

Expanded Learning Opportunities in Colorado: Concepts, Case Studies, and Implications

Prepared for the
Colorado Legacy Foundation
and
Colorado Department of Education

By:
Cynthia Hazel
Adam Soberay
Katie Voroselo

October 2013



UNIVERSITY *of*
DENVER

MORGRIDGE COLLEGE OF EDUCATION

This report was created through the generous support of the Colorado Legacy Foundation and the Colorado Department of Education. We are deeply grateful to all of the participants who so willingly gave of their time and expertise to meet with us.

Questions can be directed to:

Dr. Cynthia Hazel

Child, Family, and School Psychology

Morgridge College of Education

University of Denver

chazel@du.edu

Table of Contents

- Introduction and Overview 5
 - Why Expanded Learning Opportunities (ELO)? Why now? Why here? 5
 - Colorado’s Vision for ELO 6
 - This Report..... 7
 - Participating Schools and Districts..... 7
 - Participating Educational Partners 8
- Considerations for Implementing the Elements of ELO 8
 - General Findings 8
 - Findings by Elements of the ELO Vision 9
 - School Findings 9
 - District Findings 9
 - Educational Partner Findings 10
- Considerations for Implementing the Elements of ELO 11
 - The ELO Elements 11
 - Dramatically Personalized Learning Experiences that Ignite the Unique Potential of Every Student 11
 - Know the Student 11
 - Summary of Considerations for Know the Student 15
 - Modularize Content..... 16
 - Summary of Considerations for Modularized Content 17
 - Maximize Time..... 18
 - Summary of Considerations for Maximizing Time 22
 - Reimagine Human Capital 23
 - Summary of Considerations for Reimagined Human Capital 26
 - Vary Delivery Methods 27
 - Summary of Considerations for Vary Delivery Methods 29
- Case Studies of Schools: Putting it All Together to Create Dramatically Personalized Learning Experiences that Ignite the Unique Potential of Every Students 30
 - Alicia Sanchez Elementary School 30
 - West Generation Academy..... 31
 - Rocky Mountain Preparatory School 33
- Sustainability Considerations 35
 - Funding 35
 - Policies 35

Data Management Systems..... 36

Integration With Other Initiatives and School/District Priorities..... 36

Next steps..... 36

Collaborations..... 37

Appendix A: Matrix of Schools by ELO Elements..... 38

Appendix B: Matrix of Districts by ELO Elements..... 60

Appendix C: Matrix of Educational Partners by ELO Elements..... 73

Introduction and Overview

Why Expanded Learning Opportunities (ELO)? Why now? Why here?

The U.S. education system has scarcely changed since the industrial age. Instead of taking advantage of seismic shifts in technology, communications, and globalism, it has experienced a decades-long decline. Today, millions of U.S. students drop out of high school annually. College completion rates are sub-par, with outcomes for urban youth far worse. If we do not rally to transform our system, the future of education in our country – indeed, the future of our economy – is bleak.

In this context, how can we reignite education nationwide? How can we remain competitive globally? How can we keep students engaged and make learning more enjoyable and relevant? How can we reach those children whose brains are wired for the Internet, texting, and Facebook? And, ultimately, how can we create an Education System 3.0 to support the diverse and dynamic needs of future generations of students?

An answer can be found in ELO, an innovative teaching and learning platform designed to ignite the unique potential of every student through the creation and delivery of dramatically personalized learning experiences. The Colorado Legacy Foundation (CLF) and Colorado Department of Education (CDE) have teamed to expand how we view learning, teaching, and classrooms today. Figure 1 depicts some of these key enhancements.

FIGURE 1

ELO Transforms Learning

Traditional / Historic		ELO
Seat Time	→	Competency / Mastery
Bricks & Mortar	→	Anytime, Anywhere
Agrarian Calendar	→	Flexible Calendar
Teacher-Driven Learning	→	Shared Ownership for Learning
One School	→	Multiple Learning Options
Annual Summative Assessment	→	Frequent Formative Assessments

Increased student equity is a driving factor and leading indicator of this work. CLF and CDE believe that providing dramatically personalized learning experiences is the primary mechanism to equitably engage all students in a high quality education. Moving away from the “one-size-fits-all” classroom experience where students are expected to learn the same skills and content at the same time and in the same way, ELO places the student in the center, igniting individual passions and interests through customized learning opportunities. It helps all students to master content at their own pace. Equity within this context focuses on better understanding and targeting the unique needs and interests of diverse students and communities in order to address persistent access and achievement gaps, including those by socio-economic status, ethnicity, geography, and learning style. The result? Competent, confident learners who are more empowered, better supported, and fully prepared for education, careers, and life.

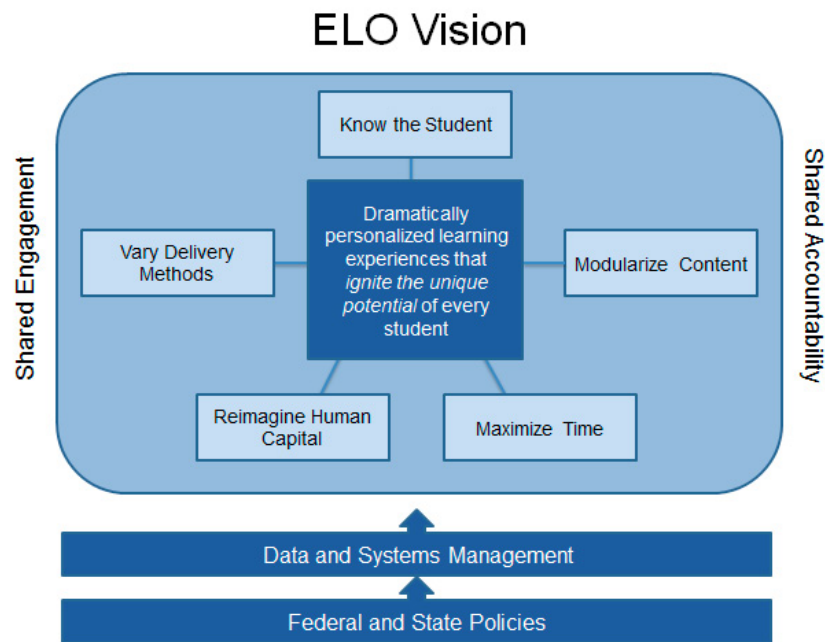
Colorado's Vision for ELO

Building on the work of the ELO Commission in 2010-11 and other state reforms already underway, CLF and CDE created a vision for ELO in Colorado. Together, we are leading the way toward a day in the not-too-distant future when:

- Progress through our K-12 education system is based on assessed mastery of learning rather than measures of seat time.
- Students have access to a wide range of high-quality educational opportunities to reflect their interests, needs, and talents – regardless of where they live or the school they attend.
- The delivery of education is not tied to a single model or structure but takes advantage of a variety of media, partners, schedules, and approaches.
- Educators have the time, space, support, and resources they need to provide personalized instruction to every student, creating and coordinating a range of measurable, engaging experiences that deliver results.

The 2012 ELO strategic plan articulates a working model that describes how ELO will be implemented in Colorado in service of this vision. Figure 2 provides an overview of the conceptual model and ELO vision elements, which are elaborated on throughout this report.

FIGURE 2



Personalization is at the center of the model because it is the most basic point of divergence from the factory model education system and the core of the ELO vision. Surrounding personalization are five elements common to programs across the country that have been successful in dramatically personalizing learning. Successful approaches do not necessarily utilize all five elements, but they do incorporate some combination. Importantly, it is not another layer of work. Rather, ELO is an opportunity to rethink allocation of resources (time, people, technology, and funding), to accelerate and seed innovation within implementation of existing reforms.

This Report

The Morgridge College of Education (MCE) at the University of Denver was contracted by CLF and CDE to study Denver-metro sites that are pursuing, planning, and implementing ELO. This report documents a scan of districts, schools, and educational partners that are engaged in ELO efforts: officials from 7 school districts (100% participation), 14 schools (70% participation), and 6 government or educational associations (75% participation). The audiotaped and transcribed interviews were coded based on the CLF and CDE ELO Vision and then analyzed by three aspects:

1. Elements of the ELO Vision
2. Entities (district, school, or educational partners)
3. Systems (a district, its schools, and its educational partners)

This report should be taken as a snapshot of current practices. As stated in Colorado's vision for ELO, at the heart of ELO is *Dramatically Personalized Learning Experiences that Ignite the Unique Potential of Every Student*. Staying true to this goal is what will ensure meaningful change occurring through the elements of the ELO vision. This report is not a cookbook for implementing ELO; instead, we hope it will be a resource for school, district, and community partner leaders interested in pursuing personalized learning. The report is organized by the ELO elements and also presents three case studies of schools to highlight the interactive nature of the elements. A summary of the ELO findings by schools and districts can be found in the appendices.

Participating Schools and Districts

Districts	Schools
Sheridan School District No. 2 (Sheridan)	none
Adams 12 Five Star (Adams 12)	Malley Elementary School
	Riverdale Elementary School
	Woodglen Elementary School
Adams County School District 50, Westminster (Adams 50 School District)	none
Aurora Public Schools (APS)	Vista PEAK Preparatory High School
	William Smith High School
Boulder Valley School District (BVSD)	Alicia Sanchez Elementary School
Denver Public Schools (DPS)	Cole Arts and Science Academy
	Grant Beacon Middle School
	Manual High School
	Merrill Middle School
	North High School
	Odyssey Charter Elementary School
	Rocky Mountain Prep (PK-8 th)

	West Generation Academy (6 th -12 th)
Jefferson County Public Schools (Jeffco)	none

Participating Educational Partners

- Aurora Education Association (AEA)
- Colorado Education Association (CEA)
- Denver Classroom Teachers Association (DCTA)
- Denver Mayor's Office of Children's Affairs
- Jefferson County Education Association (JCEA)
- Southwest TURN (SWTURN)

Considerations for Implementing the Elements of ELO

General Findings

- Great variety existed in districts' and schools' approaches to ELO. However, many started by investigating the use of time; for many, this spiraled into changing other aspects of practice. Some districts and schools viewed ELO as a means of supporting all students in obtaining a minimum competency of knowledge; most saw it as a means to support students in developing habits of learning, driven by individual interests and expertise.
- ELO activities redefined the role of teachers; they also greatly expanded the role of administrators and other building-level support personnel. Schools with the most comprehensive ELO agendas usually had multiple people supporting teachers in ELO activities.
- When an ELO approach could not be embraced for all students or for all subjects, equity and students with Tier II needs were prioritized.
- Food service and transportation were repeatedly mentioned as calendar barriers; a recommendation was to involve these district providers in designing and planning ELO practices.
- Implementation of the Common Core Standards was a big priority. Professional development for community partners about the Common Core Standards and how partners can work together to align their programming to the Common Core would be extremely useful to schools that work extensively with community partners.
- Schools and districts that emphasized 21st Century skills and post-secondary readiness had already embraced the paradigm shift underlying ELO.
- Colorado has a long school day; many participants reported that utilization of existing time and expansion/rearrangement of calendar year were more fruitful activities than extending each day, especially given budget limitations. However, students sometimes experienced more daily educational time, even when school days were not lengthened, when school personnel collaborated with community partners who provided after-school experiences (either at the school or at a community location).
- Particularly when district policies or collective bargaining agreements served as impediments to change, schools used special status (innovation, charter) or waivers to make ELO changes.
- When all stakeholders (teachers, parents, educational organizations) were involved extensively, ELO agendas were more successfully implemented.
- In order for educators to be able to assimilate ELO agendas, they need to see explicitly how the changes will benefit students. They also need to see how ELO practices integrate with Multi-Tiered Systems of Support (MTSS; previously called Response to Intervention), Senate Bill 191, the Common Core standards, and other significant building or district initiatives.

