

Personalized Learning Driver Model

Purpose

The Driver Model is Denver Public Schools' framework for Personalized Learning (PL), a major initiative to ensure equity for all learners. The primary drivers guide the educators and learners to develop a new type of learning experience for all learners that maximizes opportunities for learner control and achievement. It represents our current understanding about how PL can be implemented within a public school by describing teacher and learner actions along a progressive continuum, from teacher-driven to learner-driven. The Driver Model is used primarily to:

- 1. Support PL school design, goal-setting, implementation and progress monitoring
- 2. Support our research to understand learner outcomes as a result of personalized learning
- 3. Communicate a consistent definition of PL across the district
- 4. Guide teachers in providing the learner the opportunity to create learning experiences that are meaningfully authentic and relevant.

The Driver Model is not intended to be used as a roadmap or a prescription for action. Rather, it serves four purposes for educators thinking about their educational practices:

- 1. **Diagnostics:** Teachers and leaders can use the Driver Model as a tool for understanding where they currently are (both individually and collectively).
- 2. **Goal-setting:** Teachers and leaders can use the Driver Model to set both short- and long-term goals and to characterize what the overall educational environment will become.
- 3. **Strategy development/action planning:** The Driver Model provides a framework within which leaders can develop a whole-school strategy for change and teachers can identify action steps and develop plans to implement those steps.
- 4. **Progress monitoring:** Teachers and leaders can use the Driver Model to set targets and timelines, develop measurement plans and instruments, and identify the information they will need to gather in order to monitor progress toward meeting their goals.

Definition of Learner Agency

We define learner agency as the learner's ability-due to both internal capacity and external circumstances-to influence and ultimately direct his or her own learning.

Definition of Personalized Learning

Personalized Learning is an approach to education that focuses on building students' identities as lifelong learners, so that, over time, they develop a full-fledged sense of learner agency and ownership of their academic progress. Ultimately, our model suggests it leads to improved academic outcomes for all learners.* Within the framework of a formal curriculum and the Common Core State Standards, teachers offer learners choice and flexibility in what and how they learn, in order to facilitate intrinsic motivation, engagement in learning, and self-determination, and they promote learner voice-oriented activities in order to foster learners' influence, responsibility, advocacy, and leadership. Teachers set high expectations and adhere to high academic standards for everyone, in order to ensure that all learners reach their full potential.

- Learner Paths: Learners can identify their cognitive and non-cognitive strengths and challenges, name and pursue their interests and passions, and develop skills in setting, monitoring, and reflecting on their own learning goals. Learners use quantitative and qualitative feedback (data) to assess their own progress, to evaluate the effectiveness of their learning strategies, and to set appropriate learning goals. This knowledge and these skills are foundational to the development of intrinsic motivation and ownership of learning, and to learners making beneficial choices that will lead to mastery.
- Evolving Learner and Teacher Roles: Learner and teacher roles shift as learners develop their competencies, as they assume greater responsibility for their learning, and as they pursue specific areas of personal interest. Teachers provide appropriate resources and scaffolds to support learners on their individual journeys toward mastery. The role of the teacher is critical in evaluating learner progress and in determining when and how to give learners greater responsibility for their learning. Particularly for

- younger learners, as well as for learners new to Personalized Learning, teachers must skillfully gauge how best to foster the acquisition of independent learning skills that are the foundation for self-determination and learner agency.
- Strategic Resource Use: The notion of learning resources is expanded to include the wider community (through mentorships and partnerships) and to harness the power of technology to enable and support learning across time and distance. Expanding resources in this way is critical to enabling learners to pursue their interests, to look beyond the teacher as the primary source of knowledge, and to learn valuable interaction and collaboration skills. By creating a flexible classroom learning space, teachers can introduce learners to the concept that learning results from the learner's own engagement with the learning process rather than the structure of the environment. This understanding reinforces the development of self-regulation skills.
- Developing, Deepening, and Demonstrating Competencies: Learning is made relevant and applicable to learners' interests and life-goals, with a focus on creatively identifying, analyzing, and solving problems. Learning is grounded in depth of understanding rather than breadth of content. Learners advance based on their ability to master a skill or competency at their own pace, regardless of environment. Assessment is embedded in authentic tasks and may involve learners choosing assessment formats, developing rubrics, and providing self and peer feedback and evaluation. Increasing learners' opportunities to participate in such voice-oriented activities is foundational to the development of learner agency that lies at the heart of Personalized Learning.

