A Vision for Personalized Learning in Georgia K-12 Schools

WRITTEN BY

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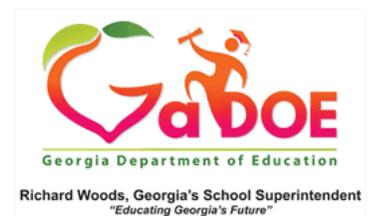
FOREWORD

Personalized learning is already being enacted in several school districts across Georgia. These districts have expressed frustration with barriers to growing personalized learning beyond individual pilot classrooms. One barrier was teacher preparation, and we began a pursuit to design educator preparation programs and professional learning systems that would support teacher expertise and build capacity in personalized learning. However, we quickly discovered that similar barriers affected our efforts to grow personalized learning from our own setting and role. Barriers that persist beyond districts and schools of education are more closely related to state policies, laws, organizational structures, accreditation, assessments, and limited technologies.

Systemic change needs to occur, and personalized learning cannot effectively depend on teachers and teacher educators to hold the full responsibility as this would predestine the change efforts to failure. First, there must be a common awareness and understanding of what personalized learning is for our context here in Georgia. Such a vision should not critique the work of those districts already deep in the trenches of this change, but instead complement and validate their efforts. The purpose of this vision is to provide a common understanding of personalized learning for all stakeholders, and serve as a guidepost for strategic planning processes throughout the state. Secondly, beyond a common vision, we must name the stakeholders who have a role in this change to perk everyone's ears and help them see how they fit in such a huge shift for education. We must not wait to be told our policies and processes are a barrier. Using a common vision, we must anticipate how we can support this important work and open pathways that encourage and celebrate innovation.

This document is not intended as a static unchanging vision, but instead must be reviewed and rewritten as experience and research in personalized learning gives us new knowledge of what best practices have the greatest impact on Georgia's learners. In the future, we hope to include case studies of stakeholder successes and lessons learned. We look forward to expanding our collaborations in the future such that the voice behind this vision grows larger and increasingly united.

TABLE OF CONTENTS

Suggested Citation

Executive Overview

- This document is intended to provide a common high-level vision for personalized learning such that all stakeholders can build complementary systems that meet the unique interests and needs of each learner in Georgia.
- An educational shift to personalized learning is needed in Georgia as a means to effectively prepare children for college and career in the 21st century.
- Personalized learning is an educational paradigm shift that values learner differences and harnesses technology to allow the educator and learner to co-plan a unique educational experience.
- While a traditional learning environment operates on the need to support deficits, personalized learning capitalizes on those individualities as assets and gives responsibility back to the learner to drive his/her learning on a unique path that serves that learner best.
- Educators and stakeholders must work together to break down educational barriers to personalized learning that are enshrined in laws, policies, evaluation instruments, and traditions that perpetuate a common pace and a common path for all learners.
- Personalized learning has nine Essential Conditions for success including: Prioritized Executive Function, Growth Mindset, Individual Path, Flexible Content, Learner Voice, Authentic and Adaptive Assessment, Dynamic Communication, Expanded Collaboration, and Mastery Dispositions.
- School systems must begin with planning, teaching, and assessing learner executive function as the first essential condition, because of the level of learner agency required for success in implementing the other eight essential conditions of personalized learning.
- Executive Function are the skills and cognitive processes needed to plan and achieve one's own educational goals. These skills, well established in cognitive science, are also the foundational cognitive processes needed for the "Soft Skills," "Essential Skills," and "Social Emotional Skills" learners need for 21st century college and career success.
- After executive function is prioritized, a school system will implement additional Essential Conditions as fitting for the unique needs and processes of that school system until all nine Essential Conditions are fully operationalized.
- The personalized learning classroom requires an efficient division of responsibility, starting first with learners as driving agents in the educational process.
- A more challenging adjustment is the specialization of educator roles. The educator has traditionally designed and implemented all lessons for all learners in the classroom; however, in a personalized setting this would be over burdensome. Today, many teachers share and divide the job of instructional design as grade level and departmental teams. This division of responsibility between the Educator as instructional designer will become increasingly distinct from the Educator as learning coach as personalized learning matures in the school settings.
- This shift results in the three major roles of responsibility in the personalized learning classroom to be Learner, educator as Instructional Designer, and educator as Learning Coach.