- Funding was repeatedly mentioned as the greatest impediment to ELO expansion and sustainability, including both startup costs and ongoing budget needs.

Findings by Elements of the ELO Vision

- All interviewees mentioned maximizing time as their primary ELO objective. This could take the form of maximizing the use of existing time or trying to expand time. Expanding or rearranging the calendar year was emphasized as particularly important. At the secondary level, core content was often taught in longer blocks to enhance learning and reduce transition time.
- Investigations into the use of time often led to reimagining human capital. Staggered schedules and redeployment of support staff were common results. All school sites had increased teacher planning, collaboration, and professional development time to support the additional teacher roles in ELO and to improve instruction.
- As calendars and human capital were reimagined, delivery methods were often affected. Participatory enrichment activities that were responsive to student interests and deepened understanding of core curriculum were implemented. Blended learning was often utilized to allow teachers to work with other students in smaller groups, provide individualized content, and provide teachers with more regular data on student progress.
- Because of MTSS initiatives, schools were already engaging in data-driven decision making, but the above changes allowed for more information about students and more resources to respond to identified student needs. Many interviewees commented that enhanced student data management systems will support teachers in deeper knowledge of students and the ability to differentiate supports more quickly.
- The five ELO vision elements were not always enough to support dramatically personalized learning experiences that ignite the unique potential of every student. Schools and districts also needed to embrace a pedagogy that valued students' unique potential; such as experiential models, preparing students for post-secondary success, or wanting all students to possess 21st Century learner skills.

School Findings

- At the schools with the most comprehensive ELO agendas, a team of administrators or building level support personnel were working in concert to support teachers in their new roles.
- Teacher leadership teams were instrumental in developing ELO agendas. Some schools included families and community partners in their decision-making. Community partners were carefully selected to promote ELO agendas and address student needs.
- Many schools used blended learning, teaching assistants, and staggered schedules to reduce student to teacher ratios for core content instruction.
- Besides for allowing for small group instruction, blended learning was used to support differentiation and provide teachers with student mastery data. Infrastructure and software were hindrances to increased use of blended learning.
- Schools revised schedules to increase student academic time and teacher planning, collaboration, and professional development time.
- For some schools, student data management systems hindered intervention decision making.
- For all schools, funding and sustainability were concerns.

District Findings

- Maximizing time, either through better use of existing time or increasing time, was the primary ELO intent at the district level. Other aspects of ELO (such as use of human capital or varied delivery methods) often spun out of

analyzing how to better utilize time. Revised calendars were impeded by transportation and foodservice limitations.

- Student data management systems were still being developed or refined; this impeded or made much more labor intensive the ability to assess student progress.
- Online learning was developed for remediation, but then sometimes used for acceleration. Blended learning was utilized for differentiation.
- Budget cuts led to the elimination of or slowed implementation of some ELO activities.
- Common Core Standards were the primary curricular driver.
- There was an interest in inter-district communication and collaboration on logistics of and visions for personalized learning.

Educational Partner Findings

- Educational partners advocated for teachers, parents, students, and community members all being at the table with districts as they develop their ELO agendas. These discussions need to include what outcomes are most valued by all stakeholders so that assessments of impact reflect these values.
- Educational partners emphasized a deep, holistic, personal knowledge of students as critical for educational outcomes. A skilled teacher is critical for understanding students as learners within their unique contexts; online learning can support but does not replace the teacher-student relationship.
- Educational partners stressed the importance of teacher planning and collaboration time for teachers to promote and implement an ELO agenda.
- They advocated for leveraging ELO as an equity strategy to support students of poverty and students in high needs schools.
- Most educational partners expressed that optimized use of existing time and restructuring of calendar were greater priorities than increasing the length of the school day.
- When an increased school day length was desired, staggered schedules were one means to provide additional student supports and enrichment.
- Participatory enrichment activities were mentioned as critical for student development.
- Similar to school personnel, educational partners mentioned funding was the largest barrier to ELO development, expansion, and sustainability.

Considerations for Implementing the Elements of ELO

The ELO Elements

As stated previously, Colorado’s vision for ELO is focused on igniting the unique potential of every student. Therefore, all ELO activities center back to how they create dramatically personalized learning experiences for every student. The following information explores each ELO vision element in greater detail; provides local examples of this work in practice; and identifies considerations for school, district, and community partner leaders in designing their own vision for personalized learning.

Dramatically Personalized Learning Experiences that Ignite the Unique Potential of Every Student

CLF and CDE have defined *Dramatically Personalized Learning Experiences that Ignite the Unique Potential of Every Student* as: **Educators use what they know about students’ background knowledge, approach to learning, and current level of achievement to engage even the most reluctant student, and provide the right instruction, at the right time, in a way that matches how they learn best.** Without a commitment to engage students and provide learning opportunities that support each student, ELO is a set of activities without a mission. Defining “dramatically personalized learning experiences” and what it means to “ignite the unique potential of every student” is most critical work that an organization must undertake if they are to affect meaningful change for students and in schools. Personalizing learning and developing each student’s unique potential is a paradigm shift from the factory model of education. For multiple parties to successfully work together, it is important to develop a shared definition of student success. This is not a quick or one-time process, but something that should be continually evaluated and returned as you work to implement ELO practices.

There are many stakeholders in a student’s development, and all are critical to creating the best opportunities for success. For these reasons, a successful ELO project will solicit input and involvement from all parties from the beginning of ELO planning. At the school level, discussions may start with a vision of what you would like the experience of learning to be and to feel like for students at your school. This vision can then be compared to current student achievements and needs, reviewing the data management system and what is currently known and unknown, and clarifying the current instructional and curricular norms. At the district level, ELO conversations may begin with discussions regarding what supports schools and educators need to be successful in ELO environments. District personnel should consider the district’s role in supporting schools, principals, and teachers. Districts should identify what systems characteristics would support personalized learning. Finding exemplar schools that can be models of success as well as evaluating academic achievement of the district population and subpopulations are useful first steps.

With a clearly articulated vision of what constitutes a dramatically personalized learning experience and how that experience will lead to the development of each student’s unique potential, each ELO element can be explored as a potential means to achieving that vision.

Know the Student

CLF and CDE have defined *Know the Student* as **Educators know what students know, can do, and are ready for, as well as what motivates them and how they work and learn best.** This includes that:

- Students feel known well both as learners and people; their learning experiences are responsive to their interests, learning styles, and individual strengths and weaknesses, and they receive timely data to help them monitor their progress and make informed decisions about their learning.

- Educators have timely and comprehensive data to know students well, and use that understanding to create authentic learning environments and opportunities for student choice; they use data to make regular decisions about teaching and learning (e.g., how students are grouped); they are supported in and evaluated for effectively using individual student data to regularly make decisions about personalized learning.

Examples of how Colorado educators engage with this ELO vision element include: identifying and gathering data points, managing and sharing data, utilizing data, and personalizing instruction. Practices observed or described by Colorado educators in this context are outlined below.

Identifying and Gathering Data Points

Gathering student data is important to personalized learning for several reasons. Student data can indicate classroom-, school-, or grade-wide needs that ELO can be designed to address. Through gaining an understanding of the student, educators can target needs, which can help inform intervention strategies. Data can also provide a picture of student progress. Consistent monitoring of student progress allows for the assessment of initiative efficacy, can guide the refinement of interventions, and point to unmet needs. Further, consistent monitoring of student data can also allow educators to better understand individual students' academic aspirations, so as to prepare students for future academic and career success.

Most, if not all, schools monitor various aspects of students' academic progress, such as standardized test scores. However, some schools have systems of gathering academic data in shorter intervals than traditional grading periods and state- or district-wide testing provide. One such strategy, as implemented at Rocky Mountain Prep and Cole Arts and Science Academy, is to use blended learning software to provide student data on a daily basis. The data gathered by these educational software packages provide educators, as well as the students, with up-to-date information regarding student progress. The software, in turn, can be adapted to match student achievement levels and provide targeted instruction where the student needs it the most. Moreover, Rocky Mountain Prep uses the information provided by this software to inform the organization of small groups within their blended classrooms, so as to ensure the small group instruction is delivered to students at approximately the same skill level.

Some schools have chosen to also monitor other aspects of students' development. For instance, Odyssey K-8 assesses social and character development under the belief that strong character, habits of scholarship, and academic achievement are necessary for long-term individual success. Similarly, Alicia Sanchez Elementary School utilizes data regarding behavior and attendance along with academic data to determine student needs. They have found that students of low socio-economic backgrounds often have behavioral and attendance difficulties. Therefore, systematic monitoring of these aspects is conducive to proper intervention, which leads to overall student success. Social and behavioral indicators have become a district-wide focus in the BVSD so as to better ascertain a comprehensive picture of each student. Educational partners also advocate for broadening the focus beyond only academic data, such as the Denver Mayor's Office of Children's Affairs who have found an increase in attendance and a decrease in behavioral problems among students associated with their out-of-school programming.

As stated, student data can also be used to inform interventions at a school- or grade-wide level. Schools, such as North High School and William Smith High School, use data to identify and address deficits for given grade levels. North High School uses data regarding grade-level needs in the reconstruction of their academic schedule. For instance, they have increased the length of the daily math and literacy courses for their 10th grade students in response to an identified grade-wide need. Other schools, such as Alicia Sanchez Elementary and West Generation Academy, use their data to better understand and address additional needs of students from low-income families. Alicia Sanchez Elementary School has implemented programming focused on health and wellness, in accordance with research on

students of poverty, as well as their understanding of their own student body. The Denver Mayor's Office, Denver Public Schools Foundation, and Mile High United Way have jointly allocated resources to schools and areas with the greatest level of need, such as those with high levels of poverty. Denver County Teachers Association, similarly, has indicated the need to target resources to areas of greatest need.

Student data can also include individual student interests, goals, and learning styles. The "PEAK Hour" at Rocky Mountain Prep is designed to allow students to create and conduct projects aligned with personal interests. Similarly, the Academic and Career Pathways program at Vista PEAK Prep tailors curriculum around individual interests and post-secondary goals. Further, student data can be used to better understand the unique ways in which students are best able to learn. Faculty at William Smith High School assess student's individual learning styles, so as to personalize learning to be most beneficial for each student.