NOTE: All LEAP indicators aligned throughout the document are pulled from LEAP Distinguished Student Behaviors.

* See here (add link) for our full outcomes model

	Foundational Practices								
Foundational Practices	The elements highlighted in this section are foundational for successful implementation of Personalized Learning. We recommend that		All members contribute positively to the school community and work to build trusting, meaningful and authentic relationships.						
	school communities self-reflect on these elements to determine their strengths and areas for growth. If a foundational practice is missing,	Culture	Learners and teachers consistently demonstrate cultural awareness and sensitivity, respect, and empathy.						
	we recommend planning for how to improve in that area to ensure Personalized Learning work is successful.		Mindsets around learner agency, the role of the teacher/learner and growth mindset are shared and demonstrated by stakeholders in the learning community.						
	successiui.	Metacognition	The processes used to plan, monitor, and assess one's understanding and performance.						

	Primary Drivers	Secondary Drivers			
Learner Paths	Learners have a deep understanding of their own assets, needs and interests and use this information to create and monitor personalized goals.	Learner Profile Data	Learners, teachers and families understand each learner's assets, interests, and needs and use this information along with outcomes data to personalize and drive learning.		
	to create and monitor personalized goals.	Goal Setting & Progress Monitoring	Learners and teachers use the learner profile data to co-create goals and monitor progress.		
Evolving Learner and Teacher Roles	Learners demonstrate agency and teachers are facilitators of learning, creating a classroom culture and forming relationships that support all	The state of the s	Learners exercise increased control and responsibility for their learning, and teachers serve as guides by providing support structures and processes.		
reactive Roles	learners. Learners leverage metacognitive skills and collaboration opportunities to drive their own learning.	Learner Collaboration	Learners work collaboratively to achieve their learning goals.		
Strategic Resource Use	Learners adapt their use of space, technology, and time and develop community partnerships to meet	Strategic Space	Learners and teachers design and use space to support learners' needs and preferences.		
	their learning goals and improve the learning process.	Strategic Tech	Learners and teachers utilize technology as a resource to expand and deepen the learning experience and outcomes.		
		Strategic Time	Learners are able to create schedules, with the teacher's assistance, that meet their educational needs for best learning.		
		Strategic Community	Learners and teachers use community resources and partnerships to support relevancy and personalization.		
Developing & Demonstrating	Learners progress at their own pace based on transparent assessment and authentic	Competency Based Progression	Learners are able to progress at their own pace based on demonstrated competencies.		

	Primary Drivers		Secondary Drivers
Competencies	demonstrations of learning.		Learners demonstrate learning through a variety of authentic means that include application and creation of knowledge and support increasing levels of rigor.

Foundational	Practices		Beginning	→	→	Advanced
Schools are a cohesive community with respect for all members, operating under a common belief system that all learners should have agency, be empowered and supported to meet high expectations.	Relationships LEAP Alignment: LE.1, LE.2, LE.3, P.1	All members contribute positively to the school community and work to build trusting, meaningful and authentic relationships.	Learners and teachers have no opportunities to share their life experiences with others. The learning environment is not conducive to building relationships or serving as a safe, caring and trusting home for everyone. Learners and teachers do not have high expectations of one another. Teachers establish social leadership guidelines.	Learners and teachers have few opportunities to share their life experiences with others. The learning environment is somewhat conducive to building relationships and serving as a safe, caring and trusting home for everyone. Learners and teachers develop increased expectations of one another and begin to identify their own personal biases. Teachers increasingly allow learners to co-design social leadership guidelines.	Learners and teachers have occasional opportunities to share their life experiences with others. The learning environment is flexible and occasionally serves to build relationships and serving as a safe, caring and trusting home for everyone. Learners and teachers have high expectations of one another and understand their own personal biases. Learners and teachers increasingly co-design social leadership guidelines.	Learners and teachers openly and authentically share their identities and experiences. Learning environment fosters relationship building and serves as a safe, caring, and trusting home for everyone. Learners and teachers have high expectations of one another and challenge each other's biases as they cultivate stronger relationships. Learners and teachers demonstrate social leadership: initiate necessary but difficult conversations, stand up for their convictions, and expect ethical participation from others.
	Culture LEAP Alignment: LE.1, LE.2, P.1, P.4	Learners and teachers consistently demonstrate cultural awareness and sensitivity, respect, and empathy.	Learners are primarily aware of their own learning and not aware of other learners and their needs. Teacher identifies and solves problems for learners. Teacher designs rituals and routines for daily activities and to monitor behavior. Teachers have no awareness of their biases.	Learners are occasionally aware of other learners and their needs. Teacher occasionally supports learners to solve problems. Teacher designs classroom routines and structures to support restorative classroom practices. Learners have some input on these practices. Teachers are beginning to be	Learners are regularly aware of other learners and their needs. Learners have regular opportunities to identify and solve problems in a constructive manner with the support of their teacher. Learners and teacher codesign many of the classroom routines and structures to support restorative classroom practices, to foster learner	Learners are aware of other learners and their needs and respond with empathy. Learners consistently identify and solve problems in a constructive manner with support from their teacher when needed. Learners and teachers co-design all of the classroom routines and structures to support restorative classroom practices, to foster learner freedom and choices, and a

