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Education Interim Committee  
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## WHAT'S THE BIG DEAL WITH STUDENT-CENTERED, PERSONALIZED, COMPETENCY-BASED LEARNING?



The traditional, age-based cohort, industrial model of education could be viewed as a series of high jump contests. Multiple times a year, groups of students are evaluated against a standard; basically, they are asked: “Can you clear the bar?”

A significant problem with this model is that some students may walk into the classroom on day one already, or nearly, able to soar over that bar, while others, despite great efforts by teachers and themselves, may take longer than a semester or year to acquire the knowledge and skills to be able to clear the bar.

But unless a student’s progress is judged to be so far beyond (skip a grade) or behind (hold back) their age-group cohort, students remain with their class despite varying levels of mastery. Those able to clear the next height quickly may become bored and disengaged; those who have still not cleared the previous bar will likely fall further behind, and become frustrated and disengaged.

Obviously, this analogy is overly simplified, and many teachers strive to differentiate instruction to challenge each student appropriately, but there is some accuracy to the comparison. The educational model in the US has worked well enough for more than a century, but it has not changed much. It is an efficient delivery model, but it works best for students “in the middle” and isn’t necessarily designed to “develop the full educational potential of each person.”

The various redesign elements under the umbrella of student-centered learning suggest a different analogy: rather than a series of high jumps, a timed event in which the goal is for each runner to cover as much ground as possible.

What if we looked every parent of a kindergartener in the eye and said, “The state of Montana is prepared to invest \$150,000 to \$200,000 in your child over the next 13 to 17 years to help develop their full educational potential. Let’s see how far they can go!?”

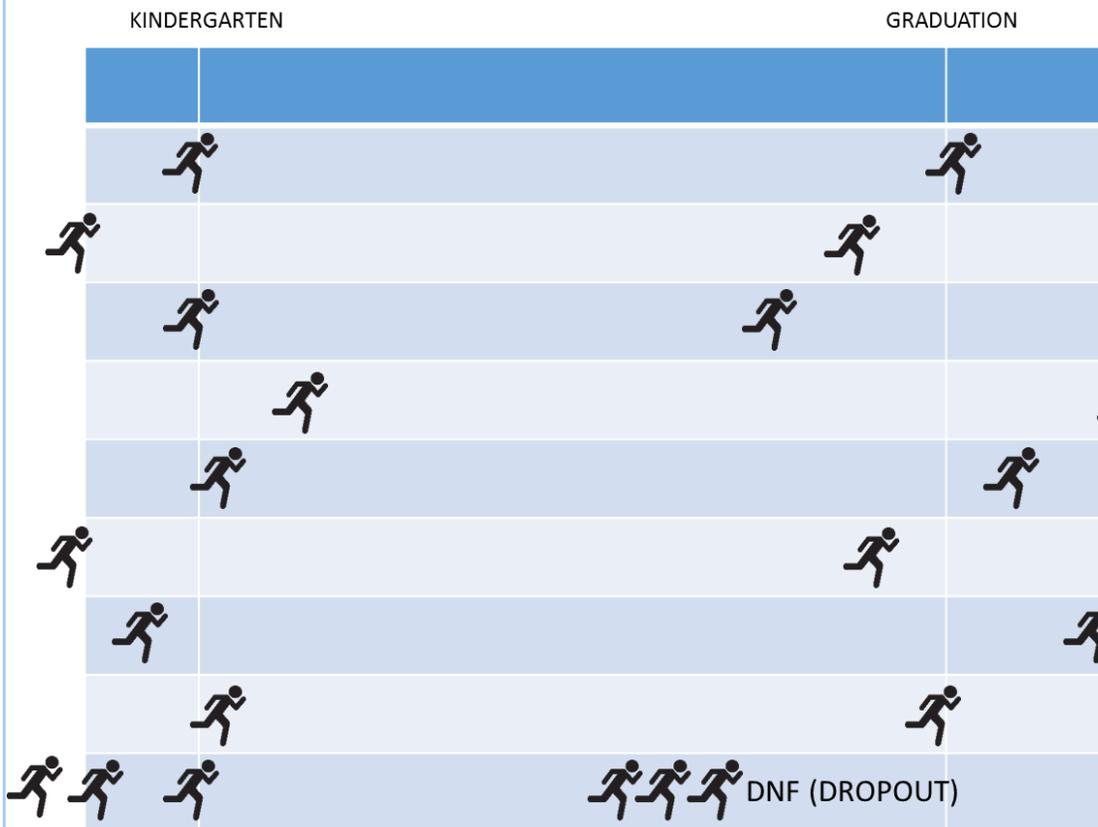
Student-centered learning proposes that:

- we acknowledge that some students will run farther and faster, sooner and later, than other students;
- rather than evaluating students based on whether they are able to cover a standardized distance established for all students of the same age, we evaluate each of them based on their individual progress;



- we put students at the center of their own education and allow and encourage them to identify their own dreams and work at their own pace and follow their own interests in pursuing those dreams;
- we instill in students that we are all lifelong learners, that teachers are all around us, and that learning happens inside and outside classroom walls; and
- we leverage technology not as a replacement of the artistry that is teaching but as a tool to enhance teaching and learning and to help measure and monitor each student's progress.

## WHAT IF WE VIEWED K-12 EDUCATION AS A 13-YEAR RACE?



In Montana, our foundational constitutional goal for education is to establish a system that will “develop the full educational potential of each student” and we guarantee “equality of educational opportunity.”

That some kids will run farther than others is not necessarily a problem. We all have different abilities and developmental timelines, and we put in varying degrees of effort along the way. Our current educational system produces widely varying individual outcomes.

To provide for a fair race, we can help all kids get to the starting line on time (school readiness) and we can ensure that distance covered (educational opportunity) does not correlate with family income or race or zip code (achievement gaps).

The Montana Constitution acknowledges individual potential, and using the 13-year-race analogy, our system should help kids run as far as they possibly can during these 13 years. Viewed in this way, successful schools, districts, states, and nations will be the ones whose education systems as a whole record the greatest total distance from all their runners.

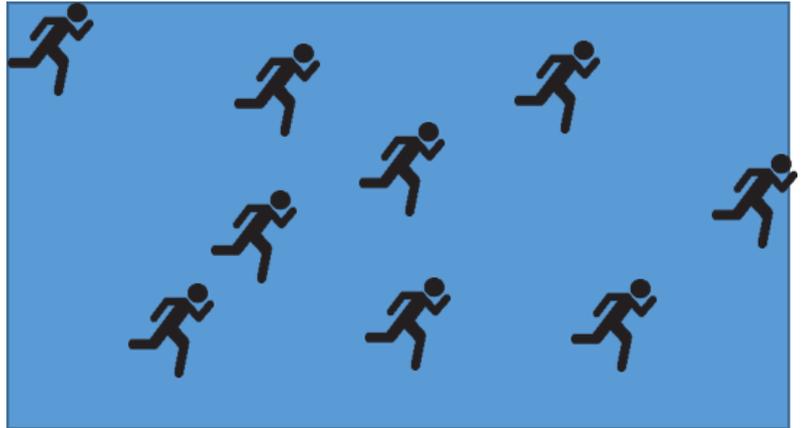
## IS THE EDUCATIONAL MODEL THAT WE'VE USED FOR 100+ YEARS DESIGNED TO MAXIMIZE INDIVIDUAL (AND GROUP) POTENTIAL?

### Traditional Education Model

An age-based cohort is placed in a classroom that for the most part proceeds together through a pre-scheduled curriculum over the course of 180 days for 13 years. Students are assessed simultaneously and then move on as a group despite widely varying degrees of mastery of subject matter.

This has been a highly efficient model for delivering education for over 100 years, but it has its liabilities, including that:

- it tends to teach to the middle of the group and give less attention to students who are ready to move on sooner or who need more time to master concepts; and
- it tends to solidify achievement gaps in the early grades—those who start out behind or who need more time, remain/fall behind.