Managing and Sharing Data

All data collection should be guided by what questions a school, district, or organization wishes to answer. For example, Adams 50 School District has implemented a system of competency based academic progression, which in turn guides what data are collected and how. Student evaluation questions should be developed based on the beliefs about student success and the theory of change that has been articulated. Once data points are identified and methods for collection are outlined, the next issue becomes how to store, manage, interpret, and share this data. Most student data is ultimately converted to a computerized format; collecting data through electronic means is even more efficient. Various service providers have created virtual platforms to manage student data: "Infinite Campus", "Student Portal", "Dashboard", and "Data Director" were all identified as such platforms that were currently being utilized.

After data is collected, it must be interpreted and made accessible. Having the information online is a common strategy to make the data available to teachers, students, and families. Cole Arts and Science Academy uses Google Docs to facilitate the sharing of student data. Beyond just making student data available to parents, schools such as Rocky Mountain Prep actively contact parents regularly to update them on student progress. Other schools, such as Manual High School, discussed the importance of providing training to family members on accessing and interpreting student data. Woodglen Elementary School has noticed that as student data, particularly student achievements, has been increasingly shared with parents that the parents have become more involved in their students' academic activities. Further, Woodglen focuses on the collaboration with their PTO, so as to further the home-school connection.

There are challenges, however, that schools, districts, and partners continue to encounter relative to managing student data. Adams 50 School District indicated difficulty finding a system to manage data within their competency-based model of education. Current academic data management systems have been designed to track traditional grades-based data, which is not very compatible with tracking students' individual skills and competencies. Others have indicated a need for greater compatibility between various data management systems, especially so that schools and community partners can work more efficiently together to serve children and families.

Utilizing Data

The ultimate goal for knowing the student is to inform educational practice through the personalization of instruction and, thereby, promote student growth. Therefore, once analyzed, student data must be utilized to guide daily practice if there is to be change in outcomes for students. Student data is often, as is the case at Alicia Sanchez Elementary School, used to inform individual students' academic placements that are commensurate with individual achievement levels. Data is also often used to place students in intervention and enrichment courses, as is currently being done at Grant Beacon Middle School and North High School, which allow more personalized learning paths for each student based on their unique needs and abilities. Cole Arts and Science Academy uses student data to inform

placements in after-school and summer programming. Blended learning models are one way that tangible data can be regularly produced for each student that can help inform instruction within the classroom. Rocky Mountain Prep uses student data from their blended learning instruction to create the small groups within classrooms, ensuring that students experience small group instruction at their current level; moreover, regular reassessment of student data facilitates reorganization of these small groups as individual achievement evolves. In these ways, student data can be used to provide students with a personalized learning experience by ensuring that each student is being academically challenged in a way that is commensurate with their personal abilities and learning styles.

Using information to inform educational decisions is an ongoing process. Student data should inform everyday instruction within the classroom. Further, student data should be regularly reassessed as student proficiencies and needs evolve, so as to ensure that students continue to get the challenges and supports that they need. If a student is identified as having a particular need and an intervention placement is made, he or she must be monitored for achievement gains. Conversely, students who had not been identified as requiring an intervention placement should be monitored with equal vigilance. Schools, such as North High School and Merrill Middle School, reassess students for intervention needs every academic quarter.

Data can not only provide information about students, but it can indicate the value of the programming that is being offered. For instance, Odyssey K-8 is utilizing student data to evaluate the effectiveness of their programs so as to ensure that resources are being allocated in a manner that most effectively meets student needs. Further, Manual High School solicits student feedback on how well the learning experiences are meeting their personal needs.

Of course, analyzing, interpreting, and planning action around student data is a time-consuming process. Therefore, it is necessary to account for this increased demand upon educators. In order to effectively utilize student data, Jeffco Public Schools has increased the time in their annual calendar dedicated to analyzing and interpreting student data. In a strong data culture, educators have adequate planning and collaboration time, which may mean rethinking other academic and non-academic responsibilities during the school day.

Personalizing Instruction

Personalized instruction requires knowledge of each student as a full person. CEA expressed that fostering personal relationships between educators and students can increase student engagement in school. Further, JCEA indicated that knowing students personally can capture elements of student need which are likely not to be captured by traditional indicators of student achievement. One way of achieving personalized instruction is through small group instruction. Rocky Mountain Prep is able to provide small group instruction through the use of teaching assistants as well as blended learning. Another approach is to extend core class time, creating fewer periods in the day. This allows teachers to have fewer students in total and, therefore, gain a better understanding of each individual student. West Generation Academy utilizes both of these techniques to make sure that their core content area teachers connect in meaningful ways with their students. Manual High School implements what they call “huddle groups,” which are small groups which meet regularly and discuss topics relevant to the students. Allowing educators and students to interact in a personal way not only allows teachers to more accurately assess and address students’ individual learning needs, but it can promote student engagement through helping students feel more connected to their school and teachers.

Another approach to personalized instruction is allowing students elements of freedom over their academic experiences. AEA advocates for providing students with academic choices. Vista PEAK Prep offers Academic and Career Pathways, which allow students to create an academic track that aligns with their personal post-secondary goals. At the state level, Individual Career and Academic Plans (ICAPs) were designed to support personalizing students’ academic pursuits. ICAPs should involve multiple sources of data and multiple individuals within the educational system uniting

with students towards personalized postsecondary goals. Enrichment offerings can also be a way that students can personalize their learning experience. Schools offering enrichment courses, such as Grant Beacon Middle School, allow students freedom in choosing these courses and, thus, creating learning experiences they desire and would normally not have access to.

Summary of Considerations for Know the Student

Knowing the student can take many forms, all of which are central to providing students with a personalized learning experience. Assessment of student data can allow educators to teach students at their current personal ability level, as well as indicate when a student may need additional supports. Moreover, knowing students on a personal level can facilitate identifying what a student wants and needs the most, as well as enhancing student engagement. To this end, there are certain considerations which may be more salient to the various levels of educators:

School-Level

- Based on your vision for personalized learning, what do you need to know about your students?
- Define what you currently know about students. How do you know these things?
- Identify what student data is currently collected or is easily accessible, as well as what data is not currently accessible and how it can be assessed. Consider:
 - a. Aspects of student development to target
 - b. Academic data points (formative information of how students work and learn best) that you need to access
 - c. Non-academic data points (student interests, motivations, learning styles, social emotional learning context) that you need to access
- What opportunities exist to facilitate greater personalized student-teacher/staff interactions?
- Identify how student data is currently shared internally, as well as with families and community partners.
- Consider the compatibility of data management systems with those used by community partners.
- How/what technology can be leveraged to monitor student progress and/or facilitate data and information exchange? New technologies may at first require additional training and time; however, it should result in time-savings ultimately

District-Level

- What are the potential implications of schools' stated data and information needs on district departments and services?
- How can district-wide data management systems be personalized to meet variable school needs?
- How can/does the district work with schools to:
 - a. Define 'non-traditional' and formative assessments of student success?
 - b. Provide training on the use of individualized data to employees, community partners, families, and students?
 - c. Facilitate the ability to share data between schools and community partners?

Educational Partners

- Based on your vision for personalized learning, what do you need to know about your students?
- Define what you currently know about students. How do you know these things?
- Identify what student data is currently collected or is easily accessible, as well as what data is not currently accessible and how it can be assessed. Consider:
 - a. Aspects of student development to target

- b. Identify academic data points (formative information of how students work and learn best) that you need to access.
 - c. Identify non-academic data points (student interests, motivations, learning styles, social emotional learning context) that you need to access.
- How can your organization:
 - a. Partner with schools to ensure effective sharing of data?
 - b. Collaborate with students, families, and school personnel to help define student needs and desired supports?

Modularize Content

CLF and CDE have defined *Modularize Content* as **Educators have access to varied and flexible instructional tools and resources that allow them to offer content to students that is presented in different ways, at different paces, and with different support. They use what they know about each student to determine next steps, grade, course completion and earned credit.** When content has been modularized to the needs of each learner, you will see:

- Students are engaged in content, complete assessments that are at their level of readiness, are provided with time and instructional support when needed, and are allowed to move ahead when ready. They might be in different grade levels in different subjects based on their level of readiness, and they might also be at a different place than other students in the same class. Learning becomes more of a continuum that is not bucketed by specific grade levels.
- Educators differentiate time and pace of learning for students. They are not held accountable to, or not restricted by, the traditional norms of a time-based system. They use frequent and varied assessment data to check for progress and determine next steps.

Examples of how educators in Colorado currently embrace this element exist in different approaches to personalized instruction. This is often evidenced in standards-based grading systems and competency-based models. Such models can facilitate more personalized learning through the identification of individual skill competencies. Blended learning models are also being implemented that facilitate the identification of students' individual skill levels. These blended learning models can also be used to provide practice that is appropriate to each student's current ability level. Having said that, this element was reported to be the most complex and difficult to embrace within the current education system. This may be due to systems not having been designed to support this kind of flexibility and autonomy, or to a lack of awareness or capacity to unbundle content.

Competency-Based Models

Competency-based education models build off the idea that students progress through academic subjects at varied paces relative to other students, as well as that an individual student may progress more rapidly within one content area relative to another. Competency-based models are designed to facilitate instruction given the existence of these differences. Adams 50 School District has created a model whereby students demonstrate proficiency in a particular academic standard, and upon doing so are 'leveled up' in terms of their mastery of that particular skill. This model allows them to better personalize learning through tailoring instruction based on the particular level of skill that a student is currently demonstrating. The Adams 50 School District model places students in classes based on common mastery of skills rather than common grade-level.

Other schools and districts are also taking approaches to competency-based models. In Rocky Mountain Prep classrooms, students are taught in small groups, and these small groups are based on students' current skill levels. This allows teachers to be more effective, because material can be presented at a level that matches students' current

understanding and ability. Aurora Public Schools, such as at William Smith and Vista PEAK, also takes a standards based approach to student achievement to allow for more fluid movement of students between courses and grades. Students at William Smith High School are assessed on a series of academic competencies. Moreover, these competencies are integrated across academic disciplines, so as to promote mastery of academic skills across settings. These competency-based systems provide educators a clearer picture of students' current academic abilities, which, in turn, informs instruction by allowing it to be tailored to a student's current needs and level of understanding.

