

Blended Learning on a Budget

Education Elements, Inc.

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Introduction and Purpose of This Toolkit

The purpose of this toolkit is to provide districts with an overview of the costs of blended learning, a description of types of funds available to support it, and a series of worksheets to enable districts to determine how they could budget for and fund their blended learning initiatives

- The U.S. Department of Education's (ED) Race to the Top-District competition spurred excitement across the country around the potential to rapidly scale blended learning and other personalized learning initiatives
- With the announcement of 16 winners in December 2012, another 350+ applicants were left to consider how they might move ahead with their plans in the absence of a significant cash influx from ED
- We do not believe that lack of RTT-D funding should stop districts from transforming their districts into places where learning is personalized and accelerated
- While there are costs involved when transitioning to blended learning, they don't have to be prohibitive in districts that have already invested in bandwidth, connectivity, and devices for students



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Education Elements Introduction

We help leaders and teachers design, build and manage **Blended Classrooms** that personalize learning, engage every student, and make data-driven instruction sustainable. Our services include:

Designing Blended Classrooms | we work with schools across the country and determine the instructional model that will work best for schools

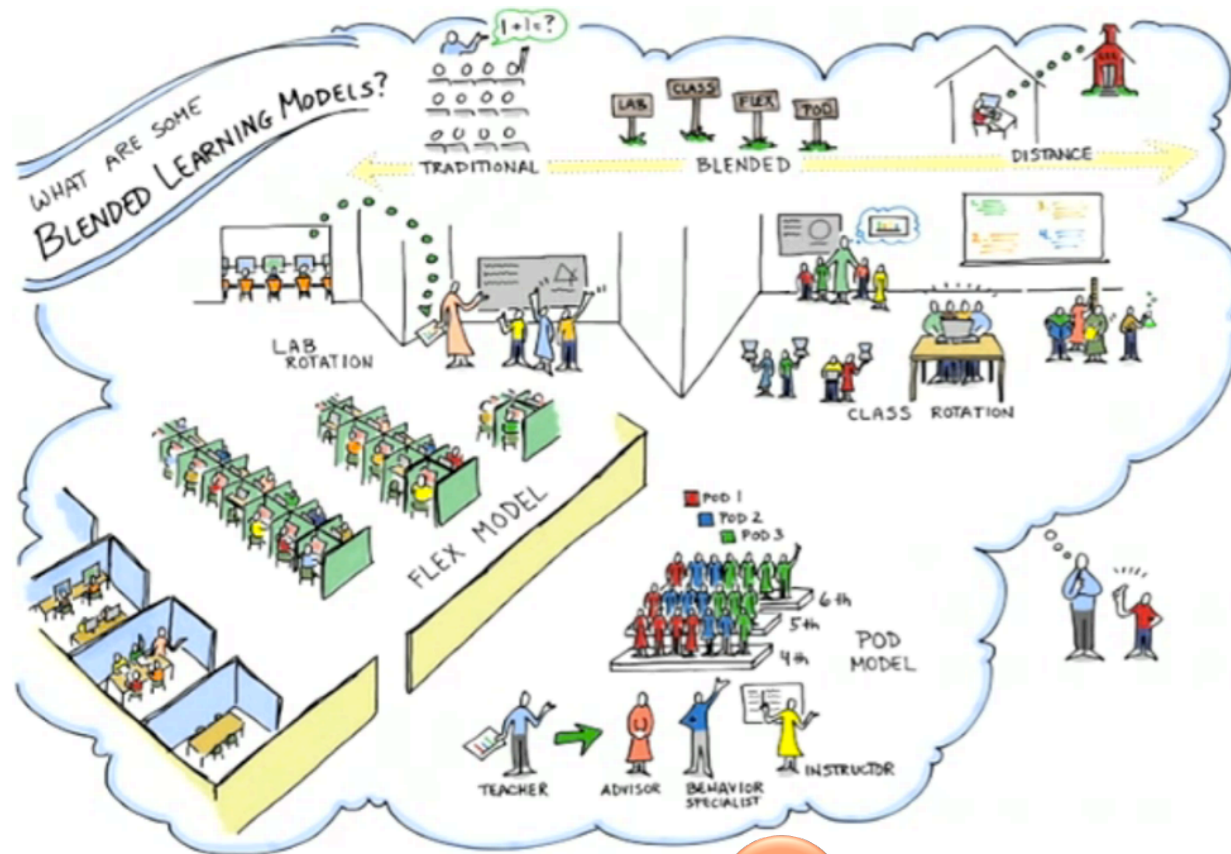
Selecting Content Providers | we use our deep knowledge of content providers to help schools determine which online content and tool providers will meet their needs