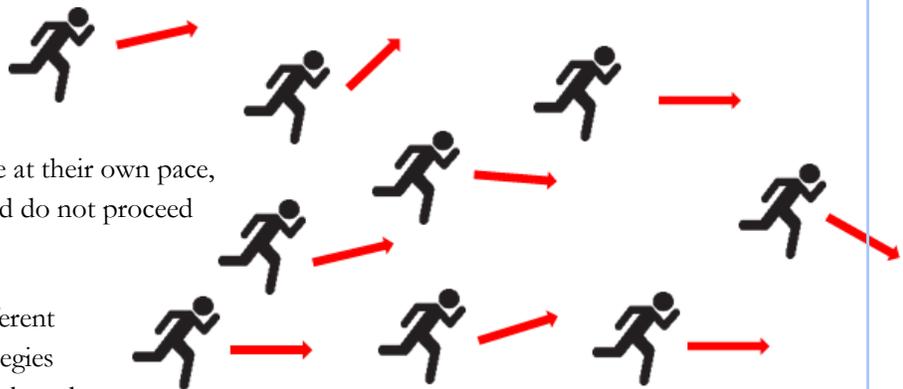


### Student-Centered Learning

While students may still be grouped to some degree in age-based cohorts, their instruction is individualized, and they are allowed to progress more at their own pace, following their own interests as much as possible, and do not proceed until they achieve mastery of subject matter.

Student-centered learning can emphasize several different principles and make use of various instructional strategies (see next page). And, it is not brand new; some schools and teachers have been practicing aspects of this for decades, but a couple of factors are driving current conversations about this possible redesign:

- concern that the traditional model may not be ensuring global competitiveness for US students; and
- new technology that is making it easier to track student progress and tailor/deliver instruction individually.



# Student-Centered Learning

Personalized Learning	Competency-Based Education	Student Agency	Open-Walled education	Socially Embedded
Each learner’s interests, passions, strengths, needs, and culture are incorporated to the greatest degree possible.	Each learner works toward competency (or mastery) in well-defined domains of knowledge and skills at their own pace.	Each learner is an active participant in the design, revision, and execution of their own learning plan; intrinsic motivation replaces extrinsic.	Learning can happen “any time, any place.”	Learning is rooted in relationships – teachers, peers, family, community members; both face-to-face and virtual connections are honored.
<ul style="list-style-type: none"> <li>• Adaptive assessments</li> <li>• Individualized Education Programs (IEPs) for all students</li> <li>• STEM/CTE/Arts focused tracks</li> </ul>	<ul style="list-style-type: none"> <li>• Performance-based assessments</li> <li>• Badges and microcredentials</li> <li>• Credit for prior knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Self and portfolio assessments</li> <li>• Individualized Education Programs (IEPs) for all students</li> <li>• Project-based learning</li> <li>• Inquiry-based learning</li> </ul>	<ul style="list-style-type: none"> <li>• Community- and work-based learning</li> <li>• Dual enrollment</li> <li>• Apprenticeships</li> <li>• Internships</li> <li>• Experiential and expeditionary learning</li> <li>• Online learning</li> </ul>	<ul style="list-style-type: none"> <li>• Peer assessments</li> <li>• Cooperative learning</li> <li>• Classroom community of learners approach</li> <li>• Online discussion groups (global)</li> </ul>

Borrowed heavily from [“A transformational vision for education in the US”](#) by Education Reimagined

While student-centered learning holds great promise, it is important to remember that education in the US has suffered from silver-bullet-solution thinking and policy pendulum swings for a long time. Student-centered learning is a significant redesign of our traditional system and it presents opportunities and challenges. A number of groups are working on this effort:

The National Conference of State Legislatures (NCSL) has formed a bipartisan Student-Centered Learning Commission to study legislative policy options to support student-centered learning.

<http://www.ncsl.org/research/education/ncsl-student-centered-learning-commission.aspx>

Education Reimagined is dedicated to educational transformation with learners at the center.

<https://education-reimagined.org/>

Jobs for the Future has created the Students at the Center Hub as a clearinghouse for all things student-centered.

<https://studentsatthecenterhub.org/>

CompetencyWorks is a project of iNACOL, the International Association for K-12 Online Learning.

<https://www.competencyworks.org/>

KnowledgeWorks is committed to student success through personalized learning.

<http://www.knowledgeworks.org/>