Blended Learning

Adaptive software systems can personalize lessons so that each student is receiving content best suited to his or her current abilities. Various schools incorporate blended learning to one extent or another to facilitate academic skills acquisition. Cole Arts and Science Academy has class periods dedicated to blended learning, facilitated by dedicated blended learning technicians. Further, these blended learning technicians collaborate and align with core teachers to ensure that curriculum is seamless. At Rocky Mountain Prep, a blended classroom model is utilized whereby students engage in daily digital skill practice. This blended classroom allows teachers to divide the classroom between those engaged with digital content and those receiving teacher-led instruction, which provides personalized small group instruction. At both Cole Arts and Science Academy and Rocky Mountain Prep, the blended software adapts to student skills and deficits to provide individualized content, and immediate data for teachers on student proficiency. Blended learning can also utilize technology resources that are aligned to core standards, as is currently being done in Adams 50 School District. The computer-based learning and recorded teacher instruction are made available to students through the internet. The Aurora School District implements an online program, "Ed 20/20", to address individual student achievement gaps. Aurora School District also has alternative high school opportunities, such as APSONline, to offer students alternative paths to high school completion. BVSD provides online content, "Newton Adaptive" to address student needs, as well as gather student data. In these ways, the use of blended learning and digital content can aid in the modularizing of content.

Summary of Considerations for Modularize Content

Modularizing content may represent a major shift for many. Transitioning to a competency-based model will require shifts in paradigms regarding student assessment, the ways in which students are taught, the manner in which student data is tracked and assessed, and how schools are held accountable. Implementation of blended learning systems also requires a change in the approach to education, as well as likely requiring enhanced infrastructural components. The following are some considerations regarding modularizing content:

School-Level

- How does this element relate to your vision for personalized learning?
- How would unbundling content, or the ability to be more flexible about content delivery, better support student learning and educator effectiveness?
- Moving to a modularized content model will be a considerable philosophical shift for some people and will require retooling for many. Identifying schools where this is working to learn from, allowing for input throughout the process, and providing on-going training will be needed.

District-Level

- Identify schools inside or outside the district that have been successful in modularizing content, so that other schools interested in modularized practices can see it "in action."
- Evaluate how district policies and academic expectations facilitate or hinder school buildings in embracing modularized content practices.

- Provide mini-grants or district resources to support schools interested in modularizing content.
- Consider how district-oversight can accommodate schools looking to revise their instruction and content to be learner-centered both for schools with special status and those without.

Educational Partners

- Consider how your services and expertise can promote individualization of learning.
- Consider how your services and expertise can align with schools' modularization of content.

Maximize Time

CLF and CDE have defined *Maximize Time* as **Schools make the best use of each minute in the day and each day in the year. Calendars and schedules are driven by student learning priorities and are organized to support educators' ability to engage in the assessment and planning required to deliver personalized approaches.**

- Students' time is differentiated and they are able to make decisions about time based on their interests, learning styles, and individual strengths and weaknesses; students have choice over how time is spent – and the amount of time spent - to achieve learning goals
- Educators have the flexibility and support to make decisions about time based on their students' interests, learning styles, and individual strengths and weaknesses, as well as on their professional development needs; time is built in to the day and year that supports their professional development and needs; their school makes strategic decisions about time and supports them in making tradeoffs.

A seemingly natural place for many to begin thinking about ELO is with altering the time they have both with students and in preparation for working with students. Many people see a logical connection between time utilization and student outcomes. Providing teachers with more opportunities for professional development and more time to assess individual student needs can allow them to more effectively address student needs. Further, increasing instruction time can provide more opportunity for students to acquire and develop skills. To date, many schools in Colorado have considered how to increase student learning and teacher collaboration time through maximizing or restructuring time within the existing school day or year, or by considering how to extend time. Many schools have found that increasing planning and collaboration time for educators is essential if every student is to receive a dramatically personalized learning experience.

Maximizing Existing Student Time

Many schools have found that they are able to do more for their students through reassessing and rethinking the usage of their existing school day and year. To this end, various strategies have been developed to better utilize the existing time. The elimination of class periods or transitions that were viewed as unessential is one way that schools have found additional time within the day. For example, William Smith High School and North High School have eliminated off periods and, thereby, increased their available instructional time. Schools such as Cole Arts and Science Academy and North High School have tightened class transitions in order to create additional time within their existing day. Shortening lunch periods is another way in which schools have found additional time. In these ways, hours of additional instruction time can be added to the school week.

Maximizing time can include altering the schedule to better target identified student needs. For instance, Merrill Middle School and West Generation Academy have been able to extend class time for core courses by shortening class periods for elective courses. This helps to ensure that students gain a greater mastery of the core academic skills. North High School has implemented unique schedules for each grade level. These unique schedules emphasizes more class time in the courses that student data has identified as being areas of particular need for each grade level. At William

Smith High School, periods are longer to reduce the number of transitions and teachers move to the students' classroom, rather than all students moving to a teacher's classroom to shorten transitions. This allows them to further maximize their instruction to total student day length ratio.

Rearranging the existing school calendar is another strategy designed to allow educators to more effectively use existing time. BVSD, for instance, is choosing to focus on rearranging existing time to be more effective. Some schools in BVSD are exploring retaining the same number of schools day but spacing them out by adding extended breaks throughout the year. These breaks could then be used for professional development and assessing student data, which would allow for more effective and personalized instruction when students are in session. Further, the BVSD Board of Education is committed to providing sufficient flexibility in district policies that allow schools to alter their calendars without requiring innovation status. Utilizing technology is another means that districts are exploring to make more efficient use of time. For instance, blended learning can be used to create teacher planning time while students are engaged in academic practice.

Educational Associations, such as SWTURN and DCTA are focused on maximizing existing time, either through a reorganization of the current amount of time or through a maximization of the current time formats. One concern is the economic feasibility of increasing teacher demands that is commonly associated with an increase in instructional time. Various entities, including SWTURN, Denver Public School District (DPS), and Woodglen Elementary School, have used the National Center for Time and Learning (NCTL) time analysis tools to gain a clearer understanding of how they can best utilize their existing time.

Extending Student Time

Many educators have a sense that there is more that they would like to accomplish, yet they do not have the time to get done what they would desire. Some schools have extended the amount of time that the school operates. One of the primary goals in extending time is to add instructional hours. There seem to be two main approaches for accomplishing this: adding time to each day and adding days to the school year. In terms of the former, several schools, such as Alicia Sanchez Elementary School, Cole Arts and Science Academy, and Manual High School have extended their school day for all students. Moreover, DPS has identified extending the day or year as one of their four pillars of ELO (along with providing intervention/accelerate for all students, enrichment, and increasing teacher collaborative time). DPS has also suggested that it is essential to be purposeful in the usage of additional time; simply adding time for the sake of adding time is likely not to be beneficial. This purposeful use of additional time can take various forms, such as enrichment opportunities, intervention periods, blended learning times, etc.

A common strategy for those that have added additional time to their day is to use some, or all, of that time for student enrichment offerings. Often enrichment classes are taught by outside providers. Partnering with community organizations to teach the enrichment classes has allowed some schools to find additional time for teaching planning, collaboration, and professional development. For example, Grant Beacon Middle School has added an hour to their school day, four days a week, and they use this time to provide enrichments, advanced classes, and interventions. Their enrichments are provided by a combination of community partners and teachers. Each academic department creates enrichment courses aligned to core academic skills. Teachers at Grant Beacon Middle School teach enrichments two days a week and the use the other enrichment times for collaboration.

Another approach to extending the day is to add academic supports before and/or after school, which are either optional for students or are provided for those identified as needing additional support. Schools such as Riverdale Elementary and Merrill Middle School currently provide such supports to students. Alternatively, North High School offers "Saturday Sessions", which provides additional times for optional, as well as mandatory instruction opportunities.

One benefit to this approach is that it allows schools to provide additional academic support to students without needing to staff the entire school for additional hours each week.

The second approach to extending time, altering and extending the school year, also can take a variety of forms. Sheridan School District has extended their year, providing seven weeks of breaks throughout the year and three weeks of intercessions for students identified as having achievement gaps. Schools such as Rocky Mountain Prep and Manual High School have added as many as 40 days to their previously existing school year. The idea is that the more contact days schools have with their students, the more that the student can be taught and the less the student will regress during prolonged breaks from school.

One reason for extending the school year is to avoid any academic regression students may experience during a prolonged break. This has led some schools and districts to look into rearranging or extending the school year calendar. SWTURN also noted that due to budgetary constraints it is often easier to engage stakeholders in conversation regarding maximizing existing time, as opposed to extending time.

Other schools have taken alternative strategies to using additional days. In the Aurora School District, such as at Vista PEAK Exploratory p-8 and Vista PEAK Preparatory 9-12, implemented what they call "PoWeR Sessions," which are 23 days of additional, targeted instruction provided in blocks throughout the year; these blocks provide an additional 172 hours of instruction per year that is available for all students. Vista PEAK Prep has used volunteer enrichment providers to help relieve some of the additional costs associated with providing additional instruction. West Generation Academy offer what they call "Intensive Courses," which are two separate one-month blocks of college and career readiness programming during the school year.

Summer programming is another way in which students can be given additional supports throughout the year. Schools often take varying approaches to the provision of summer programming. Some schools provide summer offerings that are available to all students. Others, such as the Aurora Schools District's "Fifth Block" summer programming, are available to students who are identified as having particular needs and are invited to attend. Other summer programming can be mandated for students who have been identified as having fallen behind, as is the case with Rocky Mountain Prep.

However, one of the major issues with adding additional time is the demands that it places on teachers and staff. The desire to not overwork teachers and to also remain within contractual constraints has led to the implementation of strategies that increase student contact time without increasing staff's hours. CEA has indicated that staggering teacher schedules may be one strategy to address this issue. Schools such as Alicia Sanchez Elementary School have implemented staggered teacher schedules in order to remain within the contractually agreed upon teacher work hours.

Many schools have used additional or outside providers in certain circumstances to help alleviate additional demands on teachers. For instance, West Generation Academy has two one-month periods of instruction during their school year for the delivery of "Intensive Courses." They use a dedicated set of teachers to deliver these intensive courses, which provides planning time and break periods for the other teachers. Similarly, at Vista PEAK Prep, they have implemented "PoWeR Sessions" throughout the year, which provide an additional 172 hours of instruction. Each teacher is responsible for teaching only a half of one of the power sessions, which provides them with additional break and planning times. Further, because only select students attend these power sessions, the student to teacher ratio is lower than in the traditional courses, which allows for more personalized instruction.

The decision to extend student time often comes from identifying the needs of the student body. For instance, Alicia Sanchez Elementary School works towards supporting the overall development of students from low socio-economic backgrounds. They identified that their students had significant academic, behavioral, emotional, and familial needs, which has in turn influenced their decision to extend both the day and the year. However, for many schools, particularly those that have initiated extended time through the use of time-limited grants, it can be difficult to sustain extended time. When days and annual calendars are different from the district norm, coordination with district services (such as food service and transportation) are important considerations. Extending school time involves a balance between providing ample educational opportunities to students without overworking teachers and designing a model that is economically sustainable. Therefore, there are often barriers to extending time. For instance, Jeffco Public Schools reported having difficulty gaining parental acceptance of a proposed extension of the school year. Further, the inability to develop an extended school model that is financially sustainable is often a primary reason for not adding additional student time. Districts, such as Sheridan School District, have cited this cost barrier as being prohibitive to extending the school day and year.