Leading Professional Development | we understand both the needs of teachers and the intricacies of implementing blended classrooms; we provide high-quality PD and support throughout the year

Operating Technology | our cloud-based HLMS technology platform pulls it all together in an easy-to-use dashboard, enabling data-driven instruction



How We Define Blended Learning



1

Students have daily opportunities for personalized learning

AND

2

Teachers have the opportunities, time, and resources to differentiate instruction



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Potential Costs for Blended Learning

One-Time	Periodic	Recurring
<ul style="list-style-type: none"> • Bandwidth & Wireless/Wired Connectivity • Furniture • Power Access (laptop carts and/or wired outlets) • Design & Implementation Consulting Services • Initial Professional Development 	<ul style="list-style-type: none"> • Technology Devices • Headphones and Other Accessories 	<ul style="list-style-type: none"> • Licenses for Digital Content & Tools • Licenses for HLMS or Other Integrated Platform • Blended Learning Lead/Coach • Increased IT Support or IT Lead

Note: This assumes after the first year that PD addressing blended learning would be part of a school's regular PD budget and planning



Blended Learning Cost Drivers and Key Questions

One-Time Category	Key Questions
Bandwidth	<ul style="list-style-type: none"> • How does the school’s current bandwidth compare to recommended levels of 10 – 25 mbps per 100 concurrent users?
Wireless Access	<ul style="list-style-type: none"> • How many wireless access points are there in each classroom? • Are they set up as a switch, relayed, or daisy chained? (note: they shouldn’t be) • What is their capacity?
Laptop / Storage Carts	<ul style="list-style-type: none"> • Are carts / storage / charging available in each room going blended?
Ethernet Access (if using desktops)	<ul style="list-style-type: none"> • How many ethernet ports are in each room? • How are they arranged in the room to allow for computer set-up options?
Power Wiring (if using desktops)	<ul style="list-style-type: none"> • Is there adequate power in the room to support desktops? • Where are outlets located to support options for room layout?
Classroom Furniture	<ul style="list-style-type: none"> • What type of furniture is used? • Can it be repurposed for use in blended design? Can design adjust?
Design & Implementation Consulting	<ul style="list-style-type: none"> • Will the school require assistance and expertise in blended learning model design, content selection, PD, and integration of systems?
Professional Development	<ul style="list-style-type: none"> • What is the staff’s experience and comfort level using digital content and tools? • How comfortable are staff using data to make instructional decisions?



Blended Learning Cost Drivers and Key Questions (Cont.)

Periodic Category	Key Questions
Technology Devices	<ul style="list-style-type: none"> • What is the current and desired student : device ratio? • What devices would best support the school’s model? • Do those devices allow for flexibility in content selection or limit choices? • How old are the devices in the school?
Accessories for technology devices	<ul style="list-style-type: none"> • Does the school have adequate headphones, keyboards, mice, laptop security software, and other needed peripherals?
Recurring Category	Key Questions
Digital Content	<ul style="list-style-type: none"> • What content is already licensed? • Is there teacher or district created standards aligned material that could be used in a learning management system (LMS)? • Can some licenses support multiple subjects?
Integrated Platform such as the Hybrid Learning Management System (HLMS)	<ul style="list-style-type: none"> • How will the school provide data from content, assessments, and other tools to teachers? • How will the school manage sign in, account creation, and provisioning into classes?
Blended Learning Lead/Coach	<ul style="list-style-type: none"> • What expertise exists in the school(s) to adapt to blended practices? • What coaching roles exist in the school?
IT Support / IT Lead	<ul style="list-style-type: none"> • Is there school-based IT support? • What is the response time for IT support?



