

# PERSONALIZED LEARNING

A Guide for Engaging Students with Technology

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# CONTENTS

	Introduction .....	1
<b>Chapter 1</b>	<b>Why Consider Personalized Learning? .....</b>	<b>3</b>
	How Can Personalized Learning Help Meet School Goals? .....	7
	A Model of Technology Integration Professional Development .....	10
	Bridging the Digital Divide with Mobile Learning .....	11
	Individualized, Differentiated, and Personalized Learning .....	12
<b>Chapter 2</b>	<b>A Vision of Online and Face-to-Face Learning to Meet Student Needs .....</b>	<b>21</b>
	Personalization and Common Core State Standards .....	23
	Meeting the Needs of All Learners .....	26
<b>Chapter 3</b>	<b>How Can Personalized Learning Transform Teaching? .....</b>	<b>49</b>
	Instructional Models of Technology Integration .....	49
	Personalization of Learning Activities .....	59
<b>Chapter 4</b>	<b>One-to-One Computing and Personalized Learning .....</b>	<b>67</b>
	A One-to-One Learning Environment—A Student’s Perspective .....	69
	A One-to-One Learning Environment—A Teacher’s Perspective .....	70
	Assessment in a Personalized Learning Environment .....	72
<b>Chapter 5</b>	<b>Making Personalized Learning Work for You .....</b>	<b>81</b>
	Leadership .....	81
	Policies that Support One-to-One Learning .....	86
	One-to-One Case Studies .....	88
<b>Chapter 6</b>	<b>Devices and Services .....</b>	<b>93</b>
	Mobile Devices .....	94
	Services .....	100

<b>Chapter 7</b>	<b>One-to-One Program Formats</b> .....	<b>103</b>
	School-Provided Devices .....	103
	Bring-Your-Own Device .....	104
<b>Chapter 8</b>	<b>Funding</b> .....	<b>109</b>
	Partnerships .....	109
	Grants and Loans .....	110
	E-Rate .....	113
	Other Sources .....	113
<b>Chapter 9</b>	<b>A Planning Process for a One-to-One Personalized Learning Program</b> .....	<b>117</b>
	Engage the School Community .....	119
	Investigate Personalized and One-to-One Learning .....	126
	Choose a Device .....	127
	Educate Teachers and Other Stakeholders .....	130
	Build Infrastructure .....	135
	Phase, Evaluate, and Adapt .....	138
	Conclusion .....	142
<b>Appendix A</b>	<b>Introduction to Project RED</b> .....	<b>143</b>
<b>Appendix B</b>	<b>Common Core State Standards Overview</b> .....	<b>145</b>
	Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects .....	146
	Standards for Mathematics .....	147
<b>Appendix C</b>	<b>Forms, Surveys, and Checklists</b> .....	<b>149</b>
	Technology for Principals Self-Assessment .....	149
	Interview Questions for Mobile Learning Practitioners .....	151
	One-to-One Stakeholder Surveys .....	155
	Device Investigation Checklist .....	162
	Program Evaluation Tools .....	163
<b>Appendix D</b>	<b>ISTE Standards</b> .....	<b>171</b>
	ISTE Standards for Students .....	171
	ISTE Standards for Teachers .....	174
	ISTE Standards for Administrators .....	177
	References .....	181
	Index .....	189

## INTRODUCTION

This book is designed to help today’s educators make sense of the shifting landscape in modern education. While changes may pose significant challenges, they also offer countless opportunities to engage students in meaningful ways to improve their learning outcomes.

The key to engaging students can be found by educators who are willing to bridge the gap between what kids are too often still doing in school—working silently alongside one another on activity sheets, staring at teachers as they lecture, and taking the same tests—and what kids do *outside* school: connecting and sharing online, and engaging in virtual communities of their own. Personalized learning is the key to engaging students, as teachers are leading the way toward making learning as relevant, rigorous, and meaningful *inside* school as outside.

Personalized learning is an invitation for educators to create opportunities for learning that takes advantage of the digital skills most students already possess. Personalized learning is specifically tailored to each student’s strengths, needs, and interests while ensuring the highest standards possible. This approach is a major paradigm shift from the traditional “one-size-fits-all” approach to education. Personalization encourages educators to be more open and flexible, so that students can become more invested in designing their own personal learning paths. Students engaged in personalized learning at their various paces are given access to tools and feedback that motivate them to capitalize on their unique skills and potential.

Digital tools can fuel student-centered learning by allowing students more control over, a sense of ownership of, and accountability for the learning methodologies that fit their particular learning styles, the processes that best fit these styles, and, to a great extent, the content areas that spark their interests. Digital tools also help students to absorb and effectively demonstrate such 21st-century skills as communication, collaboration, problem solving, critical thinking, and creativity through the creation, consumption, manipula-

tion, and sharing of digital content. These skills are vital for today's students to flourish in tomorrow's job market, as millennial adults will likely perform more than a dozen jobs. And most of these jobs do not exist today, meaning that mastery of 20th-century skills, including rote memorization, performing repetitive tasks, and general knowledge, simply will not suffice.

Students thrive on dynamic learning experiences that are collaborative, relevant, and engaging. As cloud-based learning solutions and mobile education apps continue to become more popular, schools need to find innovative ways of integrating these technologies into teaching, learning, and assessment. When used correctly, these technologies and techniques allow for greater autonomy, engagement, individualization, and differentiation than ever before, while giving students more active, responsible roles in their own learning.

Mobile devices and one-to-one personalized learning techniques are breaking the boundaries of education by delivering anytime/anywhere learning: turning the entire world into a potential classroom!