Adding Planning and Collaboration Time

When examining how to best use time, how to add time for teachers to reflect on their practice and students' progress should be considered. This often comes in the form of adding planning and collaboration times throughout the week or year. Any increase in instructional time requires commensurate increases in opportunities to prepare. Similarly, expansion in student tracking systems necessitates time for teachers to regularly interpret and incorporate this information if the data are to inform practice.

How schools choose to add planning and collaboration time, as well as how this time is structured, reflects the values of each school. For instance, some schools want to promote interdisciplinary faculty collaboration to focus holistically on students; other schools prioritize intra-disciplinary collaboration time as a means of investigating curricular and instructional excellence. Similarly, some schools have increased collaboration time without lengthening student days whereas others have staggered staff schedules to provide increased collaboration time in concert with increased student hours.

Numerous schools have made a concerted effort to have increased time for teacher planning and collaboration. Several strategies have been implemented to increase these planning and collaboration times. Schools, such as Cole Arts and Science Academy, utilize community partners to provide instruction, which creates time for teacher planning. Other schools, for instance Alicia Sanchez Elementary School, that have extended their school day have designated a portion of that time for teacher planning and collaboration. Various schools have altered their weekly schedules to achieve this goal. Riverdale and Woodglen Elementary Schools have instituted early release of students on Wednesdays to add weekly time for school-wide collaborations. Woodglen has also made changes within their school day to allow for more collaboration and planning time during the day. William Smith High School releases students early on Fridays for faculty collaboration and professional development. Other schools have altered their class periods. Grant Beacon Middle School combines a late start and shortened class periods on Fridays to allow time for teacher collaboration, which is used for data teams.

The use of this additional teacher time can vary. For instance, Rocky Mountain Prep, which use blended learning, allocates additional time for teachers to assess the data that the student software is providing them. This, in turn, allows them to better assess student skill levels and modify instruction accordingly. Other schools, such as William Smith High School, which emphasize cross-discipline collaboration, allocate additional time for teachers from various disciplines to cooperatively align teaching strategies to best support student learning.

Adding planning and collaboration time is also an issue addressed at the district level. Sheridan School District has scheduled student lunch, recess, and enrichment classes in a block in order to provide opportunities for data teams and collaboration with staff and teachers. BVSD has added 11 days to the school year dedicated to teacher planning, professional development, and collaboration.

Teachers' unions and educational partners also have an interest in ensuring that teachers have ample time for planning and collaboration. Whether schools are extending time or maximizing existing time, teachers are often being called upon to do more without commensurate time being added for them to plan. AEA, DCTA, and JCEA all expressed focusing on making sure teachers had ample planning and collaboration time regularly within their schedule as essential to maximizing outcomes for students.

Summary of Considerations for Maximize Time

There are several factors to consider when addressing the issue of maximizing time, including the use of existing or additional time during the day as well as the annual calendar. The focus should always be on how the utilization of time can best support students' engagement and learning. Further, considerations of maximizing time should also include how to best support teachers in using time efficiently and effectively, as they are the most essential element in students' success.

School-Level Maximizing Time Considerations

- How does your use of time support your personalized learning vision?
 - How does student learning time relate to your personalized learning vision?
 - How does teacher collaboration time relate to your personalized learning vision?
- How does the utilization of time meet your personalized learning vision?
- How is time currently a barrier to achieving personalized learning goals? Or, how is rethinking time an opportunity to achieve personalized learning goals?
- How would the ability to use time differently in the school day or year enable changed instructional practice or effectiveness?
- What supports will teachers need in order to use time differently?
- How should time be maximized for all students?
- In what ways is (or could) time be used to deliberately target specific student needs, or differentiated based on student needs?
- Will altering time require creative faculty and staff schedules (e.g. staggering schedules)?
- Consider how non-school time (or traditionally out-of-school time/informal learning) could be leveraged or structured in support of learning:
 - Summer and break programming
 - Before/after school programming
- Which departments or individuals at the district-level (i.e., transportation, food service, custodial staff) should be engaged to achieve schedule and calendar goals?
- Consider community partners that align with your personalized learning vision and could help maximize time for students and teachers.

District-Level

- Identify how district services can facilitate schools' unique time and schedule visions; what departments need to be involved in the ELO vision and could have helpful input?
- What role could district leadership plan in supporting schools that want to think differently about time?

- Decide how to alter or maximize district-guidelines on time:
 - School day
 - School year
- Decide what time strategies will be consistent across district and what strategies will be building-specific, considering:
 - Potential efficiencies of standardization
 - Individual school needs and differentiations
 - Needs of subpopulations within district
- How can the district provide incentives or support for teachers having additional planning/collaboration time?
- How will altering time impact faculty and staff schedules?
- Identify how the district can work with community partners to support students outside of traditional school times.

Educational Partners

- What content or trainings does your organization have that could lend to maximizing time within or outside of the traditional school day (e.g., before or after school, summer school)?
- How does your organization's intended impact on student learning align with your school/district partners' vision for the use of time to personalize learning?
- Consider how your organization's work aligns with academic standards and skills/21st Century competencies; what skills and knowledge do students gain as a result of working with you?
- What are the best uses of your skills and resources in promoting the maximized use of time? Consider supports for:
 - Enriched curricula
 - Project-based learning
 - Individualization and differentiation
 - Teachers and staff

Reimagine Human Capital

CLF and CDE have defined *Reimagine Human Capital* as **School leaders think creatively about how to get people into roles that allow each teacher to give students his or her best each day. They also think differently about community partners and what it means to be highly qualified to deliver specialized content in credit bearing courses.** Human capital is the most valuable and essential resource in education. When human capital is reimaged:

- Students see themselves, their peers, and others as human capital; they are not always reliant on teachers to drive their learning, but work with each other and connect to resources and people outside the classroom to engage in meaningful, relevant learning
- Educators are facilitators of learning, and are placed in sustainable, strategic roles that leverage and maximize their strengths; they are engaged in leadership teams and decision-making about classroom- and school-level decisions (e.g., professional development needs/structures, staffing strategies, tools/resources needs, policies); they work with one another, families, and community partners to make the best use of resources and talent to maximize learning for all students.

In Colorado, efforts to reimagine human capital have focused on schools collaborating internally, community partners and schools collaborating to support students, professional development, and leadership teams.

Schools Collaborating Internally

When thinking about reimagining human capital, promoting collaboration is an important consideration, including collaboration with key stakeholders, such as members of the educational community. In order to successfully implement collaboration time, the schedule of the school day may need to be adapted to allow teachers (and community partners) to meet. This may include utilizing other teaching personnel to educate the student in other areas (i.e. specials classes) or working with community partners. Teachers are often expected to perform additional duties or perform dual roles.

Across the district, Sheridan encourages collaboration between general education and ELA instructors by sharing spaces and coordinating lesson plans. DPS encourages teacher collaboration in using student data to design interventions, accelerations, and action plans. DPS also encourages collaboration efforts between schools regarding ELO practices. Jeffco Public Schools and JCEA have collaborated extensively on the implementation of ELO practices to ensure student success. In the process of deciding how to adopt ELO practices, Jeffco involved the union in each step. They stress the importance of working with teacher unions because they represent the individuals who will be implementing the practices and have a great knowledge of student needs.

CEA supports collaboration as well. They recognize that teachers want time to collaborate with colleagues to better serve students and advocate for that collaboration time. SWTURN has built partnerships between unions and schools and they provide supports for administrators collaborating with teachers as educational practices evolve.

Community Partners and Schools Collaborating to Support Students

One aspect of Reimagining Human Capital within the ELO model is leveraging partners outside of the traditional school day, e.g., community-based organizations, museums, colleges and universities, or local businesses. Most schools and community partners have much to offer the other, as both are committed to the development of engaged, educated citizens. Together, they are much more able to support personalized learning experiences for students by providing experiential learning opportunities, as well as providing enrichment, learning interventions, and accelerations. In addition, collaborating creatively is often what allows for more and better use of time aligned to school priorities.

School-community partnerships can be structured in a variety of ways. Alicia Sanchez Elementary works with undergraduate education students who help teach classes centered on health and wellness. This allows future teachers to get valuable experience, while offering supports to the school. Community partners like Downtown Aurora Visual Arts, Black Actors Guild, and Muay Thai (a martial art school) help deliver enrichment classes at William Smith High School and Grant Beacon. At Manual High School, students spend an hour every day in a class taught by community partners. One partner is the YMCA; the YMCA teaches different classes to about 150 of the students. These enrichment classes are designed to help students see what is possible in the “real world.”

In the Sheridan District, community partners teach basic life skills and character development. One example is an instructor who teaches tae kwon do, which contains elements of building confidence, focus, and behavior regulation. Adams 12 is encouraging every school to partner with community members by reaching out to the community to see what it needs and in turn asking community members to provide work and learning opportunities. Post-secondary institutions, such as Aurora Community College, award college credits to Aurora high school students. In 2012-13 Aurora Public School Students saved approximately \$1,000,000 in tuition through this partnership. Additionally, community partners and the Aurora School District have a Community Work Force Planning Team and Pathways Advisory Committees that assesses the needs of the community workforce and aligns curriculum to prepare students for postsecondary success. Community partners can also help deliver professional development to teachers and staff. West Generation Academy operates with the help of community partners. As an example, they are currently working with

mental health providers to deliver trainings and support around wellness activities and education. Community partners can support technology utilization by offering trainings to the staff. Community partners can also identify the needs of the school and develop tools that may be of use to the school and potentially other schools.

The Denver Mayor's Office of Children's Affairs promotes collaboration between community partners and DPS. They see the need to utilize parks and recreation sites along with libraries and cultural organizations to provide Denver's children with out-of-school programming. They conducted a needs assessment to determine what services the children in the school system were receiving and in which geographic areas of the city were children being underserved. They worked with community organizations to get enhancement opportunities to all children. Their current goal is to expand services in the summer, with a priority on children from areas that historically have had few summer options. AEA suggests that schools and school districts involve the community by recognizing its needs, which discourages working in isolation of each other. DCTA advocates for schools working with community partners, but suggests that these partnerships need to remain non-political.

Professional Development

Professional development is an important way for teachers and support staff to ensure they are providing the best services to their students. A challenge to providing professional development is finding the people and time to provide continuous professional development.

Some schools rely on one or multiple members of the faculty to facilitate professional development. At Malley Elementary School, the academic coach is in charge of offering instructional professional development. Cole Arts and Science Academy has a technology representative, who is part of the administrative team, who provides technology assistance and training to all of the staff. At Vista PEAK Prep, all teachers are required to participate in a team that oversees a certain aspect of the school's development. As examples, there are instruction teams, operations team, an equity team, and a parent organization team. These teams are all responsible for delivering professional development to their peers around their area of expertise. This ensures that best practices are being taught and used and there is up-to-date information because there is a group of people who can focus and be responsible for the information of one area.