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Federal Program Funds That Could Support Blended Learning

Program	Purpose	Allowable Uses of Funds Include	Cost Drivers These Funds Could Support	Additional Notes
Title I Part A	<ul style="list-style-type: none"> To help students at-risk of educational failure meet State academic achievement standards 	<ul style="list-style-type: none"> Staff PD Supplies (e.g. computers, laptop carts, peripherals) Instructional materials 	<ul style="list-style-type: none"> PD Devices Digital Content Integrated Platform BL Lead/Coach IT Lead/Support 	<ul style="list-style-type: none"> If over 40% of students are low-income the school can operate as a school-wide program and invest Title I funds to improve the entire school's educational program Schools under 40% have to provide targeted assistance to students most at-risk See p. 13 for more on consolidating funds in school-wide schools
Title I Set-Asides	<ul style="list-style-type: none"> Requirement in NCLB to set-aside Title I funding for tutoring and school choice for students in schools not making adequate yearly progress 	<ul style="list-style-type: none"> Same as overall Title I 	<ul style="list-style-type: none"> PD Devices Digital Content Integrated Platform BL Lead/Coach IT Lead/Support 	<ul style="list-style-type: none"> ESEA Waivers gave States the option to eliminate these set-asides in their new accountability systems (but did not require them to be eliminated) Only 34 States and DC have received ESEA waivers from ED Some States kept set-asides

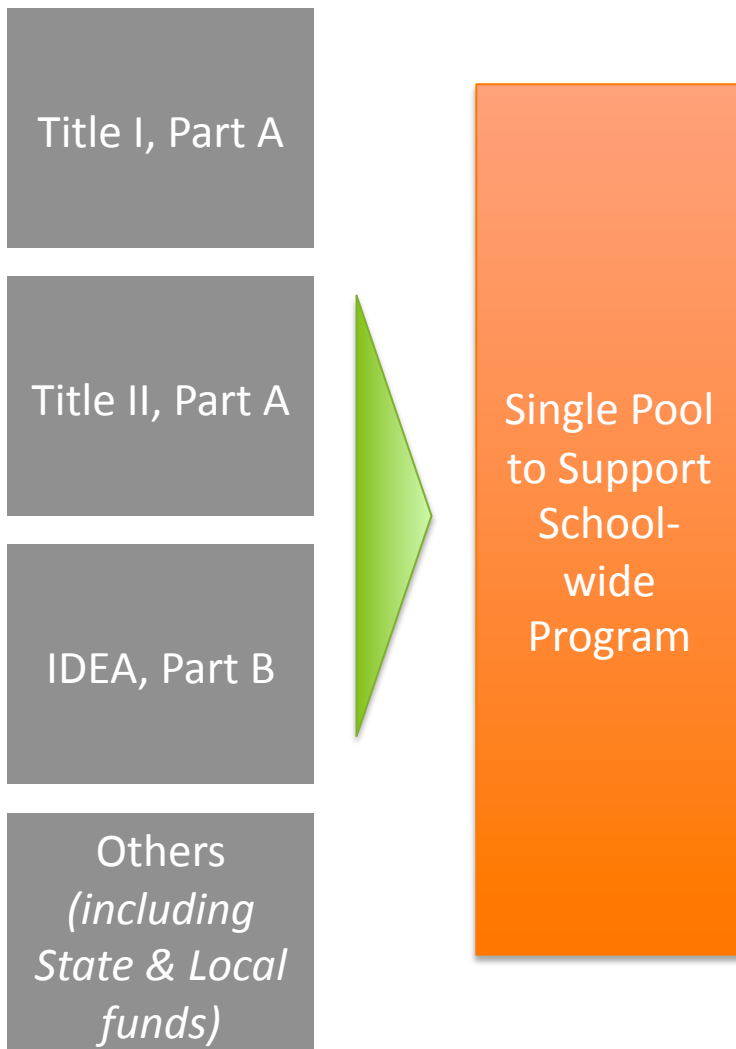


Federal Program Funds That Could Support Blended Learning (Cont.)

