

Quest Forward Learning Research Brief

Personalized Learning

Research, Insights and Recommendations for Personalized Learning.

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Definition of Personalized Learning

Definitions of personalized learning (PL) vary, but most agree that PL includes the following components:

- 1 **Competency-based progression.** Learners progress at their own pace based on their competencies. Learners demonstrate evidence of learning in multiple ways and receive recognition for their demonstrated competencies, not seat time. Learners receive ongoing feedback to help them progress and reach goals.
- 2 **Personal learning paths.** Learners co-design their unique pathway with their mentors based on interests, experiences, strengths, and needs.
- 3 **Learner profiles.** Learner profiles are co-created by learners and mentors to capture learners' interests, backgrounds, motivations, goals, and progress towards goals.
- 4 **Flexible learning environments.** Learning spaces should be designed to promote valuable learning experiences. Environments shouldn't determine how we learn. There should be spaces for individual work, collaboration, building and making, internet research or production, etc. Additionally, learning happens both in and out of school, anytime and anywhere. Learning is social: it happens with peers, mentors, parents, community members, etc. By design, learning experiences are fluid and connect across time and spaces.

A Model for Personalized Learning

The Institute for Personalized Learning (2017) has developed a model used to create personalized learning environments and schools. When applied, the “Honeycomb Model” has contributed to increased engagement and ownership of learning among learners, enthusiasm among educators, positive shifts in relationships, and more effective processes to support learning. These changes can be seen after just a few weeks. The model includes the components mentioned in the PL definition, as well as learning and teaching goals, a focus on relationships and roles, and recommendations for structures and policies.

The model values many of the same things as Quest Forward Learning and could be useful for designing Quest Forward Learning schools. For example, learner choice and independence, multiple representations, feedback, learner-driven environments, family and community engagement, flexible learning spaces, learning-aligned technology, etc., are all part of this extensive model.

You can learn more about the model below:

- 1 [“Finding Your Sweet Spot: The Honeycomb Approach to Personalized Learning”](#)
- 2 [The Institute for Personalized Learning](#)
- 3 [Tapping the Power of Personalized Learning: A Roadmap for School Leaders](#)
– this book provides a very detailed explanation of the model and provides training activities for school staff.

Learner Outcomes

Penual and Johnson's (2016) study found that two years of personalized learning had positive effects on math and reading scores. Personalized learning implementations varied widely and often resembled traditional educational approaches more so than not.

The highest achieving schools that were studied had three things in common:

- ① Flexibility and dynamic learner groupings.
- ② Learning spaces that support personalized learning.
- ③ Opportunities for learners to make decisions about their learning goals using data.

According to PIP researchers (2016), there are many pros and cons expressed by learners participating in PL schools:

Pros

- Stress and anxiety levels drop for many learners when time and pacing are in their control.
- Learners seek out peers for help more than teachers.
- Information is crowd sourced by all participants, and the teacher isn't the holder of all information.

Cons

- Learners find math to be more difficult than literacy work in a PL school.
- It's hard to transition to and from traditional schools.
- Learners wish they had more access to teachers (but instead turn to peers, which is a pro).

Best Practices in Personalized Learning

The following section describes best practices that have emerged from PL schools and research, including ways to promote **agency and choice**, **the mentor's role**, creating **learner profiles**, **assessment**, and **training for mentors and learners**.

Agency & Choice

Results from the Personalization in Practice study (2016) summarize the best practices for supporting learner agency and choice in PL schools. A culture of agency can be created by giving learners more control over time and pace of learning, physical and social spaces in which learning occurs, and content learned.

TIME & PACE OF LEARNING

Agency over time and pace of learning can be supported through the school's master schedule and the provision of opportunities for learners to take responsibility for organizing their time.

To support learner agency over time and pace of learning, schools should include:

- Flex periods. Offer flexible times and spaces for learners to work. Not everyone needs to work on math at the same time each week.
- Access to materials and technology outside of school.
- Regular goal-setting meetings with learners and mentors.
- Clear plans for scaffolding to help learners become more independent over time and to help them be more efficient at managing their time.
- Opportunities to let learners fail.

PHYSICAL & SOCIAL SPACES

Agency over the space of teaching and learning can be supported in a few ways, including:

- Breaking away from traditional time schedules.
- Not having assigned classrooms and allowing multiple mentors to work in the same space.
- Providing common spaces.
- Implementing movable walls and furniture.
- Avoiding setups that create a front and back of the room, and instead utilizing large open spaces or collaborative work tables.
- Allowing learners to move freely between spaces.
- Designating structured time and spaces (silent reading time, all-school meetings) and other times that are more flexible.
- Mentors providing lessons or seminars on an as-needed basis. If mentors see multiple learners struggling with the same concepts, they can provide some instruction or set up optional sessions.
- Mixed-age classrooms.