Sheridan School District provides professional development for community partners as well as teachers. DPS provide professional development regarding leadership for teachers because leadership is necessary to the ELO process. As teachers are the main connection with children, they know what is best for the students because they are able to recognize the needs. Thus, it is imperative that they have the skills to be a leader and facilitate positive change. They also have monthly professional development meetings that promote cross-school collaboration.

Leadership Teams

Leadership teams are an essential way of ensuring that all voices are heard within a school, especially when implementing new practices. They also serve as a way to allow faculty to focus on one area and work with others to enhance expertise. These team members are then seen as the go-to people within the school when other teachers have questions or concerns.

Riverdale Elementary has an ELO leadership team charged with acting in the best interest of the students and the school. Vista PEAK has all teachers involved in a leadership team. West Generation Academy has a management team that consists of three staff members who oversee intensive courses, wellness programs, and collaboration with community partners to ensure the needs of the students are met. They also have teacher leaders within the school who strive to promote best practices. Leadership teams ensure that numerous voices are heard to help collaborate on how to personalize learning for every student. When making school-level decisions, the involvement teachers and staff leads to buy-in and greater engagement from them, thus from the students as well.

In Adams 12, each school has a leadership team that must be involved with every step of ELO. BVSD stresses the importance of strong leadership teams to begin an ELO movement. As discussed within the professional development section, DPS focuses their professional development around leadership. These leadership teams consist of teachers, parents, and students (at the high school level). They also involved their Human Resource Department early in the ELO conversations and that department has helped facilitate school-level desired human resource reallocations.

Summary of Considerations for Reimagine Human Capital

Reimagining human capital is an essential component of the ELO vision. Reimagining human capital is a way for educators and schools to think differently about individual educator roles, as well as resources that can be brought to bear outside the traditional classroom to influence learning. This allows for a more personalized learning experience for students because it focuses on leveraging individual educator strengths, and introducing students to educators of diverse backgrounds. It also promotes the idea that one educator should not need to be responsible for meeting all the unique, diverse needs and interests in a classroom, but should be supported in leveraging resources and partners outside the classroom to support learning. The following considerations are recommended when thinking about how to structure components of reimagined human capital.

School-Level

- How does your utilization of human capital support your personalized learning vision?
- How could rethinking human capital or redeploying human resources better support your personalized learning goals?
- How will you clearly define new roles and expectations prior to implementation to support a smooth transition? After changes are made, what structures are in place for ongoing evaluations and feedback to refine roles and expectations over time?
- Responsibilities for implementation need to be identified and decision-making process needs to be clearly articulated:
 - Need to identify an implementation team; often this is most successful when it include teachers who were elected by their peers; all teachers should vote on the implementation
 - In some cases, an individual should be appointed to facilitate ELO implementation

District-Level

- Given the human resource changes that schools want to implement, what district-level supports will they need? Will there be different needs for teachers, administrators, and support personnel?
- How can the district help engage the teachers union to support schools' interests with regard to reimagining human capital?
- Explain the objects of ELO to the Human Resources department and utilize their expertise to facilitate school-initiated resource changes
- Evaluate the district distribution of resources and personnel: how does resource allocation support schools' ELO visions?
- If possible, appoint a district ELO coordinator to facilitate across-school conversations and learning.

Educational Partners

- Evaluate the points of overlap between your mission and the school or district's ELO vision
 - What can you add to the school's ELO vision and practices?
 - What resources does the school need to supply for you to be able to fulfill your mission and support the school?

- Beyond supporting academic and career goals, are there other roles that you would like to and can play?
- Participate in the ELO implementation and planning team.
- Beyond understanding the ELO vision, need to understand Common Core standards for levels of students wishing to support, as well as post-secondary readiness goals of district and school.
- How can partners maintain relationships with the schools to ensure both parties are still benefitting?
- When Teachers Unions are involved and contract negotiations are considered, success and sustainability are more likely.

Vary Delivery Methods

CLF and CDE have defined *Vary Delivery Methods* as **Teachers and schools work with students in flexible systems that provide students with multiple ways to engage in and demonstrate the same rigorous learning.** Varied delivery methods encompass not only learning modalities, but also means of demonstrating understanding and mastery. When delivery methods are varied,

- Students are able to choose from a variety of engagement methods and instructional supports (e.g., technology, projects) to make connections through expanded access to connect and varied methods for building knowledge, practicing skills, and organizing information
- Educators have the flexibility and support to differentiate place and method for how students engage in and demonstrate learning.

Some examples of how delivery methods have been varied include the use of technology and digital content, experiential learning, and internships.

Technology and Digital Content

With the rapid advancement of technology and digital content, one way the education system is varying delivery methods is by utilizing technology as a tool to supplement and support learning. Technology can allow for differentiated instruction according to student needs. Technology can also be a way to make content and learning available to students outside of the classroom and beyond the school day.

Through online and blended learning, students can engage with digital content full-time, or part-time in combination with face-to face instruction. Some schools offer online classes to differentiate instruction to students. William Smith High School has an online civics class; the online curriculum measures content knowledge and confidence in that knowledge, as well as providing instant feedback to students. West Generation Academy uses a rotation blended model as part of their curriculum structure by using computer instruction in the classroom to allow for smaller group instruction with the remaining students, as well as students receiving tailored curriculum from the computer-based instruction.

Some schools note that it is hard to stay up-to-date on technology because of the cost. Many schools and districts cannot stay atop of updating technology resources; others cite that the software that would be most beneficial is too costly. The cost of supporting students with home technology is especially concerning to some families. West Generation Academy collaborated with Comcast to offer internet and laptops to families at a low cost so they could use technology in the home to support their student.

At the district level, Adams 50 School District is encouraging teachers to make online videos to supplement and help further the students' understanding of content areas. BVSD is in the process of creating their own online system so the content pacing can be personalized to each student. They also offer "full virtual" online courses which ensure that

students obtain a mastery of skills. Although this started as an online credit recovery program, Boulder Valley has also seen a demand for online credit opportunities from students that want to expedite their graduation and from students who have other commitments (such as competitive athletes). Similarly, Jeffco Public Schools has a program called “Virtual Academy” which offers online classes. The added component of virtual learning allows students to choose to expand their knowledge at the time that they desire and be able explore different subject areas on many different levels. Students’ learning paths can more closely align to their individual needs.

Experiential Learning

Experiential learning involves project-based learning experiences that allow students to enhance their core learning by applying their knowledge in real world situations with hands-on experiences. Experiences usually link multiple academic areas and allow students to delve deeply into content. William Smith has an integration of fieldwork and service learning experiences to supplement didactic learning. At Odyssey Elementary, they utilize technology to individualize the learning of core curriculum in the classroom, but also plan expeditionary “fieldwork” outside of the classroom linked to the course curriculum. Sheridan School District has a “journey program” which offers school-based enrichment and educational experiences outside of the school. These enrichment experiences are used to teach and enhance core curriculum, as well as partner students with community members.

Internships

Internships allow students to apply and deepen what they know, as well as prepare themselves for the work force. Internships are being used as a part of school programming to help students define how their interests and talents could lead to a career they may want to pursue post high school. To have internships available, schools and districts collaborate with community partners to make those opportunities available to students. One school that offers internships to their students is Vista PEAK; they work with community partners like the Anschutz Medical Campus to offer internships in the medical field.

The Aurora School District focuses on career preparedness and work force readiness. This not only includes working with colleges to offer classes that earn students college credits at their high schools but also working with community partners to create internship opportunities and other contextual learning experiences. The partnerships with the community members also helps Aurora align curriculum to the work-force demands to better prepare students for post-secondary careers. They strive to ensure a variety of internships are available to meet the interests of the students. Jeffco has a program offered specifically to students who qualify for special education that provides job training to learn skills outside of the classroom. They also offer internships and community experience opportunities to all students for career related experiences.

Content Integration

There seems to be a shift in many schools towards integrating skills across class periods or increasing time blocks and addressing multiple core academic areas in those longer blocks. Several schools, such as Riverdale Elementary, Alicia Sanchez Elementary, and West Generation Academy have implemented a focus on literacy throughout their curriculum. William Smith High has created time within their schedule to facilitate cross-discipline collaboration to promote integration and alignment of skills across subjects. There are also opportunities to integrate core content with English Language Acquisition (ELA) and Special Education interventions. At Woodglen Elementary, Special Education and ELA instructors are placed within classrooms to provide students with support within existing classrooms. Merrill Middle School also incorporates ELA reading interventions into language arts classes. JCEA also advocates for the incorporation of core skills across disciplines and content areas.

Various extended learning offerings provide opportunities to integrate core skills. The Power Sessions and personalized student Pathways offered at Vista PEAK Prep have been aligned to core instruction standards. Manual High offers four weeks of student excursions during the school year, during which they provide students with academic content in an experiential manner. Enrichment opportunities also provide an opportunity to integrate core skills. The community enrichment providers at Alicia Sanchez Elementary, for instance, actively collaborate with teachers to align enrichment offerings with core academic content. Grant Beacon Middle School has enrichment courses created by their academic departments aligned to the core course content which include project based activities and extensions of their learning. Sheridan has incorporated vocabulary, writing, geography, and/or math in virtually all of their enrichment offerings, so as to align ELO activities with grade-level standards. Additionally, Sheridan incorporates a focus on psychosocial needs within their enrichment offerings.

Summary of Considerations for Vary Delivery Methods

Varying delivery methods is a way to provide students with access to education and learning in a variety of ways. This allows for a more personalized learning experience for all students because they can learn in a method that is relatable to them. The following guidelines provide considerations for varying delivery methods at each level.

School-Level

- How can different curricular delivery methods support your personalized learning vision?
- What different kinds of learning styles are represented in your student body? How do you know this? How might you best meet students' needs with these various learning styles?
- In what ways are you currently varying delivery methods?
- What support would educators need to do this well?
- Technology is a tool, not the objective; in order to use technology most effectively, consider:
 - Forming a technology team within the school
 - Evaluating the comprehensiveness and integration of software systems
 - Evaluating home access to and facility with technology

District-Level

- Identify potential implications of varying delivery methods on district departments/school support needs.
- How to manage state requirements around minutes and hours for full-time funding in supporting internship and community service experiences.
- Technology
 - What instructional technology is needed to support individualized learning and student engagement?
 - What infrastructure and hardware is needed to support individualized learning and student engagement?
 - What professional development is needed to support the use of the above technologies so that learning is individualized and students are engaged?

Educational Partners

- What educational enrichment opportunities can you provide on campus that serve your mission and support the school's ELO vision?
- What educational enrichment opportunities can you provide off campus that serve your mission and support the school's ELO vision?
- Are you able to provide technology assistance to schools, students, or families?

