DIGITAL LEARNING NOW!

DATA BACKPACKS:
Portable Records & Learner Profiles

EXECUTIVE SUMMARY

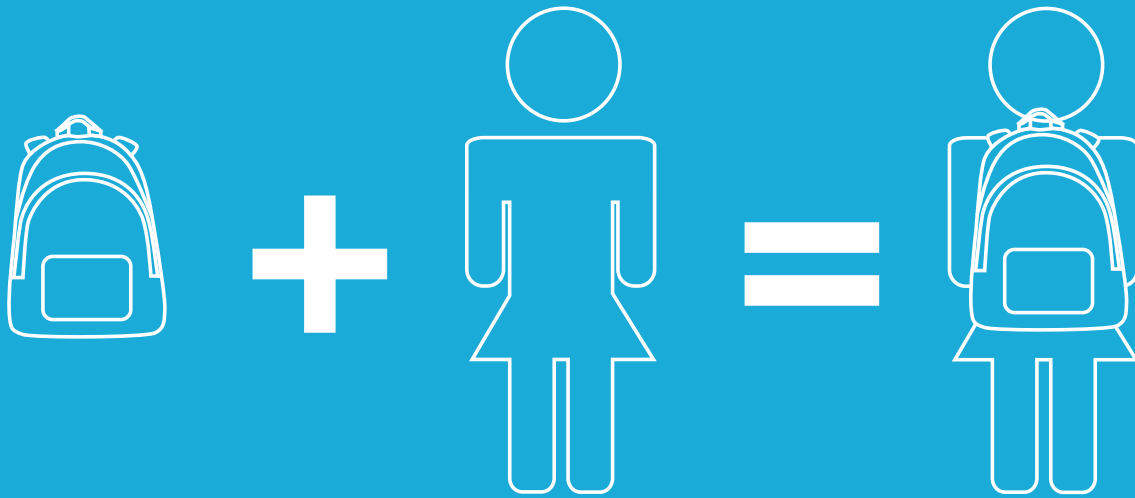DLN SMART SERIES

IMPLEMENTATION STRATEGIES AT THE INTERSECTION OF DIGITAL LEARNING AND THE COMMON CORE STATE STANDARDS

Authors:
John Bailey
Samuel Casey Carter
Carri Schneider
Tom Vander Ark

October 2012

EXECUTIVE SUMMARY

The current way student records and transcripts are managed is insufficient to meet the evolving needs of teachers, students, and parents. Only the most basic of information follows students into the classrooms they enter each year. Teachers have little visibility into the past performance of their students, what other teachers noted, or each learner's strengths, weaknesses, and individual needs. New personalization technologies and the demand for differentiated instruction as a Common Core strategy will only further place further strains the ecosystem of data systems and paper based records that form the patchwork of our current student records.

What if students instead came to each course or classroom with a digital backpack of data about their learning levels, preferences, motivations, and personal accomplishments? How would this improve each teacher's ability to tailor learning to meet the needs of individual students? What if parents and students could easily access their child's records to share the information with afterschool providers? How would all of the personalization this affords add up to deeper learning and improved college and career readiness?

Data Backpacks: Portable Records & Learner Profiles asks these questions and reveals some key problems with the current system:

1 The current official transcript does not provide enough information for teachers to personalize learning from the first day of school.

2 Customized learning requires an enhanced and expanded Learner Profile.

3 Parents and teachers should have the ability to protect privacy and empower multiple providers to use and contribute to a Learner Profile.

This paper provides two recommendations for addressing the inadequacies of today's student records in order to power personalization from day one, at every step, for every student.

The Data Backpack

The Data Backpack is an expanded common electronic student record: an official transcript that follows students through every transition—grade to grade and school to school.

The Backpack includes traditional transcript data such as demographic information, state testing data, and supplementary student supports. However, it would also include additional information in order to represent a more holistic picture of student achievement—such as a gradebook of standards-based performance data and a portfolio of personal bests—and better capture

the student's progression at any moment in time. This enhanced data would provide a context for attendance and behavior patterns, supplementary support services, grades, and other performance information such as proficiency scores and learning gains.

Since this data would follow students to each new learning experience, learning could be tailored to meet their individual needs from the first lesson rather than the extra time teachers must spend diagnosing student needs and abilities.

The Learner Profile

The Learner Profile builds on the "official transcript" of the Data Backpack to provide additional clues to unlock learner needs, preferences, and potential. While each student's Data Backpack would be populated by a set of common elements for all students at a new minimum level, the components of each student's Learner Profile could be customized based on student needs, platform data requirements, and family decisions.

Amazon, iTunes, and Netflix have demonstrated the potential of predictive algorithms. Adaptive software is powering high performance blended schools. Learner profiles—powered by achievement and keystroke data— will unlock secrets about the kinds of experiences that inspire persistence and performance for each student.

In addition to standard achievement data, Learner Profiles should contain expanded achievement information, student goal statements, badges and other recognitions, and a college/career readiness tracker. Students would contribute a full portfolio of work, complemented by teacher narratives on student assets and challenges. The Profile could also include non-cognitive variables that impact achievements, as well as an "early warning system," self-management skills, behavior/character education, and a record of community service.

When learning is personalized to meet the needs of individual learners, everyone wins. Taken together, the Data Backpack and the Learner Profile can power personalization and protect privacy. **The Data Backpack ensures that personalized learning begins on Day One. The Learner Profile powers a personalized pathway toward college and career readiness.** Customized learning, informed by enhanced and expanded student data, will boost motivation and achievement—keeping more students on track for college and career readiness.

The Opportunity

We are at a critical moment in time. With the introduction of the Common Core State Standards (CCSS), online assessments in 2014-15, and the shift to digital learning, districts are on the brink of receiving a flood of unprecedented amounts and variations of student data. Although no one has yet realized a full-scale solution to unlock the potential of personal digital learning that Digital Learning Now! described in the 10 Elements of High Quality Digital Learning, the authors describe a rich field of toolsets and "point solutions" that address singular aspects of the overall needs. While much good work is underway, the paper concludes with a call to action and an assertion that the leaders of various efforts need to come together to create a common, integrated, and comprehensive system that is universally endorsed and widely implemented. Tackling the range of challenges— from privacy compliance to technical issues—will require collaborative involvement from everyone, ranging from state leaders and policymakers to developers and industry leaders, in addition to representatives from education agencies, advocacy organizations, and funders.

Recommendations to Power Personalization

Personalized Learning
From Day One

Personalized Learning
To College and Career Readiness

Student Data Backpack

- Demographic data
- Standards-based gradebook (computer and teacher entered items)
- Grades and transcript data (for secondary students)
- Portfolio of personal bests (e.g., current writing sample)
- State testing data
- Attendance and behavior data
- Supplementary student supports

Expanded Learner Profile

- Expanded achievement data
- Motivational profile that predicts persistence and performance
- A narrative description of student assets and challenges
- Recognitions and badges
- Full portfolio of student work
- Student goal statements
- College and career readiness tracker

Optional Additions to Profile:
- Non-cognitive variables
- Self-management skills
- Behavior and character education
- Record of community service