Foundational	Practices		Beginning	→	→	Advanced
			Teachers demonstrate limited awareness of empathetic actions for learners.	aware of their biases and how it impacts their practice and pedagogy. Teachers have empathetic actions for some learners.	freedom and choices, and inclusivity. Teachers demonstrate empathetic actions for most learners, considering race, ethnicity, FRL, gender identity, special education, ability, sexual orientation, ELL, religion.	culturally inclusive environment. Teachers are aware of their biases and proactively adapt their practice and pedagogy to meet the needs of the school community. Teachers consistently demonstrate empathetic actions for all learners, considering race, ethnicity, FRL, gender identity, special education, ability, sexual orientation, ELL, religion.
	Mindset LEAP Alignment: LE.2	Mindsets around the learner agency, the role of the teacher/learner and growth mindset are shared and demonstrated by stakeholders in the learning community.	Stakeholders (learners, families, educators, school leaders) have not discussed their mindsets around learner agency, growth mindset, and the role of the teacher/learner. The school community may not be in alignment in these areas.	The school community discusses their mindsets around learner agency, growth mindset and the role of the teacher/learner. These conversations may not yet include all stakeholders and/or may not result in an articulation of shared mindsets.	The school community discusses and articulates their mindsets around learner agency, growth mindset, and the role of the teacher/learner. The community's mindsets are known and shared throughout most of the community, with some work to be done to ensure all are aware. These shared mindsets are often used to guide the decisions and actions taken by all members of the community, with occasional situations in which individual or community actions do not align with these mindsets.	The school community regularly discusses and articulates their mindsets around learner agency, growth mindset, and the role of the teacher/learner. The community's mindsets are known and shared throughout the community. These shared mindsets are regularly used to guide the decisions and actions taken by all members of the community.
	Metacognition LEAP Alignment: I.2, I.5, I.6, I.7	performance. Metacognition includes a critical awareness of (a) one's thinking and learning and (b)	his or her own instruction. Teacher uses simple, ageappropriate scaffolds to		identify and implement	Learners independently use metacognitive strategies routinely as part of their approach to learning. They have access to multiple strategies; know when and how to use them most effectively; and make conscious decisions about which strategies to use. In reflecting on their learning, they routinely consider their use of metacognitive strategies and evaluate their role in their learning achievement.

Foundational Practices		Beginning	→	→	Advanced	
					where particular strategies are applicable and effective.	