Personalization empowers students to take true ownership of their education, altering the dynamic between teachers and students. This new model gives teachers the time and information they need to design personalized instruction that builds the critical thinking skills crucial to independent learning. Teachers can also create diverse, highly personalized learning environments that recognize students' different skills, challenges, and talents.

This book provides the essential information needed to implement personalized learning with technology and concludes with a step-by-step guide to planning, funding, and implementing a schoolwide personalized learning program.

Please let us know what you think about the information in this book. We are very interested in your feedback and look forward to helping educators and administrators deliver 21st-century solutions that effectively engage and motivate today's students.

*Paige Johnson*

Education Strategist, Intel Corporation  
ISTE Board of Directors

## CHAPTER

# 1

## Why Consider Personalized Learning?

Educators are finding traditional classroom structures—where the same lessons are presented to a class of students and equal time and resources are allotted to all students for learning the material—nonviable. Students in the same grade have different knowledge base levels and learn at different rates. They are more likely to succeed academically, emotionally, and behaviorally when they are supported as individuals.

In contrast, with personalized learning structures made increasingly available through technology and online opportunities, teachers and students are empowered to take charge of their education experiences. The customized one-to-one (often shortened to 1:1) computing approach transforms learning environments, turning them into dynamic communities of connected learners taking advantage of digital tools. In student-centered classrooms, students meet core standards as they use various methods and work at different paces, based on their educational needs and interests. In this way, students learn how to learn on their own unique terms.

The customization of education represents an important advance because it recognizes that pupils come from different backgrounds and have varied interests and ability levels (Sharples, 2007). Special needs students, for example, can get additional time and attention as technology tools afford them unprecedented access to resources. Gifted pupils can move quickly to accomplish required skills and then be engaged by more

demanding projects. Students master concepts at their own speeds and in their own ways via one-to-one learning.

Collaborative learning represents another virtue of the personalized online world. In addition to one-on-one learning, technology enables students to collaborate with one another and work with a range of interactive, instructional resources. These resources can include teachers, parents, peer tutors, volunteers, and other interested individuals. Students become engaged participants, spurred on by regular feedback and challenging assignments.

One-to-one personalized learning is not simply a “patch” for a broken education system. It is a new way of expanding and enhancing learning for all students, regardless of their individual abilities and circumstances. Personalized learning is not the digitization of traditional learning. It is the individualization of learning through use and mastery of modern digital tools and collaborative strategies among teachers, students, and peers who utilize the unique possibilities of the digital environment. Technology is the tool that makes personalized learning easier and more efficient.

A successful personalized learning initiative has the following characteristics:

- Students’ interests and abilities are engaged in authentic, real-world activities to promote the learning of content area standards.
- Teachers take on the roles of facilitators and coaches in the classroom rather than the dispensers of knowledge.
- Students take control over the learning paths they take to achieve established goals, building self-efficacy, critical thinking, and creativity skills.
- Technology enables students’ choices related to what they learn, how they learn, and how they demonstrate their learning.
- Formative assessment throughout the learning cycle, supported by digital tools, helps teachers and students address weaknesses and build on strengths.
- Progress through subject area content is measured by the demonstration of proficiency in identified skills and understanding.
- Technology is integrated throughout teachers’ and students’ experiences to support learning.

Personalized learning is not a replacement for teachers. Rather, it provides the data and strategies educators need to make better pedagogical and interventional decisions to allow students to learn in their own ways, at their own paces.



## HIGHLIGHT

### ISTE Standards

The International Society for Technology in Education has developed student, teacher, administrator, coach, and computer science educator standards for “learning, teaching, and leading in the digital age.” Explore these standards at [www.iste.org/standards](http://www.iste.org/standards).

Neither is personalized learning a replacement for the traditional classroom experience. Instead, it is meant to serve as a dynamic enhancement to the classroom, freeing up teachers to spend more time interacting with students. One-to-one learning also allows teachers to mediate learning rather than act as gatekeepers, transforming the classroom into a hub of self-directed learning with teachers enabling and empowering each student’s unique learning path.

Personalized learning does, however, require both a radical shift in the design of schooling and a better leveraging of modern technologies, so that in the course of daily teaching and learning activities, teachers may employ formative assessment methods to track learning needs and gains dynamically. These resources and strategies must be appropriate for each student’s learning style, abilities, and interests in order for each one to succeed.

Technology tools, especially mobile devices, allow students to assert control over the methods by which they learn, thereby personalizing their educational experiences. Students can learn anywhere anytime when they are connected to subject matter content by these mobile devices. Yet, simply providing technology to learners doesn’t necessarily make their learning personalized. To achieve the satisfaction of being connected with content in meaningful ways, the learner must be at the center of the experience.

The formula for personalized learning is an adjustable, individualized pace combined with an adjustable, differentiated learning approach (with and without mobile devices) that allows students to incorporate their interests and choices into the overall experience.

Powerful, adaptive software can help fuel meaningful instruction. Online language laboratories, quizzes, lectures, and lessons can all make what students learn in the classroom more engaging and relevant. These tools help to put students truly in charge of how



they learn, while teachers keep students on track, creating and discovering material to enhance the excitement of learning.



*YOUR TURN*

**Introduction to Personalized Learning  
with One-to-One Computing**

**Stop and Reflect:** What questions do you have about personalized learning in a one-to-one environment?

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**Discuss:** What goals does your school have that you think might be addressed with personalized learning?

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**Apply:** What steps have you already taken to implement one-to-one computing in your school? What are your plans and goals?

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