Rationale

Concerns of the effectiveness of Georgia's education system to prepare children for college and career in the 21st century are growing. Georgia's children are the state's greatest resource, and the educators who nurture and teach them are an invaluable asset to shaping Georgia's future. Current educational systems and processes often serve as a barrier to unleashing the true potential of educators and learners. To date, we have not harnessed the full capabilities of stakeholder individualities or the power of technology to revolutionize education. To optimize the impact of the educator and empower Georgia's children to become adaptable college and career ready young-adults, we must change the paradigm.

Technology and information networks have changed consumer and employer expectations. Adaptable systems that celebrate and serve individualities are becoming the norm. Industries such as medicine are moving to a consumer-focused, personalized system based on our DNA that is both more efficient and increasingly effective. Additionally, as consumers, we expect a personalized experience, one that is supported by huge processing power to enable immediate, media-rich, and archivable interactions. These changes are affecting the skills required by Georgia's workforce, and impacting industry growth across the state.
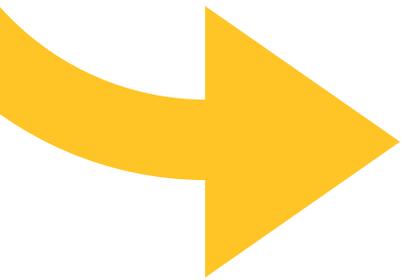
IN ORDER FOR GEORGIA TO DEVELOP FUTURE ADULTS WHO ARE ADAPTABLE TO THIS EVER-CHANGING WORKFORCE DEMAND, GEORGIA MUST TAKE ON STATEWIDE CHANGE IN THE EDUCATION SYSTEM THAT MIRRORS THE CHANGES OF PERSONALIZATION WE SEE IN OTHER INDUSTRIES.

Rather than continuing to create initiatives and bureaucracies around the traditional education model established over a century ago during the Common School Movement, Georgia needs to realign the values foundational to teaching and learning. The system must move away from defining learner differences as deficits, but instead, Georgia should adopt the same value of individuality that industry has adopted. Industry has capitalized on those individualities as assets and given the consumer the opportunity to drive their unique personalized experience. This gap between industry and education in Georgia reveals a crisis in the education system. The crisis is that the traditional mass production model of education does not truly prepare learners for careers in any personalized industry. By changing the same foundational value and celebration of individuality, mass production of a common educational experience is no longer relevant in a personalized technology-rich world. According to Thomas Kuhn (Kuhn, 1962), when an existing field has a fundamental change in values or beliefs, a crisis is initiated, and a new paradigm can follow.

This document defines a vision for the personalized learning paradigm shift emerging in the state of Georgia, described the essential conditions for facilitating the shift, and specifies the roles that all stakeholders play as we move towards systemic change. Without a common vision for the state, various stakeholders may develop systems or policies the inhibit the work of one another. This mindset will help Georgia move toward a common goal and vision.

A Vision for Personalized Learning

Personalized learning is an educational paradigm shift that values learner differences and harnesses technology to allow the educator and learner to co-plan an individualized educational experience. Since personalized learning is an educational paradigm shift, it cannot be reduced to simply a new initiative or instructional strategy. A paradigm shift implies a change to the values on which the education system is built and therefore the roles of all stakeholders in the system must also change. Personalized learning is an ideal for which we will strive. The definition of the term stated above will evolve as research and practice in the field develops. This process requires flexibility, comfort with uncertainty, and the ability to take risks.

PERSONALIZED LEARNING IS AN EDUCATIONAL PARADIGM SHIFT THAT VALUES LEARNER DIFFERENCES AND HARNESSES TECHNOLOGY TO ALLOW THE EDUCATOR AND LEARNER TO CO-PLAN AN INDIVIDUALIZED EDUCATIONAL EXPERIENCE.