Program	Purpose	Allowable Uses of Funds Include	Cost Drivers These Funds Could Support	Additional Notes
Title I School Improvement Grants (SIG)	<ul style="list-style-type: none"> To support significant interventions in the persistently lowest achieving schools in a State over a 3 year period 	<ul style="list-style-type: none"> Same as overall Title I 	<ul style="list-style-type: none"> PD Devices Digital Content Integrated Platform BL Lead/Coach IT Lead/Support 	<ul style="list-style-type: none"> These grants require substantial planning and approval before the significant interventions are launched, so mid-cycle changes are difficult Best option to consider blended learning is when planning for new awards or for post-grant sustainability
Title II Part A	<ul style="list-style-type: none"> To conduct activities intended to improve the quality and effectiveness of teachers 	<ul style="list-style-type: none"> Staff PD 	<ul style="list-style-type: none"> PD BL Lead/Coach 	<ul style="list-style-type: none"> These funds have more limited uses than Title I but see p. 13 for more information on opportunities to consolidate funds in school-wide schools



Federal Government Option to Consolidate Funds Creates Opportunity to Pool Funds to Support Blended Learning



- Schools need to design and implement a comprehensive plan to upgrade their entire educational program based on the school's needs, as identified through its required comprehensive needs assessment
 - This provides significant flexibility for the school to determine how to improve their educational program and help meet the needs of their students
 - This strategy eases the requirements for accounting for funds from each specific program separately and eases most statutory and regulatory requirements for the specific Federal programs included in the consolidation
- Students must be at least 40% low income
- This flexibility can be dependent on State policy context as well
- More detailed information and examples of how this could play out in schools are available in Section E of the guidance below from ED:
 - <http://www2.ed.gov/programs/titleiparta/fiscalguid.pdf>



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Consider Re-Purposing Under-Utilized Software Licenses

- Many schools may currently have licenses for software that are under-utilized
- If your district centrally purchases software licenses, it may be worth investigating whether all the schools are using that technology
- There could be situations where software isn't a strong fit for the needs of particular schools even with the advantage of volume discounts
- Reducing these license agreements could free up resources for software more aligned with the blended learning instructional models



Consider Consolidating Frequently Idle Computers

- Computers in some schools are spread thinly spread across many classrooms and often sit idle throughout the day
- Schools can assess how computers are currently distributed and consolidate them in grades or classes interested in blended learning
- Investing in laptop carts may increase utilization of computers by allowing computers to be used in multiple locations during a single day
- Schedules can also be coordinated to enable sharing of computers across different classes



Consider Shifting Some Funding from Print to Digital Content

- Many blended learning schools have reduced their reliance on textbooks as they increase usage of digital content
- Re-evaluating textbook usage could free up resources for digital content in blended learning classrooms
- The switch to e-books can save schools money which can be re-allocated to other digital content; some schools also choose to forgo textbooks completely, although at this point in time, that may not be advisable in most districts



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Understanding the Impact of Potential Cost Drivers

- The following slides can be used as the basis for a worksheet in your schools to better understand the incremental costs of a blended learning implementation
- Most of the potential cost drivers depend on the current readiness – both technological and staff - in your schools and are difficult to estimate without specific research
- Education Elements has conducted readiness assessments with a number of districts that can more precisely study the budgetary impacts of a shift to blended learning based on readiness in specific schools and districts
 - If you'd like to talk to us about helping your district with this work please contact Amy Jenkins (amy@edelements.com) or Neil Campbell (neil@edelements.com)



Blended Learning Implementation Cost Worksheet (I)

One-Time Category	Cost Range	Quantity Required	Estimated Total Cost	Possible Sources of Funds
Bandwidth	Depends on local provider costs	Providers recommended as high as 25 mbps / 100 concurrent users		Federal E-Rate , State & local funds (possibly capital funds too)
Wireless Access	Depends on local provider costs	Minimum 1 per classroom; not relayed or daisy chained; many blended schools use more		Same as bandwidth
Laptop / Storage Carts	Wide range, especially if carts used for charging: From \$300 – 1,800			Title I, State & local funds
Ethernet Access (if using desktops)	Depends on current wiring			Same as bandwidth
Power Wiring (if using desktops)	Depends on local provider costs	Capacity testing highly recommended, especially in older schools		State & local funds (possibly capital funds too)



Blended Learning Implementation Cost Worksheet (II)