“ Offer flexible times and spaces for learners to work. ”

“ The teacher’s role is no longer about creating plans FOR learners, but about creating plans WITH learners. ”

CONTENT

Agency over the content of learning can be supported by focusing on interest-driven learning rather than standards-driven learning.

- Learners and mentors should 1) co-develop personal learning goals, 2) select activities and resources to support learning, 3) identify progress markers, and 4) define how learning will be demonstrated. Learners’ plans are flexible and adjust to their skills, curiosity and goals.
- Learners monitor their own progress, advocate for support, reflect on learning and adopt a growth mindset. Learners receive individualized support from mentors. Schools should encourage affinity groups based on interests, rather than classes focused on covering topics.
- Learners should choose their daily activities within limits. Some schools offer a “menu” from which learners choose their activities. Others provide weekly learning targets for learners to work towards.
- Learners should choose how they demonstrate competencies. Learners should be able to choose how they express their knowledge and skills (e.g. the types of artifacts they make). And, the spaces in the school and tools available should support their choices (e.g. access to software, materials, etc.).
- Learners, along with mentors, customize and curate their portfolios to demonstrate areas of interest and expertise that are most relevant to them.

The Role of the Mentor

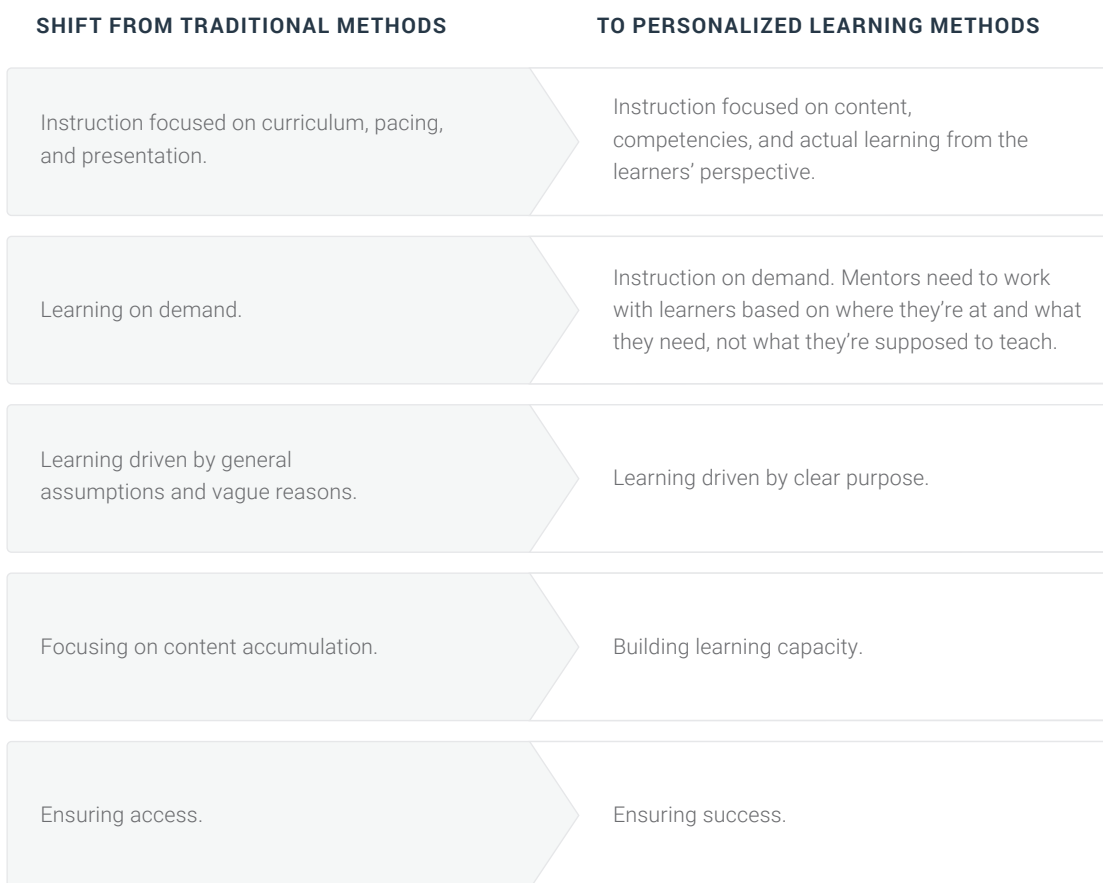
This research study (Halverson, et al, 2015) shows that the role of educators has to shift to support PL. Part of this shift entails consultation in the design of learning plans and goals. The teacher’s role is no longer about creating plans FOR learners, but about creating plans WITH learners. Some strategies for supporting teachers as consultants include:

- One on one advising time. Some schools have daily or weekly learner-mentor meetings to discuss learning goals, problems, or questions about assignments.
- Use of Google Docs to document revised plans and needs or concerns other teachers might have to prep for one on one meetings. These docs can be compiled by multiple mentors and maintained by the learner’s lead advisor.
- Access to data. Mentors and learners need to make decisions based on data (e.g. progress, ratings, analytics, etc.).
- Additionally, according to LEAP Innovation’s PL framework, mentors and learners need time together in order to:
- Reflect on past learning.
- Plan and modify future learning goals, both short-term and long-term.
- Create an individualized timeline.
- Reflect on styles of learning (in groups vs. working alone).
- Co-design unique learner experiences (modify quests, propose new quests for advanced learners, etc.). Mentors will need to modify or adapt content, the where and when of learning, and other aspects of learning to align with learners’ interests and needs.

- Discuss assessments. Mentors need to guide learners to identify a set of learning goals that are achievable, measurable and meaningful to them.
- Define mastery artifacts and expectations.
- Find resources to support learning.
- Celebrate failure.

Rickbaugh (2016) describes 5 instructional shifts mentors will need to make.

These should be key focuses of training:



Mentors will need the most help shifting away from compliance. It's hard for teachers and learners because that's what they've been taught in their training and schooling. Getting them to believe is easy. Just like learners, mentors will need individual professional learning profiles and programs.

Learner Profiles

LEAP Innovations suggests creating extensive internal profiles that compile information regarding individual learners' backgrounds, interests, strengths, and needs. Profiles should be updated continuously by both learners and mentors. Schools should offer tools to help learners identify interests, strengths, and needs, such as interest inventories, checklists, and self-reflection. There should be a method for learners to document their needs and preferences.

Assessment

The LEAP framework also offers best practices related to assessment, including:

- Provide multiple data sources for mentors and learners to use to determine where they fall in the learning progression and how their pace is advancing.
- Communicate expectations for mastery artifacts. Learners will need a very clear rubric of what is expected and what they need to do to reach mastery.
- Provide multiple assessment options.
- Allow flexible, ongoing and repeated opportunities to demonstrate competency. Learners don't have to get it right the first time.
- Provide continuous access to performance data for learners.

Learner Training & the Transition to PL

Learners and mentors should experience the same training with slightly different resources and emphasis. One challenge to PL is the transition from traditional schooling to PL schooling. The Institute for Personalized Learning (I4PL) recommends taking 3 weeks at the start of the school year to support this transition. Learners will need to unlearn school as they know it and discover a new way to learn.

This training should focus on the following:

- 1 Team building
- 2 Setting goals
- 3 Understanding and developing interests
- 4 Getting familiar with the technology
- 5 Creating school guidelines and expectations
- 6 Setting goals, and understanding the learner and mentor roles in this process

The learner training should be learner-driven as much as possible. Future research and training should emphasize how to transition from passive students to independent learners who can set and achieve goals, take ownership, and discover and pursue interests.

Further Reading on Personalized Learning

- The Personalization in Practice (PIP) study is based out of UW Madison. PIP works with local teachers and schools by trying to implement personalized learning and defining what this actually looks like in practice. This paper sums up the PIP project and the schools:
<https://uwmadison.app.box.com/v/pipworkingpaperdec2015>.