Primary Drivers

Learner Pa	Learner Paths		Teacher Driven	→ Learner	Centered →	Learner Driven
Learners have deep understanding their own asset needs and interests and us this informatio to create and monitor learnin profiles and progress monitoring.	Profile Data LEAP Alignment: LE.1, I.1, P.1, P.2, I.5-I.7	learner's assets, interests, and needs and use	Teacher has a general understanding of learners' needs based on monthly academic assessment data and generalized information about the learners. Teacher supports learners as a collective group. Learner profile information is composed only of academic data and is available to the teacher.	Teacher has an understanding of individual learner needs based on bi-weekly academic assessment data, outcomes data (including behavior, attendance and social emotional) and learner generated profiles. Learner engages in a learner preference inventory to collect information on their assets, interests, preferences and needs. The teacher gathers this information at least once per year and uses it to regularly guide instruction. Learner profile information is occasionally shared with the learner and their family.	Learner and teacher have an understanding of individual learner needs based on frequent (at least weekly) academic assessment data, outcomes data (outcomes data including behavior, attendance and social emotional), individual reflection, and frequent feedback sessions. Learner creates their learner profile. The learner and teacher discuss and update this information at least twice per year and both use it to guide learning. The profile continues with the learner throughout the years. The learner's families are aware of the profile and may have opportunities to provide input.	Learner self-evaluates his/her needs based on frequent (weekly) academic assessment data, outcomes data (including behavior, attendance and social emotional), learner profiles, and self-reflection. Learner leads feedback sessions with teacher and families. Learner creates and regularly adjusts their learner profile with teacher and peer guidance as they recognize growth and changes in their assets, interests, preferences and needs. Learner uses the updated learner profile to drive their learning. Teacher uses the profile to best support the learner-driven learning path and ensures it follows the learner throughout the years. All stakeholders are aware of the profile and can provide input.
	Goal Setting & Progress Monitoring LEAP Alignment: P.2, I.1, I.6, I.5, I.7	Learners and teachers regularly co- create goals and monitor progress.	to set goals for the class as a whole or a small group of	Leveraging some learner profile information, teacher creates individualized and SMART (specific, measurable, achievable, rigorous, timely) goals for each learner. These goals are communicated to learner and families, but they do not have input on the goals.	Leveraging learner profile information, learner co-creates SMART personalized goals with their teacher. Teacher and learner discuss and monitor learning goals. Families are aware of and may have some input on goal creation and learner progress	Leveraging learner profile information, learner creates their own SMART personalized goals with teacher support. Teacher and learner discuss and monitor learning goals frequently. The learner regularly reflects upon their learning and makes adjustments to their goals and strategies to meet their goals as

Le	earner Paths	Teacher Driven	→ Learner (Centered →	Learner Driven
		families.	monitor learner progress toward goals and may share this progress with learners and families on a regular basis.	Learners take increased ownership in using data to monitor progress toward goals and sharing it with families, but may rely on the teacher for support.	needed. Families provide regular input and support their learners to meet their personalized goals. Learners independently use data to monitor progress toward goals and clearly articulate trends and overall progress. Learners lead conferences with their teacher and families.

Evolving Learner and Teacher Roles		Teacher Driven	→ Learner Ce	ntered →	Learner Driven
Learners demonstrate agency and teachers are facilitators of learning, creating a classroom culture and forming relationships that support all learners. Learners leverage metacognitive skills and collaboration opportunities to drive their own learning.	increased control and	Learners have few opportunities to make choices around the learning content or process. Teacher closely follows a curriculum and occasionally makes adjustments based on the needs of a few learners or groups of learners in each class. Teacher spends the majority of the class time teaching the class as a whole group through direct instruction.	choice in content and/or process, often choosing from a menu of options. Teacher has a deep understanding of the curriculum and standards and makes instructional decisions based on the needs of a few learners or groups of learners in each class. Teacher creates and follows class	around content and/or process. Leveraging a deep understanding of the standards,	

Evolving Learner and Teacher Roles		Teacher Driven	→ Learner Ce	ntered →	Learner Driven
Learner Collaboration LEAP Alignment:		Teacher requires learners to work independently with few opportunities for meaningful collaboration with peers or other collaboration partners.	occasional opportunities for meaningful collaboration with peers or	when to work collaboratively with peers and collaboration	Learners seek and drive opportunities to work collaboratively with peers and collaboration partners to support and extend their learning goals.
1.8, 1.2, 1.5, 1.7		Learners do not provide feedback to evaluate peers' arguments and/or reasoning. The teacher is the only person asking questions that exhibit low to moderate-level thinking and provides answers to the class.	questions that exhibit low to	reasoning, ask each other questions that exhibit higher- level thinking, and provide	Learners consistently evaluate peers' arguments and/or reasoning, ask each other questions that exhibit higher-level thinking, and provide support for one another to master learning goals.

