Executive Summary

Personalized learning programs are proliferating in schools across the United States, fueled by philanthropic dollars, tech industry lobbying, marketing by third-party vendors anxious to enter the K-12 education market, and a policy environment that provides little guidance and few constraints. This brief examines the promise and limitations of personalized learning by reviewing its history, identifying its key assumptions, assessing the roles and possible impacts of the digital technologies it deploys, and reviewing relevant research evidence. Familiarity with these factors will maximize policymakers’ ability to craft appropriate guidelines for personalized learning initiatives and will help educators critically evaluate personalized learning products being marketed to them.

Our analysis reveals questionable educational assumptions embedded in influential programs, self-interested advocacy by the technology industry, serious threats to student privacy, and a lack of research support.

Despite many red flags, pressure to adopt personalized learning programs keeps mounting. States continue to adopt policies that promote implementation of digital instructional materials but that do little to provide for oversight or accountability. Even the RAND Corporation, a distinguished research organization, published a 2018 paper offering schools strategies for how to implement personalized learning despite admittedly weak evidence to support its efficacy.

Linking personalized learning with proprietary software and digital platforms puts important educational decisions (such as whether a child has attained a specific competency or grade level) in private hands, and it can compromise the privacy of children and their teachers. It can also distort pedagogy in ways that stifle student learning and stunt their ability to

http://nepc.colorado.edu/publication/personalized-learning
grow as people and as participants in a democratic system. Because the influential programs reviewed in this report privilege data over all other instructional considerations, they reflect a restricted, hyper-rational approach to curriculum and pedagogy that limits students’ agency, narrows what they can learn in school, and limits schools’ ability to respond effectively to a diverse student body.

Given the manifest lack of oversight and accountability, it is recommended that schools and policymakers pause in their efforts to promote and implement personalized learning programs until rigorous review, oversight, and enforcement mechanisms are established. It is also recommended that states establish an independent government entity responsible for implementing and enforcing the following recommendations relevant to personal learning programs, including recommendations for safeguarding the use of student and teacher data:

• Require that program curriculum materials be externally reviewed and approved by independent third-party education experts.

• Require that pedagogical approaches be externally reviewed and approved by independent third-party education experts to ensure that the approaches are appropriate for intended student populations.

• Require that both the validity of assessment instruments and the instructional and programmatic usefulness of data generated be independently certified by independent third-party education experts.

• Require that the assumptions and programming of all algorithms associated with personalized learning materials be reviewed and approved by independent third-party education experts before any processes employing the algorithms are implemented.

• Develop—and require that all entities that collect student, teacher, and other data through personalized learning materials and related software platforms be subject to—a standard, legally binding, transparent privacy and data security agreement that:
  o Requires the entity collecting data to disclose its financial interests and business relationships as well as any potential commercial implications of data collection;
  o Vests the ownership of any and all data collected on a student with the student or the adult(s) legally responsible for the student;
  o Prohibits the entity collecting data from collecting any data not directly relevant to an agreed-upon specified educational purpose and from using any data collected for any purpose other than the agreed-upon specified educational purpose;
  o Makes the entity collecting data legally responsible for protecting the security of data if data are shared with a third party;
  o Requires that the entity referring students to a third party be legally responsible for ensuring the security of any data the third party may collect from the students referred;
- Requires the entity collecting data to provide a legally enforceable data agreement that clearly explains what kinds of data it proposes to collect from children under 13, how it proposes to store the data and for how long, who will be allowed access, and what educational purpose all data will serve;

- Requires a standard, explicit, and easy to understand explanation of what kind of data use is incorporated in such activities as “improving” websites, apps, or services, or in “personalizing and improving” users’ experience with the platform.
Notes and References