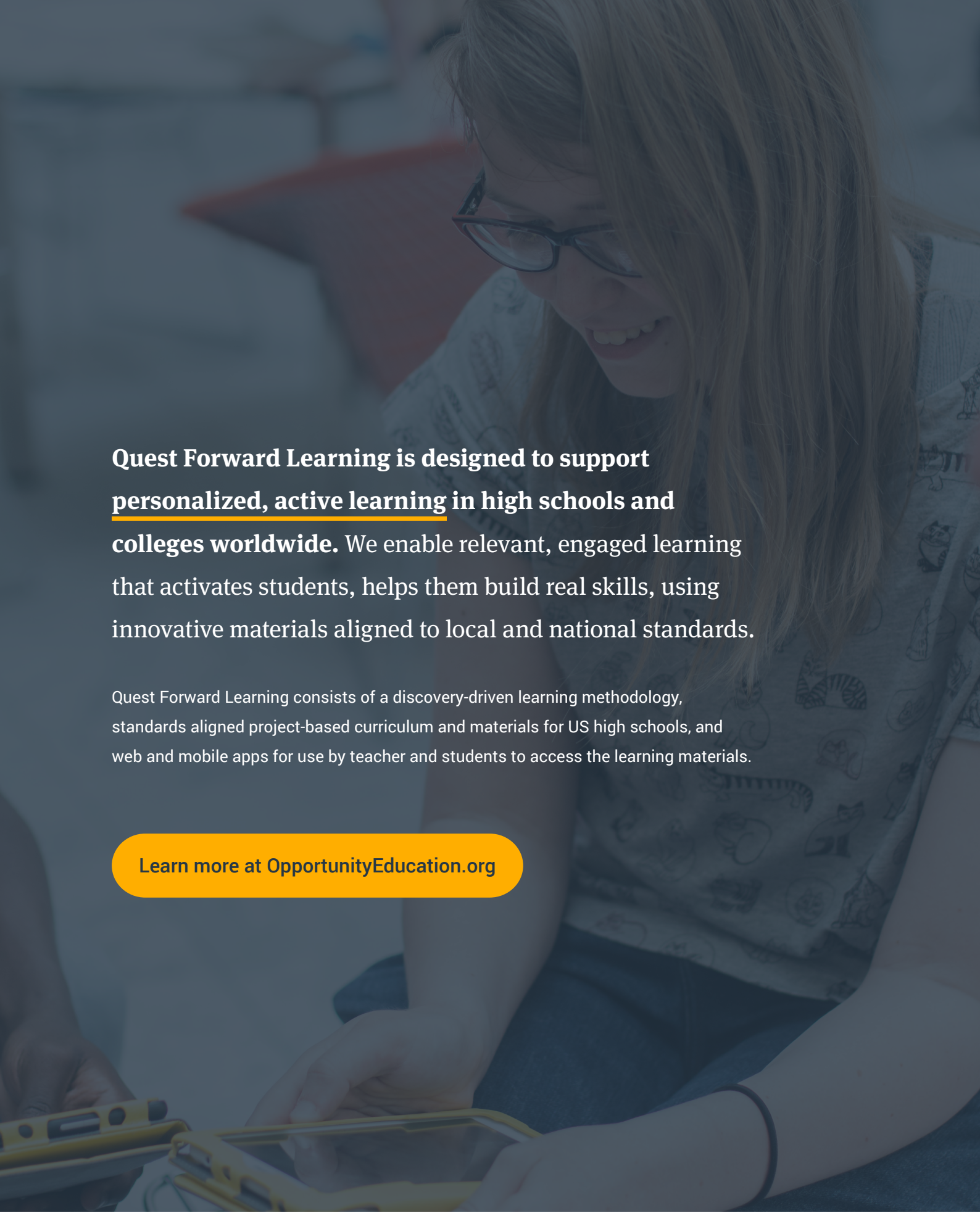
MORE INFORMATION IS AVAILABLE HERE:

<http://www.pipwisc.org/publicationsmedia/#publications>,
<http://www.wcer.wisc.edu/About/Project/2344>

- The Institute for Personalized Learning (<http://institute4pl.org/>) offers resources and site visits to schools and hosts an annual conference.
- Schools and other learning organizations that emphasize personalized learning:
 - PlayMaker School, a partnership with GameDesk. <http://www.playmaker.org/>
 - Clark Street School in Middleton, WI. Check out how Clark Street defines graduation requirements and skill requirements:
<http://www.mcpasd.k12.wi.us/cscs/general/about-our-school/cscs-learning-and-graduation-plan>
 - Kettle Moraine, <http://www.kmsd.edu/domain/468>
 - Summit Learning, <http://info.summitlearning.org/>,
and Summit Public Schools, <http://www.summitps.org/>

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Quest Forward Learning is designed to support personalized, active learning in high schools and colleges worldwide. We enable relevant, engaged learning that activates students, helps them build real skills, using innovative materials aligned to local and national standards.

Quest Forward Learning consists of a discovery-driven learning methodology, standards aligned project-based curriculum and materials for US high schools, and web and mobile apps for use by teacher and students to access the learning materials.

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