Values

Several stakeholders and organizations contributed to this vision, which is founded on a value of diversity and inclusion. Personalized learning requires a commitment to serve all students in a meaningful manner, and support them to reach their individual potential through embracing that which makes each person unique including but not limited to their race, gender, ethnicity, culture, age, learning challenges, talents, interests, abilities, and voice. With equity in mind, personalized learning necessitates learners get interventions and supports as they are needed to optimize the pace of learning towards the learner's full potential.
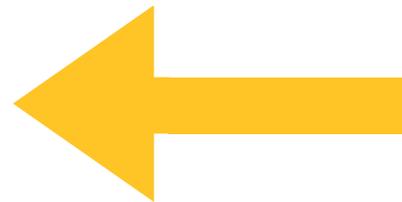
WHILE A TRADITIONAL LEARNING ENVIRONMENT OPERATES ON THE NEED TO SUPPORT DEFICITS, A PERSONALIZED LEARNING ENVIRONMENT CAPITALIZES ON THOSE INDIVIDUALITIES AS ASSETS AND GIVES RESPONSIBILITY BACK TO THE LEARNER TO DRIVE HIS/HER LEARNING ON A UNIQUE PATH THAT SERVES THAT LEARNER BEST.

Personalized Learning: A Shifting Paradigm

Operationalizing personalized learning is difficult due to the disruptive nature of a paradigm shift that is incomplete...we are not yet implementing all of the conditions necessary, so the outcomes are illusive and hard to capture or describe definitively. Each system and stakeholder will interpret personalized learning through his/her own lens, making a common description difficult at this point in time. Since we have a clear understanding of the traditional education paradigm we are leaving, it becomes easier to propose how personalized learning is different from what we already know. To distinguish personalized learning from traditional education, we have identified nine essential conditions. This collection of conditions helps to better operationalize and communicate a common vision of personalized learning.

Efforts to establish all of the conditions of personalized learning cannot be done all at once, nor by a single educator.

Establishing all of these conditions in a learning environment require a systemic commitment to advancing personalized learning.

Educators and other stakeholders must work together to break down educational traditions and build up new policies, tools, and actions that all align to a common vision of personalized learning.

Each stakeholder in the system must begin by playing his or her part and tackle those conditions, which are within his/her realm of influence to move the system forward.

CONDITIONS FOR PERSONALIZED LEARNING

The nine Essential Conditions of personalized learning are: Prioritized Executive Function, Growth Mindset, Individual Path, Flexible Content, Learner Voice, Authentic and Adaptive Assessment, Dynamic Communication, Expanded Collaboration, and Mastery Dispositions. These conditions were informed by school visits, multiple stakeholder validation, and the literature on personalized learning. By design, Prioritized Executive Function is first among the conditions, as it acts as a prerequisite for the remaining eight. The path towards implementing these conditions will vary in every instance, and so long as there is a foundational focus on learner executive function, personalized learning environments will be increasingly successful.