One-Time Category	Cost Range	Quantity Required	Estimated Total Cost	Possible Sources of Funds
Classroom Furniture	Significant range in cost	Depends on current stock, blended instructional model, and flexibility desired (e.g. tables vs. desks)		State & Local funds
Design & Implementation Consulting	Can be scaled / shared across schools especially in same grade span with common model and content (up to \$100K for single site)			State & local funds, philanthropy
Professional Development	<ul style="list-style-type: none"> * Need to consider cost of possible consultants plus stipends or sub coverage for teachers * Many content providers require training on top of general training in blended practices 			Title I, Title II, SIG, State & local funds, philanthropy



Blended Learning Implementation Costs Worksheet (III)

Periodic Category	Cost Range	Quantity	Estimated Total Cost	Possible Sources of Funds
Technology Devices	<p>Chromebook: \$200-400; limits content choices</p> <p>Tablet: \$300-700 depending on specs; limits content choices</p> <p>Desktop: \$400 – 700+ depending on PC/Mac and specs</p> <p>Laptop: \$600 - \$1,100+ each depending on PC/Mac and specs</p>		Should consider total cost of ownership (e.g. support, maintenance)	Title I, SIG, State & local funds
Accessories for technology devices	<p>Headphones: ~\$12- 25 per student, more with microphones</p> <p>Mice: ~\$10 per computer, recommended for young students</p> <p>'LoJack': ~\$35-60 per laptop per year depending on length of purchase</p>			Title I, SIG, State & local funds



Blended Learning Implementation Costs Worksheet (IV)

Recurring Category	Cost Range	Quantity	Estimated Total Cost	Possible Sources of Funds
Digital Content	<ul style="list-style-type: none"> * Depends on scale, number of subjects, content choices, and in house content available * ES up to \$150 per student * MS up to \$250 * HS up to \$350 			State & local funds
Integrated Platform such as the Hybrid Learning Management System (HLMS)	<ul style="list-style-type: none"> * Depends on scale of implementation (\$55 - \$100 per student) 			State & local funds
Blended Learning Lead/Coach		Can be shared across schools to help teachers learn tech and new practices		Title I, Title II, State & local funds
Increased IT Support / IT Lead		Can be shared but significant support availability recommended		Title I, Title II, State & local funds



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Education Elements Process to Launch Blended Learning



Assess each school's unique needs and rethink all aspects of instruction to identify the blended learning model that fits best

Help schools navigate a fragmented marketplace to select the best content and tools for their needs

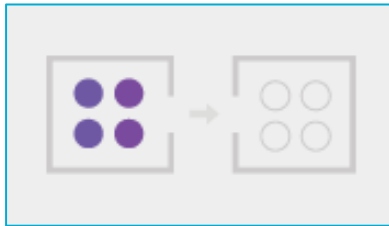
Weave instructional and technology elements into a solution and prepare teachers and infrastructure for the first day of school

Support teachers and administrators with tools, techniques, and training to effectively manage Blended Classrooms



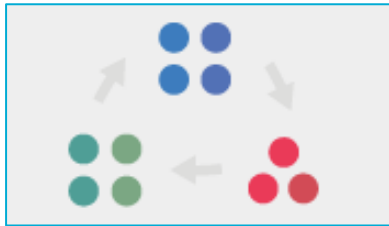
What Do Blended Classrooms Look Like?

There is no single instructional model that will work for every school, but there are a few foundational models that are good starting points for most.



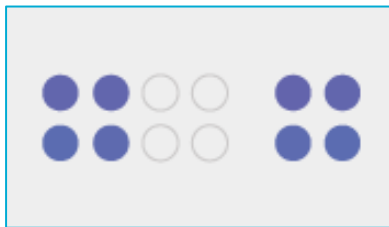
Lab Rotation

The lab rotation framework involves modifying the schedule so that students spend a portion of each day in a lab environment with online content and another period each day with the teacher.



Classroom Rotation

The classroom rotation framework puts the learning lab described in the lab rotation model in the classroom. This framework keeps all students in their own classrooms, under the direction of the teacher who knows them.