Case Studies of Schools: Putting it All Together to Create Dramatically Personalized Learning Experiences that Ignite the Unique Potential of Every Student

Although ELO is still a new conceptualization of practices, there are schools that have already experienced meaningful success in their conceptualization of how to reorganize resources to personalize learning for students. Alicia Sanchez Elementary School, West Generation Academy, and Rocky Mountain Preparatory School are explored in greater detail below.

Alicia Sanchez Elementary School

Alicia Sanchez Elementary School in BVSD is an International Baccalaureate Pre-5 School located in Lafayette. Alicia Sanchez emphasizes providing comprehensive educational support and care to their student body. Moreover, many of their educational decisions have been informed by best practices for schools that support families in poverty. The student body they serve is approximately: 290 students, 40% second-language learners, 60% Hispanic, and 80% percent qualified for meal assistance. Therefore, they began designing their current school structure based upon meeting the specific needs associated with their student body.

Before implementing any changes, teachers, elected by their peers, led research groups designed to study best practices within high poverty schools. The teachers also drafted an agreement amongst themselves to promote accountability. By involving teachers in the process of reinventing the school, they ensured a teacher-driven effort, focused on leveraging teachers' knowledge of student needs. Thus, they avoided the struggle that many schools encounter when administrators impose changes upon teachers. Teachers that were unwilling or unable to commit to making the changes were reassigned and replaced.

Alicia Sanchez aims to support students and their families academically, socially, behaviorally, and emotionally. In order to provide such a comprehensive level of support and intervention, they have extended their school day and school year. Through the extension of the school day, they have been able to provide enrichment opportunities to their students. They utilize over 200 community partners to provide these extended learning opportunities to students, which helps facilitate at least 60 minutes of collaborative time per day for teachers. In order to extend the school day without breaching the contractually agreed number of teacher working hours, they have implemented staggered teacher schedules. Further, they have only fully implemented the extended day for second grade and up. They have extended the day for a few of their kindergarten and first grade students in order to ascertain how younger children will respond to an extended school day. They have also designed before- and after-school programming to support students and families. Through a partnership with CU Boulder they implement a program called El Pueblo, whereby undergraduate education students provide after school programming focused on health and wellness, which is a need among their high poverty student body. They also have homework help provided by staff members before and after school. Further, they also provide after school programming for parents, such as GED and parenting classes.

Alicia Sanchez has also extended the school year to further support their students. They have implemented a jumpstart program that provides an additional two weeks of instruction for incoming kindergarten and first grade students prior to the usual start of the academic year. They also provide summer programming, which is divided into two sections. The first section operates in the morning and provides support for individuals learning English as a second language, and it is open to the entire community. The second section operates in the afternoons and targets students who are a year and a half below grade level, and it has a focus on literacy skills. Alicia Sanchez is currently exploring redesigning their calendar so as to provide year round support and instruction to all students.

Providing these comprehensive supports to students requires the use of numerous individuals in various roles. In addition to the community partners and CU students, they also utilize individuals in various other roles. They utilize math specialists, literacy coaches, and interventionists to support the academic needs of students. The interventionists are assigned to a particular grade level. This allows them to more personally know the students, as well as help provide small group, personalized instruction within the classroom. They also have community liaisons, who help coordinate after school programming, provide additional supports to parents, and support various other student needs. They also have a family resource specialist who helps to support parents and connect them to community resources; they have identified addressing family needs as a critical component of ensuring positive outcomes for high poverty students.

Alicia Sanchez faces a fundamental challenge that many schools encounter: how to best support students of poverty. In response, they have extended the learning day and year, so as to be able to focus on providing psychosocial and family support, in addition to academic supports. Through the flexible policies of the BVSD, they have been able to make these changes within the teacher contract. However, their current model requires the usage of significant additional funds, which brings into question the long-term sustainability of their model. They currently utilize funding from several sources including: CDE, CLF, and Title III and Title I funds. The sustaining of the current model is a primary challenge.

Alicia Sanchez has successfully implemented an ELO vision by supporting teacher-led decision groups focused on providing a personalized learning experience that addresses the multi-faceted needs of students growing up in low socio-economic background families. Over the past year they have noticed significant improvements in student literacy, as well as significant gains in student attendance.

West Generation Academy

Another example of a school with a multi-component ELO structure is West Generation Academy in DPS. West Generation Academy is a public school in Denver that focuses on college and career readiness aligned with the student's individual skill sets and goals. They are an innovation school and currently serve approximately 450 students in grades six, seven, nine and ten. They will have built out to just over 1,000 students in grades 6-12 by 2016. West Generation Academy is in its second year of receiving a small Student Improvement Grant through the Colorado Department of Education, they are also designated a turnaround school. West Generation Academy is a local pilot school of the Generation Schools model, which launched its first pilot in Brooklyn, NY with the goal of leveling the playing field for disadvantaged students who were not performing at the same rate as other students. Students who do not perform as well as others in a typical school environment often need more individualized attention. They also need to be exposed to the possibilities and opportunities that are available to them upon graduating from high school. West Generation Academy focuses on adding time while simultaneously reimagining human capital as a means to reach their personalized learning vision for students. Their vision is to create an environment where every student, regardless of circumstances, is prepared for life's responsibilities, challenges, and opportunities.

The West Generation Academy model adds 20 days to the traditional school year and operates on an 8 hour school day. To make the extended day and year feasible it was necessary realign the use of human capital to ensure teachers were not being overworked and simultaneously keep class sizes small and personal. Teachers work 180 days, which is similar to the work schedule of most teachers. To do this, they divide their teachers into three rotating teacher teams: Foundation (core courses), Studio (science plus electives, replacement curriculum, etc.) and Intensives (focused on college/career transition). Utilizing the three team structure, they implemented a schedule where students have intensive class for one month twice each year, which allows teachers to have staggered vacation schedules. Intensive classes focus on college and career readiness and give students the opportunity to complete rigorous course work as they explore careers and educational pathways in high growth industries. Examples of classes include Robotics, Energy

and Environmental Science, Hospitality, Creative Design, and Money Matters, which focuses on financial jobs. These classes are offered to an entire grade level at a time. The intensive classes are taught by certified teachers who specialize in a specific area, so the students are able to receive credit and quality instruction on a subject that is of interest to them as a way to further personalize the learning experience.

In addition to the month-long Intensive Courses, students take Studio Courses as part of their daily schedule. These classes are based on data about the student population, interests and student needs. Examples of classes include science, health, language support classes, fine art classes, and intervention classes. During this time, Foundation Course teachers teach once course and then have time to collaborate through common planning time and participate in PLC's. The Foundation Courses are taught in the morning over two 90 minute sessions. Each Foundation Course teacher team (either math or humanities) is comprised of up to four teachers who work collaboratively to teach these core subjects with the ability to group and regroup students as often as needed to help achieve academic growth. The team consists of experts in each subject some of whom are dual certified in special education and ELL to meet the needs of the diverse population of students. The afternoon planning time allows each team to discuss goals, assess student data, hold Rti and SPED meetings and plan. Over 90% of the staff at West Generation Academy teaches classes, which allows for smaller class sizes. Because of this, teachers are also expected to take on additional roles within the school that are typically the responsibility of support staff in the additional time they have beyond the 120 minutes of daily planning time

Due to the GSN belief in whole child development and supports, they partner with community based organizations to supplement meeting student needs in addition to the shared campus psychologist, social worker, nurse and social work intern to ensure students are getting their mental and emotional needs met. A member of the Generation Schools Network staff works with one of the assistant principals to establish partnerships that deliver a broad array of services to students and families. One example of a partner they work with is Mental Health Services of Denver. As many families cannot afford to get their children mental health services because of either time or money, in many cases the only time children will receive this type of care is in the school. Collaborating with community partners ensures students' mental health and wellness needs are being met, a need that is so critical in education.

The other structure built into the model to help eliminate barriers to success and propel future focus is the Faculty Advocacy program. Every student is assigned a faculty advocate that they meet with daily for 45 minutes around lunchtime along with 8-10 of their peers. This allows for a single teacher to have a group of students they get to know deeply over time allowing them to develop a trust relationship and to be the school's first line of defense for keeping the student in school. Personal, social, emotional and workforce skills are taught during Advocacy. Students undertake regular goal setting and review of their progress, strategize with their Advocate to eliminate barriers they are facing, and plan for the future.

West Generation Academy also focuses on other components of the ELO model to deliver more personalized learning to their students. Online and blended learning is part of all three course types and skillware is used extensively to help push, expand and remediate learning. All teachers are expected to incorporate the use of technology in daily lesson planning, using the computer bank as a learning station which allows teachers to both supplement learning and individualize instruction. The use of computers also allows teachers to facilitate small group instruction within the classroom while still ensuring other students are learning.

West Generation Academy offers multiple opportunities to integrate learning and provides teachers with the time to collaborate together to connect different subjects to each other allowing them to be taught simultaneously. For example, the children are learning both English and Social Studies in their Humanities Course. When there is a

connection between subjects, children are able to consistently utilize skills and knowledge from different disciplines throughout the day.

West Generation Academy cites fitting a new model into existing district structures as its greatest challenge. This includes receiving very small amounts of turnaround funding compared to other district turnaround projects and having time to build relationships, and advocate with various departments for implementation of the approved Innovation Plan. While the model seeks to operate close to a cost-neutral basis once the school has reached enrollment capacity, transitional costs to a new model in a turnaround setting are to be expected as part of the turnaround effort.

Transportation has also been a barrier as the school seeks to attract students back to a campus that had largely been abandoned by the students assigned there. The transportation policies that apply to the rest of the district leave students with long RTD rides, crossing major thoroughfares (Federal, Alameda, 6th, 8th and I-25) and having siblings riding different buses when going to and from the same school. Padres Unidos and the district are working together to try to abate some of these transportation issues, especially since almost all of the West Generation Academy students come from low-income families.

Rocky Mountain Preparatory School

Rocky Mountain Prep is a public charter school located in southeast Denver, which serves a diverse student body. They currently serve approximately 130 students, 84% of students are eligible for the Free and Reduced Lunch Program. Demographically, 35% are Hispanic and 35% African-American. This new school is designed to serve Pre-K through 5th grade. However, they currently serve Pre-K through 1st grade and are using a slow growth model whereby as their current student progress in grade level, they will begin to serve higher grades. A major emphasis at Rocky Mountain Prep is to provide personalized instruction through a combination of accurately assessing student skill levels and small group instruction.

Rocky Mountain Prep utilizes a classroom model that facilitates personalized instruction. Students in the classroom are divided into three groups: one that is engaged in blended learning, one that is receiving direct instruction from the lead teacher, and one that is receiving direct instruction from a "Teaching Fellow" (a younger educator studying to become a lead teacher). Students are grouped based on similar skill levels so as to allow instruction to be provided at a level that is appropriate for all students in the group. Further, the students are regrouped weekly to allow for relative fluctuations in student achievement.