Strategic Resource Use		Teacher Driven	→ Learn	er Centered →	Learner Driven
Learners adapt their use of space, technology, and time and develop community partnerships to meet their learning goals and improve the learning process. Strategic Space LEAP Alignmen LE.4, I.6	teachers design and use space to support learners' needs and preferences.	physical learning environment. Learners have little, if any, input on the design of the classroom. The physical learning environment does not change based on learning needs or goals. Learners have assigned seats	multiple learning zones (ex: independent area, collaborative work area, presentation area, etc.). Teacher directs learners to utilize specific parts of the environment depending on the current learning goal and task.	include multiple learning zones and	Learners and teacher co-design the physical learning environment to be flexible, include multiple learning zones and support collaboration. Learners advocate for their needs in the physical learning environment and are able to make changes whenever necessary. Learners frequently make appropriate choices and utilize the environment as needed to achieve their learning goals.

Strategic Re	Strategic Resource Use		Teacher Driven	→ Learn	ner Centered →	Learner Driven
	Strategic Tech LEAP Alignment: I.2, LE.4, I.6	Learners and teachers utilize technology as a resource to expand and deepen the learning experience and outcomes.	Learners are directed when to use technology to support their learning. Technology is used as a substitute for more traditional learning opportunities (ex: replacing a worksheet).	Learners have occasional opportunities to choose when they use technology to meet their learning goals. Technology is occasionally used to access or engage in learning experiences that would not be possible without the technology (ex: virtual field trips).	Learners and teachers work together to decide when and how learners will use technology to meet their learning goals. Technology is used to access or engage in learning experiences that would not be possible without the technology, to connect the learner with others around the world for collaboration and an authentic audience.	Learners are empowered to make strategic choices regarding when, how and why they will use technology to meet their learning goals. Technology allows for learning experiences that were previously inconceivable or impossible without the technology (ex: collaborating in real-time with a peer across the country, sharing a final project with a panel of experts via video conference).
	Strategic Time LEAP Alignment:	Learners and teachers capitalize on academic needs through innovative uses of time within the school day.	The master schedule is highly structured and emphasizes broad and high level academic instruction with an emphasis on teacher guided instruction. Classroom schedules are designed to prioritize high rigor, quick and effective transitions, and blocks of uninterrupted time for learning. Learners' schedules are decided within the master schedule and the schedule lacks flexibility for the teacher and learner to make adjustments.	The master schedule allots considerable time for the core academic subjects of math, ELA, science, and social studies. Teachers make small changes to their classroom schedules to ensure tight transitions, high rigor and solid time of uninterrupted learning for learners. Learners are given some opportunities to use class time to decide when to complete work.	The master schedule allots for adults to move to support all students' needs. All educators have one focus: use all time to the maximum for high rigor learning to accelerate learning for all students focused on their individual needs. Teachers and learners collaborate and evaluate data and other information to determine when learners are best suited for a specific subject. The teachers understand the attention span of the learners and make the necessary considerations to allow for maximum time for learning/engagement.	The master schedule considers all learners' personalized learning plans and maximizes the time for all learners, allowing for appropriate progress that aligns with learner goals, demonstrated competencies, and to receive recognition for completion. Learner grouping is fluid to meet the individual student needs. Learners collaborate with all teachers and administration to evaluate individual data and make decisions about specific learning targets and outcomes. Learners set up the highest leverage use of time throughout the school day.
	Strategic Community LEAP Alignment: LE.1, P.4	Learners and teachers use community resources and partnerships (families, local businesses, non-profit organizations etc.) to support relevancy and personalization.	Learning experiences take place inside traditional school structures. Other than traditional-style field trips, learning experiences never or rarely include community resources or partnerships.	Learners occasionally have access to experiences that include community resources and partnerships, but have little to no opportunity to choose experiences that connect to their learning needs and interests. Community resources and partnerships are teacher directed.	Learners regularly have access to experiences that include community resources and partnerships, and have some opportunity to choose experiences that connect to their learning needs and interests. Teachers engage learner input about community resources and partnerships.	Learners consistently have access to experiences that include community partnerships and resources; these experiences are core to the learning environment. Learners can choose experiences that connect to their learning needs and interests. Teachers and learners co-design the use of community resources and partnerships.