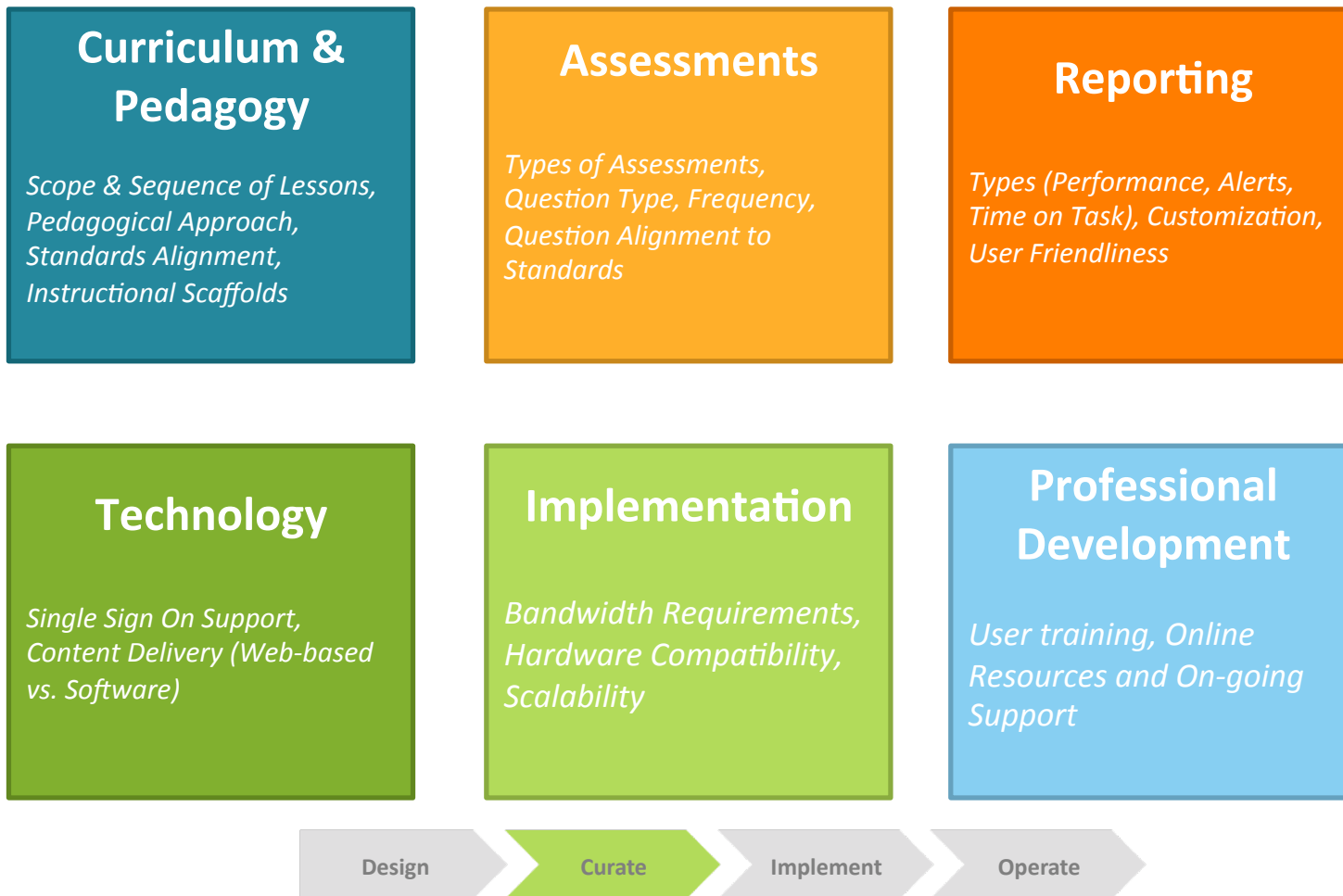
Flex Framework

The flex framework places all students in 1 large room, each with their own computer and generally an array of smaller rooms on the periphery. Students work independently in online coursework and teachers dynamically identify and pull small groups into breakout rooms to address specific topics.



Essential Criteria for Evaluating Content and Tools

We think it is critical to take a structured approach to identify a school's needs and evaluate digital content across 88 variables in 22 subcategories.