START
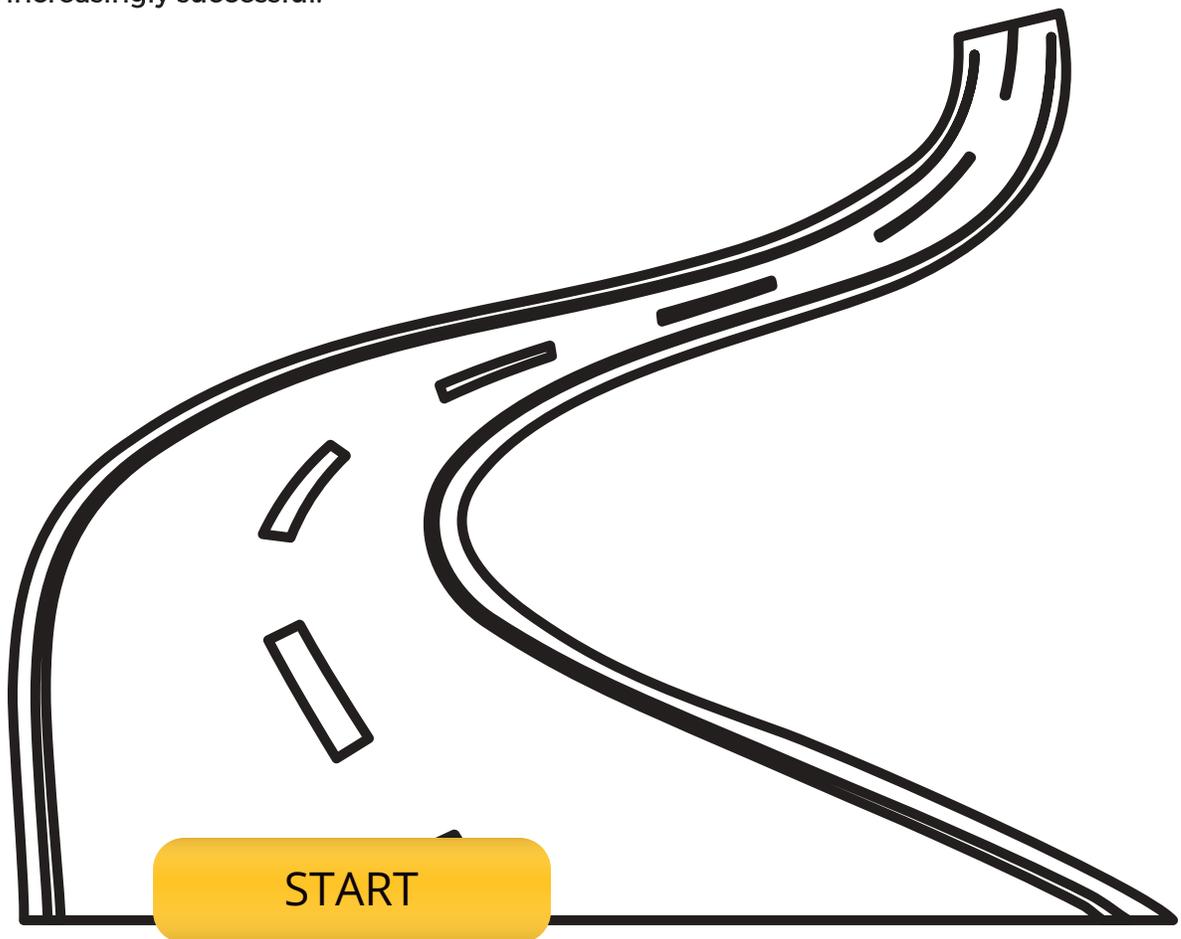
✅ Prioritized Executive Function

In personalized learning, **it is not possible for the educator to dictate the behaviors and learning of all learners at all times.** Instead, learners must have the skills and complex cognitive processes to direct their own learning and reach their own unique goals. Without this learner skillset, personalized learning is too large a burden for an educator. This condition that activates learner agency must be met before any other conditions can be effectively pursued. In personalized learning, educators must explicitly teach students the skills of executive function, teach practices of metacognition, and prepare the learning environment to allow student agency.

✅ Individual Path

Personalized learning does not free the learner of a pre-defined set of curriculum competencies, but instead requires the learner to be aware of competency dependencies to make informed choices in planning a unique progression and pace through mastery in partnership with the educator. Learners may also make a plan to master additional competencies that address learner needs and interests, however, traditional seat time policies are irrelevant in this context. The unique pace and path of curriculum mastery, makes grade-level divisions arbitrary and invalid. The group of learners that fill a classroom may include multiple ages, and educators may loop or stay with a group of learners for multiple years.

✅ Growth Mindset

In personalized learning this binary of success and failure does not function, as learning is an on-going progression that never arrives at a definitive point of either success or failure. **Instead, what might have been considered failure in a traditional classroom, is instead simply a moment in the journey of growth, an opportunity for revision, and a practice of perseverance.** This growth mindset requires the lines between grade-level successes to fade in relevance, and for individual goals to become the focus of measurement.