The blended learning within the classroom allows for both small group instruction and thorough student assessment. As the students practice their skills on the computers, the system is constantly gathering data about how the student is progressing academically. The system then provides teachers with detailed information regarding each student's individual progress, which they can then use to personalize instruction for that student. They have weekly Data Meetings, where student data is formally discussed. This data informs each student's small group placement. Also, because the digital content programs automatically records and tracks student data, teachers save time by not needing to manually record student data. Moreover, because approximately one third of the students are engaged in technology-based learning at any given time, teachers are providing instruction to fewer students and can more easily personalize instruction.

To further provide individualized instruction, they have teaching fellows within each classroom providing instruction to one of the three student groups. Through a partnership with Metropolitan State University of Denver (switching to University of Colorado Denver), they are able to provide a licensure opportunity for their fellows. In exchange for providing instruction and receiving training as an educator, the fellows are provided with a stipend and

benefits, which makes this a far more economically feasible option for the school than hiring more teachers. Therefore, they are able to greatly reduce the student to educator ratio while still remaining within their budgetary constraints.

To further personalize learning, they are incorporating within their school day what they call "PEAK hour." This is a period of time where students who are exhibiting proficiency in their basic skills can undertake an educational project of their choosing. This time is also used to provide intervention for students who are not showing proficiency in their skills. This flexibility time will therefore serve to allow students to personalize their education in accordance to individual interests while creating time within the school day for any necessary academic interventions.

Rocky Mountain Prep operates with an extended day and an extended year. Through extending each day and adding four weeks to their calendar, they are able to provide as much as 33% more instruction than traditional school calendars. They have a mandatory summer program for their lowest achieving students. The summer program consists of four hours core instruction and two hours enrichment time each day.

Supporting students outside of school is also a goal at Rocky Mountain Prep. In part they accomplish this through involving parents. They have mandatory orientations for parents, so that they can inform parents of the educational process at it exists at Rocky Mountain Prep. Also, they have mandatory volunteer hours for parents to further involve them in their children's education. They have also made the computer-based learning available online so that students may access it remotely. Further, they utilize a partnership with Comcast whereby laptops and internet access are made available to low-income families at a greatly reduced rate. This ensures that all students have access to internet content at home.

The fiscal model at Rocky Mountain Prep is one designed for sustainability. The use of teaching fellows in conjunction with the use of blended learning allows them to place more students within a classroom while still providing individualized instruction. This approach, therefore, creates savings through decreasing the total number of classrooms required, which allows for continued reinvestment into the school. However, though this model reaps operational savings, the tech-heavy infrastructure required a significant investment. Funds from several private foundations, as well as a federal charter school grant have allowed Rocky Mountain Prep to develop this infrastructure.

Rocky Mountain Prep has developed a model centered around personalizing the learning experience for each student. Accurately assessing student needs and providing personalized instruction are central to this mission. Extending learning time is another element that they utilize to ensure that students receive the instruction they require to succeed both in their current academics as well as in their future endeavors. As a new school, they are still rolling out several of the initiatives represented by their vision. Preliminary challenges have included difficulty in keeping the blended learning fully aligned with the classroom instruction. Also, given the copious amounts of student data that are being gathered, there is a need for a fully integrated and comprehensive monitoring system. Further, due to the newness of the school, longer term data related to student outcomes are as of yet forthcoming. However, initial indications are that the personalized learning experiences provided at Rocky Mountain Prep will translate into longer term academic and personal success.

Sustainability Considerations

School leaders, district administrators, and educational partners have also identified other areas of critical considerations for the sustainable implementation of ELO over time. In addition to the findings from this report, other experiences during the first year of ELO implementation have led to several lessons learned in the areas of: funding, policies, data management systems, and prioritizing and implementing ELO while balancing key state reforms.

Funding

- There are startup expenses associated with ELO. One-time moneys (such as grants) can be a great way to begin ELO planning and implementation. However, sustainability should be considered from the development of your ELO design so that changes can be maintained. For example, technology will represent an ongoing expense for maintenance and updates; this should be considered in the budget development.
- While evidence of extending days or adding days in a cost-neutral manner exists, it is limited. Some schools and districts have identified strategies for accessing additional or more flexible funding, such as through Innovation Status, Title I, turnaround, mill levy override, state or federal waivers, philanthropic, or other funding sources. However, there is a strong need for innovative resource allocation support that helps school and district leader identify new decision-making strategies around use of time, staff, technology, partners, and budget. As the statewide work advances, emphasis on sustainable models will be a continued priority. This is one reason why, where new funds cannot be identified, schools and districts are rethinking and reorganizing schedules and other resources to maximize existing time.
- Volunteers and community partners may be one means to feasibly and sustainably provide students with learning and enrichment opportunities, and teachers with planning time, both within and outside of the scheduled school day.
- Although some schools have relied on Innovation Status for more fiscal autonomy, other schools have implemented ELO without special status.

Policies

- Developing policies and initiatives that increase spending long-term are often not sustainable
- At the state level, dedicated leadership and staff at CDE have increased awareness across the department about ELO as a vehicle for systems change. The Executive Team, the Division of Innovation, Choice, and Engagement, and other technical assistance and grant-making teams are using the ELO vision and strategies to drive grant- and decision-making and inform policy implementation. For example, the 21st Century Community Learning Centers (CCLC) Program, Title I, Supplemental Education Services (SES), Race to the Top, STEM (Science, Technology, Engineering, and Math), and Unified Improvement Planning (UIP) teams have started incorporating ELO into their grant and training processes. Additionally, the ELO vision is reflected in multiple state-level policy efforts, including turnaround, innovation schools, graduation guidelines, and changes to the accountability system in support of blended learning.
- Feedback from experts have also highlighted the need for clearer state-level leadership related to the systems conditions needed for ELO proof points to thrive. For example, competency-based pathways represent a primary example of how education leaders aspire to use time differently in policy and practice. However, absent state-level policy conditions that promote and support competency-based efforts, proof points will struggle to succeed, much less scale.

Data Management Systems

- In many cases, school-level data initiatives have been stalled due to difficulties of integration with the district's system. In other cases, data may exist, but in disparate systems that are incompatible or impermeable based on school or district policies.
- Much greater school and district support is needed for data management systems, including requirements and specifications for comprehensive data systems that support, inform, and promote the ability and effectiveness of educators to personalize learning. To truly impact a statewide initiative, CLF and CDE must tackle the data picture in ways that: 1) support use of data cycles and common assessments to personalize learning; 2) cause educators to understand and internalize the value of data platforms and applications to inform their practice; and 3) allow school and district leaders to engage with and customize data infrastructure in cost-efficient ways that incite sharing and co-creation.

Integration With Other Initiatives and School/District Priorities

- Some educators indicated that they are suffering from “initiative fatigue” or “reform fatigue”; schools should be careful to approach ELO in a way that does not feel like another “add on” without identifying other activities that will be de-prioritized or stopped as a result. To mitigate challenges related to current infrastructure and systems alignment, it is valuable to clearly and early on articulate how your ELO agenda will support and integrate into SB 191 and teacher effectiveness evaluations, Common Core and state-mandated testing, Special Education requirements, gifted and talented programming, English language acquisition, or other district or school initiatives.
- ELO must operate within other mandates and agendas; ELO implementation tends to be most successful when it is approached not as a brand new project in addition to a school or district's other priorities, but as a mindset shift to rethink overall the approach to learning and teaching. For example, some administrators have indicated that, given implementation of SB 191, the timing is not right to initiate blended learning. While the concern about initiative fatigue is real, blended learning supports educators with technology tools that provide a constant data exchange about individual student learning. It is also a way to improve working conditions for educators by enabling time to be used differently. With the right infrastructure, blended learning can increase efficiency by streamlining time-intensive work of data collection and analysis, lesson planning, and grading, and enabling educators to focus on personalized learning.

Next Steps

In May 2012, CLF and CDE published a strategic plan for advancing a statewide vision for ELO. One year later, the context in Colorado has changed and this work continues to evolve, driven primarily by extensive feedback received from Colorado educators and national experts.

The first year of implementation has caused CLF and CDE to realize that the ELO vision articulated in 2012 was not *the* vision, but the start of a vision, and part of a greater readiness effort to engage the state in articulating and moving toward a new education system that produces not only better, but different outcomes for today's students.

While our work will continue to be strongly connected to the vision for personalized learning articulated in 2012, feedback has highlighted the need for greater clarity around “personalized learning” and “unique potential.” It has also become clear that the state's efforts to articulate an updated vision must: be inclusive of students, parents, and educators; identify language that clearly resonates desired outcomes for students and intended benefits for educators; and recognize a commitment for other current priorities to stop or be decommissioned as part of this shift.

Based on the feedback we have already received from the field, we believe the education system we need must help students:

- Develop the academic, professional, and entrepreneurial competencies that the modern economy demands
- Instill the drive to contribute to society in ways that improve our state, nation, and world
- Understand and challenge themselves and take responsibility for maximizing their talent and potential

Using this as a starting point represents an important shift from our 2012 strategic plan: we believe our vision must revolve around student-level needs, and how systems at all levels must shift to support them, rather than starting from a systems-level perspective. Importantly, we have also come to realize that while personalized and personal learning experiences are crucial to developing these student outcomes, there are likely additional characteristics of learning environments that also promote the development of these outcomes.

These lessons learned imply some changing priorities in the ELO initiative's use of time and resources in the next year and beyond. While remaining connected to the two-year implementation priorities identified by CLF and CDE in the 2012 strategic plan (proof points, communications and awareness, and capacity building and change management), we expect new priorities to emerge: building the case for change by connecting school and district leaders to peers, models, and experts that can inform their thinking, as well as opportunities to self-assess their own readiness for change; creating systems conditions by identifying factors that enable or constrain implementation of next generation learning, and then strategically promoting or de-commissioning; and bringing new resources to bear in support of this work.

Collaborations

Importantly, there is evidence of an ecosystem for a shift to next generation learning which ignites the unique potential of every student in Colorado beyond the ELO Initiative. Additional evidence of engagement and readiness across the state includes but is not limited to leadership of: Donnell-Kay Foundation; Rose Community Foundation; SW TURN; Padres Unidos; the University of Colorado; the Out of School Time (OST) systems-building work facilitated by the Mayor's Office for Education and Children; blended learning efforts through Janus Foundation, eNetColorado, and the Colorado eLearning Collaborative (CeLC); Colorado Children's Campaign; Colorado Education Association; Colorado League of Charter Schools; Race to the Top District competition proposals; design thinking efforts of Design EDU, Front Range BOCES, and Rework; and many others. CLF and CDE have prioritized engaging with, learning from, and identifying linkages between these efforts as they continue to drive forward this work.

While a strong foundation of thought partners exists, rethinking teaching and learning to reflect the needs and perspectives of students, parents, and educators will require new kinds of support and engagement. This will have implications on a diverse range of stakeholders, including, for example, policy makers, business and community partners, school boards, advocacy organizations, educator prep programs, higher education, local champions, and technology bandwidth and infrastructure partners. CLF and CDE are committed to partnering with stakeholders to identify roles that can best support this work.