The Hybrid Learning Management System (HLMS): Education Elements' Approach to Creating a Unified Experience

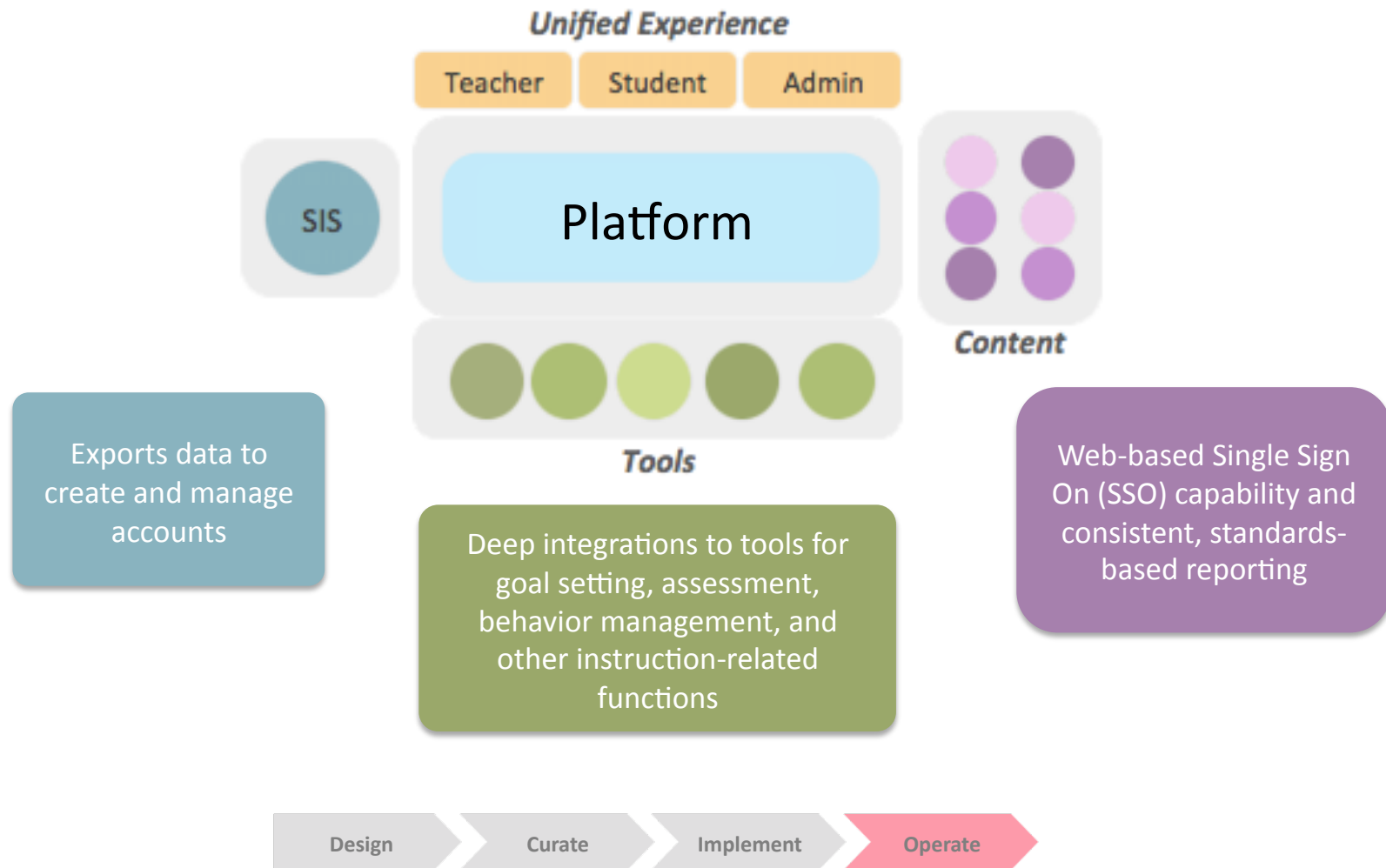


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Education Elements & Blended Learning Resources

- Introduction to Blended Learning and Education Elements
<http://vimeopro.com/edelements/education-elements>
- Videos from Blended Learning schools
Alliance - <http://www.youtube.com/watch?v=E209GFKtqMo>
KIPP Empower - <http://www.kippla.org/empower/Ten-Minute-Video.cfm>
- Education Elements Implementation Planning Toolkit
<http://educationelements.com/race-to-the-top-district-resources>
This was prepared with RTT-D in mind but the steps are not RTT-D dependent
- Contact Education Elements with questions about this toolkit or to learn more about our software and services
Amy Jenkins (amy@edelements.com) or Neil Campbell (neil@edelements.com)