✅ Flexible Content

Personalized learning leverages technology to house a collection of digital instructional content that is organized by and aligned with the competencies. Such digital collections allow the learner to choose from a collection of expertly designed instructional content that meets his/her unique preferences and interests, repeat content as many times as needed, or try different content options. Additionally, **in personalized learning the learner and/or the educator is provided the flexibility to propose and plan unique ways to master the competencies, and not be limited to the digital collection.** Learner analytics within digital content systems provide instructional designers with information for continuous improvement of content.

✅ Learner Voice

In personalized learning, **learner voice is integral to planning the path and pace of competency mastery.** Learners are not only encouraged, but required to voice their needs, preferences, and interests to plan and drive their education. Explicit training of learners to use their voice in the co-planning and conferencing process may be necessary.

✓ Authentic and Adaptive Assessment

In personalized learning, mandated state assessments and local on-going assessments are used to measure individual growth and mastery of competencies. Mandated state assessments should include digital intelligent testing systems that provide learners with the opportunity to show mastery of any and/or all competencies by dynamically adapting in real-time to student item performance, and not limit the learner to a grade-level set of questions or performances. For ongoing assessment, district benchmark tests lack validity when a common pace and path are no longer expected. **On-going assessment is authentic, flexible, relevant, varied, and performance-based.** The learner co-plans with the educator to collect evidence of mastery using varied and data-rich performances. The learner is then responsible for entering mastery evidence into a unique profile in a digital portfolio system. Personalized learning assessments are not conducted for the purpose of comparing or sorting learners, but instead to inform the educator and learner in their co-planning processes, and to provide systems analysis data for leaders.

✓ Dynamic Communication

In a personalized learning environment, the learner has equal responsibility for communication which should occur through formal and informal conferencing. **Personalized learning requires a belief that communication should be flexible, occurring in a variety of formats, and should flow multi-directionally from all stakeholders to meet learner needs.** Most important is that communication not occur at only prescribed times through the learning cycle, but that it is frequent and on-demand.

✓ Expanded Collaboration

In a personalized learning environment, **learners are equal contributors in the planning process.** A focus on setting short and long term goals collaboratively strengthens the rapport and relationship between educators and learners. Another method to strengthen collaboration and relationships in a personalized learning setting is to keep educators with a group of learners as they progress through many competencies that may extend into several 'grade levels'. In the traditional setting, this method is known as looping.

✓ Mastery Dispositions

In personalized learning, learners are encouraged to focus on a competency until it is fully mastered, such that no gap is perpetuated. For an individual learner, the time taken to master any competency will greatly vary, and self-identity should instead be tied to individual strengths, interests, and needs. **A mastery philosophy of teaching** and a belief that any learner can master any competency given the necessary time and support, **makes any amount of time spent with a learner or improving curriculum a worthy investment.**

Roles in the PL Environment

Teacher burnout and workload was as a major consideration when anticipating the success or failure of personalized learning environments. In efforts to build educator capacity to serve in personalized learning environments, educator preparation institutions and professional development organizations need a set of standards of practices as a foundation on which to design courses.

In the set of standards below, we have considered three main roles: the Learner, the educator as Instructional Designer, and the educator as Learning Coach. In the traditional classroom, educators are expected to serve as both an instructional designer and a learning coach; however, often educators divide the role of lesson planning out among members of their grade level or department teams. This division of responsibility between the educator as instructional designer will become increasingly distinct from the educator as learning coach as personalized learning matures in the school settings.

In a personalized learning classroom, when digital content is limited and only one educator is available, the responsibilities of both roles will still fall to one person. However, when the roles can be more efficiently specialized among two or more people, optimal outcomes are possible. In this scenario, the educator as Instructional Designer is charged with the development and design of the instructional content, lessons, or learning modules, while the educator as Learning Coach is primarily focused on co-planning, guiding, and facilitating learning experiences in a classroom space alongside the learner. This division of roles is informed by current practice in K-12 virtual schools and trends in team-teaching approaches found in brick-and-mortar schools.