Developing & Demonstrating Competencies		Teacher Driven	→ Learne	r Centered →	Learner Driven	
Learners progress based on transparent assessment, grading, and authentic demonstrations of learning.	Competency Based Progression LEAP Alignment: I.6, I.1, I.7, I.5	Learners are able to progress at their own pace based on demonstrated competencies.	Teacher gives all learners in the classroom the same objective at the same time based on grade-level standards. Learners learn what they can in the timeframe of the unit. Although learners may have gaps, teachers move to the next unit when it's time to move on. Learners move on to the next class/grade level based on seat time. Learners receive some differentiated support based on progress toward proficiency and their learning needs.	Teacher differentiates objectives for groups of learners based on grade-level standards. Learners begin in differentiated small groups based on similar prior knowledge, learner profile information, and assessment data. Learners progress at the pace of their small group once they demonstrate competency during predetermined assessment windows. Most learners move on to the next class/grade level based on seat time, but may have the option to move ahead in small groups based on demonstrated proficiency. Learners receive differentiated support based on progress toward proficiency and have access to different learning targets at their performance level.	Teachers share competencies with individual learners and help them understand where they are on the progression and what they need to do to get to the next level. Leveraging learner profile information, formative assessment data, and a shared understanding of the standards-aligned learning progression, teachers and learners co-design pathways to reach targets and negotiate evidence needed to demonstrate competency. Learners progress individually upon demonstration of mastery. They can take extra time to revise, retake or redo an assessment even if others have moved on. Learners receive ongoing personalized support based on progress toward mastery and their learning needs.	Learners develop competencies that are explicit, measurable and transferable. Using learner profile information, formative assessment data, self-reflection on prior demonstrations of learning, and a deep understanding of the standards-aligned learning progression, learners design their learning path. Learners take the initiative to demonstrate their competency when ready, can take extra time to revise, retake or redo an assessment and can move at their own pace. Learners receive rapid, personalized support based on progress toward mastery and their learning needs.
	Demonstration of Learning LEAP Alignment: I.7, I.5, I.1, I.2	Learners demonstrate learning through a variety of authentic means that include application and creation of knowledge and support increasing levels of rigor.	Teachers provide learner with one way to demonstrate their learning (ex: end of unit assessment).	Learners demonstrate learning by selecting from teacher designed product options: (ex: learners choose from a poster, essay, or power point). Learners demonstrate skills multiple times and combine skills to increase the depth of their learning. Teachers scaffold the demonstrations of learning into discrete skills that learners can demonstrate.	Learners have increasing control over the design of their demonstrations of learning with an authentic audience or purpose and increasing levels of rigor. With support, learners are able to show their learning in increasingly complex ways; they are able to apply their knowledge to real-world situations. Learners apply pre-requisite skills to new learning to enhance the depth of their learning.	Through their choice of demonstrations, learners ensure products are personally meaningful and relevant to an authentic audience. The learners' demonstrations of learning are increasingly complex, interdisciplinary and applicable to real-world situations. Learners leverage a deep understanding of the skills needed to both plan and best demonstrate their learning.

Acknowledgments

- Bray/McClaskey PDI Chart
- LEAP learning Framework
- EdElements Rubric
- Lake County Personalized Learning Rubric
- Toshalis, E., & Nakkula, M. J., 2012. Motivation, Engagement, and Learner Voice. The Learners at the Center Series
- Miles, Karen H. & Frank, Stephen, 2008. The Strategic School

Denver Public Schools Driver Model Updates (Summer 2017)

Changes

→ Additions:

- Purpose of Driver Model
- Definition of Personalized Learning
- Foundational driver & related secondary drivers
 - Relationships
 - Culture
 - Mindset
 - Metacognition
- Focus on rigor woven throughout document
- Acknowledgments section

→ Changes:

- All secondary drivers edited and revised
- Continuum revised from numbers 1-4 to a non-numerical continuum from teacher-driven to learner-centered to learner-driven

→ Significant secondary driver revisions:

- Learner Profiles and Learner Data secondary drivers combined into "Learner Profile Data"
- Goal Setting Driver changed to Goal Setting & Progress Monitoring
- Revision of entire Developing, Deepening & Demonstrating Competencies drivers
 - Formally: Learning Experience, Metacognitive and Lifelong Learning Skills, Transparency of Assessment and Progress, Demonstration of Learning
 - Revised to: Competency Based Progression, Demonstration of Learning
- Removal of Teacher as Learner