Role of the Learner

This set of standards would not be complete without a description of learner responsibilities. In a personalized learning environment, the learner has significant contributions to make in the planning and execution of his/her learning. Rather than personalized learning being seen as concierge schooling, this model calls for the weight of responsibility to be felt by the one most impacted...the learner.

The traditional understanding of classroom management being the primary responsibility of the educator is not sustainable in a personalized learning environment.

Educators should not be expected to direct this type of learning for dozens of individuals each day, while also monitoring and managing student behavior. Learners must practice executive function in this environment to be successful, and these skills must be explicitly taught.
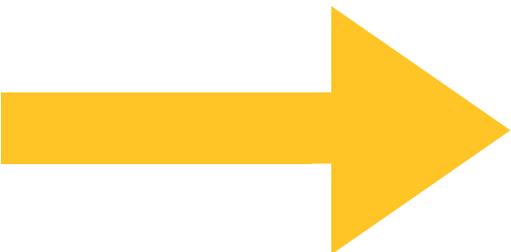
Role of Technology

While many associate personalized learning with technology initiatives, these standards don't explicitly focus on technology. However, technology has enabled these learning environments to form due to the advancement of the Internet, educational technologies, and information systems which are necessary to scale personalized learning. Stakeholders may consider adopting the ISTE Standards for Educator and Students as a guide in the area of technology use.

Standards of Practice For The Three Key Roles of Personalized Learning

① PRIORITIZED EXECUTIVE FUNCTION

1.1 **Learner** takes responsibility for his/her learning through the acquisition and practice of executive function.

1.2 **Instructional Designer** designs curricula that supports learner acquisition and practice of executive function. This requires the Instructional Designer to consider the cognitive development of the learner.

1.3 **Learning Coach** teaches the skills of and provides an environment that allows learners to practice executive function. This requires the Learning Coach to measure and report learner executive function for the purpose of growth.

② INDIVIDUAL PATH

2.1 **Learner** chooses a challenging path and current competency of focus through co-planning and consideration of content interdependencies.

2.2 **Instructional Designer** organizes competencies based on interdependency, and provides learners with multiple paths toward mastery.

2.3 **Learning Coach** uses data of previously assessed competencies to co-plan current and future learning paths.

③ GROWTH MINDSET

3.1 **Learner** is monitoring their own pace and progress to co-plan short and long-term goals for growth.

3.2 **Instructional Designer** can diagnose cause of learner struggles within competency acquisition for individual learners, prescribe a solution, and co-plans with learners to set short and long-term goals for growth.

3.3 **Learning Coach** employs a mastery philosophy in the design of adaptive learning experiences to support a growth-driven model.

Standards of Practice For The Three Key Roles of Personalized Learning

④ FLEXIBLE CONTENT

4.1 Learner seeks out or selects content from a curated menu of educational resources that address the competency of focus.

4.2 Instructional Designer curates, mines, creates, and organizes high impact educational resources and makes them accessible to learners. The Instructional Designer employs engaging pedagogies and research-based best practices of instructional design.

4.3 Learning Coach monitors and observes the effectiveness of educational resources in real-time and suggests or seeks out alternatives as needed.

⑤ LEARNER VOICE

5.1 Learner voices preferred modalities, talents, and interests when co-planning experiences that support competency mastery.

5.2 Instructional Designer embeds flexibility for learner voice to influence learning systems.

5.2 Learning Coach considers learners' preferred modalities, talents, and interests when co-planning experiences that support competency mastery.

⑥ AUTHENTIC AND ADAPTIVE ASSESSMENT

6.1 Learner identifies, documents, and defends formal and informal learning experiences to build an assessed portfolio as evidence of competencies mastered.

6.2 Instructional Designer considers multiple means of demonstration when designing assessments aligned to competencies.

6.3 Learning Coach assesses learner's experiences (formal and informal) in both formative and summative ways as they align to acquisition of competencies. Assessment strategies should be varied but also include intent and focused observation.

Standards of Practice For The Three Key Roles of Personalized Learning

⑦ DYNAMIC COMMUNICATION

7.1 Learner capitalizes on opportunities to communicate with educators, peers, and parents as he/she advocates for her/himself and the learning community in the pursuit of continued growth.

7.2 Instructional Designer effectively communicates curricula to ensure that resources are leveraged for best outcomes.

7.3 Learning Coach models and nurtures effective communication strategies.

⑧ EXPANDED COLLABORATION

8.1 Learner effectively collaborates in all classroom interactions such as co-planning and peer-to-peer time.

8.2 Instructional Designer collaborates using tools and strategies to acquire real-time feedback and data from learners, educators, and parents which will inform ongoing content iteration.

8.3 Learning Coach collaborates effectively with learners to co-plan learning paths, and commits to timely personal interaction with individual learners.

⑨ MASTERY DISPOSITIONS

9.1 Learner values his/her own individuality as an asset to learning as well as the diversity of peers and educators. The learner rejects the success/failure binary to focus on personal growth by learning from mistakes and perseverance.

9.2 Instructional Designer practices responsive design in a way that values diverse learner characteristics as assets. Educator values and participates in learning communities and/or networks for ongoing professional learning.

9.3 Learning Coach believes all students can learn any competency given adequate resources and time and values diverse learner characteristics as assets. Educator values and participates in learning communities and/or networks for ongoing professional learning.

A Framework for Systemic Change

      A paradigm shift requires systemic change. For Georgia to enact a paradigm shift toward personalized learning, a plan for systemic change must be articulated. To do this, stakeholders need a list of responsibilities and actions that they can influence to facilitate change toward the ideal of personalized learning in all of Georgia's school systems and these actions must be included in organizational strategic plans. A systems analysis can help move action forward in a productive direction.

      To frame a systems analysis of roles and actions for change, we have adopted curriculum alignment theory developed by English & Steffy (2001) and Porter & Smithson (2001) to author a plan of roles and responsibilities for systemic change. Curriculum alignment theory posits that effective curriculum has three components that are interdependent and well-aligned to one another: the intended, taught, and assessed curriculum. The intended curriculum includes all roles, decisions, policies, actions, and products that surround the curriculum standards or competencies. The taught curriculum includes all roles, decisions, policies, actions, and products that surround the lesson plan and supplemental support enacted by the educator with the learners. The assessed curriculum includes all decisions, policies, actions, and products that surround the assessments to measure learner knowledge. When all three of these curricular components are designed to match the same goals, curriculum is effective for learning (See figure below).

      Personalized learning will not change the classroom, if the educators are the only change agents. Educators only have influence over the taught curriculum. If changes in the intended and assessed curriculum do not align with personalized learning, then the educator's hands are tied to make systemic change. Stakeholders who influence the Intended and Assessed curriculum must also make changes to their roles, policies, actions and products to support educators in true systemic change toward the ideal of personalized learning. Therefore an on-going systems analysis of the roles, decisions, actions, and products that must change to align with personalized learning must be conducted.

Intended
Curriculum

Curriculum
Alignment Theory

Assessed
Curriculum

Taught
Curriculum
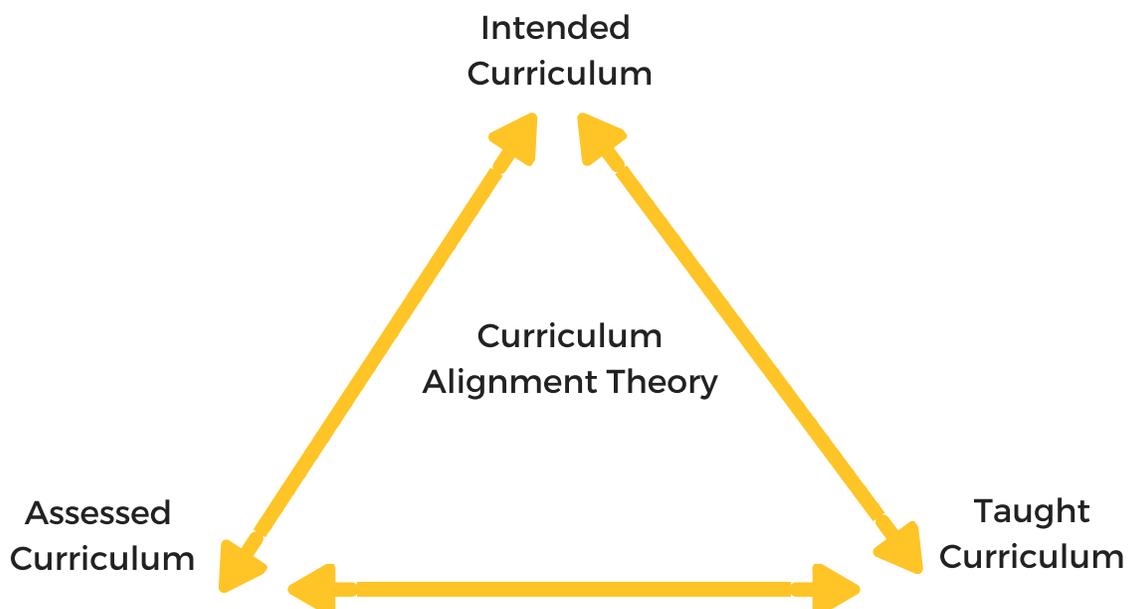
Adapted from Porter & Smithson (2001) & English & Steffy (2001)

Conclusion

Personalized learning is not a fad, technology initiative, or passing trend. It is the future of learning. Personalized learning will allow diverse learners and educators in the State of Georgia the opportunity to reach their individual potentials. Though we know the weight of systemic change is heavy, and acknowledge that it would be more comfortable if we remained in our current mindset and systems of teaching and learning, we also know that we can do better. This document has provided a common vision and starting point for change; however, educators across Georgia already feel the burden of actualizing Personalized Learning in their unique settings. There is no better group of professionals to meet this call. Georgia educators as a whole are highly-educated, well-intentioned, and passionate. Our students are in good hands, and all supporting stakeholders must consciously plan their contributions in supporting this paradigm shift.

Partnerships will develop over time that will create cohesion and inspire deeper innovation. Data and feedback collected from every pilot, prototype, and success will inform our iterative process of refinement, and this document will be updated to include our best current thinking. We call on every education agent in the state to plug in, stay informed, and connect with us as we gather feedback, revise, and forge ahead. When we all commit to a shared vision, there is no limit to what we will be able to provide for ALL learners.

The collaborative living document in which we house this analysis can be found here: **bit.ly/PLSystems**

This living document (spreadsheet) is incomplete. To participate in this analysis, you may make suggested additions, changes, or provide general feedback using this form: **bit.ly/PLSystemsAnalysis**

This analysis not only provides a map of stakeholders in the system, it also helps identify and name the roles and responsibilities aligned with this paradigm shift. Districts and organizations that appear on this systems analysis, could use this white paper to inform strategic planning processes.

Glossary

Learner- who is currently considered a P-12 student.

Educator as _Instructional Designer_- is the designer of instructional curricula within his/her content area of expertise.

Educator as _Learning Coach_- is the learner's co-planner and guide within the learning environment.

Competencies-the minimum expected collection of knowledge that would assert completion or mastery of a given content area.

Competency- what is commonly referred to as a curriculum standard.

C**ompetency of Focus**- an individual competency which the learner and the Learning Coach have prioritized for immediate focus.

Responsive Instructional Design- considers user feedback and data to make real-time, high impact adjustments to the learning environment, curricula, and resources.

Executive Function- an umbrella term for the complex cognitive processes that serve ongoing, goal-directed behaviors (Meltzer, 2010).

Dispositions- an individual's beliefs, qualities of mind, and character.

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