Blended

Using Disruptive Innovation to Improve Schools
The growth of online learning
Online learning is gaining adoption

Substitution calculation indicates online learning is growing disruptively

50% of all high school courses online by 2019
The rise of K-12 blended learning

Definition of blended learning

A formal education program in which a student learns at least in part through **online learning**, with some element of student control over time, place, path and/or pace

at least in part in a **supervised brick-and-mortar location away from home** (such as school).

The modalities along each student’s learning path within a course or subject are **connected to provide an integrated learning experience**.
Emerging blended-learning models

1. Rotation model
   - Station Rotation
   - Lab Rotation
   - Flipped Classroom
   - Individual Rotation

2. Flex model

3. A La Carte model

4. Enriched Virtual model
Station Rotation Model

Online instruction

Collaborative activities and stations

Teacher-led instruction
Station Rotation Model
Station Rotation Model
Flex Model
Flex Model

Source: Susan Patrick
Why should we care about online learning?
Student-centered learning = Personalized learning + Competency-based learning
3 elements driving its adoption
Driving adoption

Personalization
Different learning needs at different times

Long-term Memory

- Declarative
  - Episodic
  - Semantic
- Procedural
  - Skills
  - Habits
Learning environments modeled upon factories

Current system was built to standardize
The “Swiss-cheese problem” in education

Students develop holes in their learning
Driving adoption

Personalization

Access and Equity
Driving adoption

Personalization

Cost Control

Access and Equity
How do we seize its potential?
Implementing blended learning

Choose a SMART rallying cry
Choose a rallying cry

Solve problems, achieve goals, seize opportunities

Core problems

• Provide high school teachers more time to give individual feedback on writing assignments
• Boost academic reading results

Nonconsumption problems

• Lack specific subject-matter teachers
• Help students recover units & credits to stay on track for on-time graduation

Our goal is to raise school math performance by 10 percentage points by the end of the 2014-15 school year.
Implementing blended learning

Organize the team

Choose a SMART rallying cry
Implementing blended learning

Design the student experience

Organize the team

Choose a SMART rallying cry
What motivates people?

Student jobs to be done:
1. Experience success & make progress
2. Have fun with friends
Three levels in the architecture of a Job

1. **What’s the job to be done?**
   (Each job has functional, emotional & social dimensions)

2. **What are the experiences we need to provide to get the job done perfectly?**

3. **What and how must we integrate to provide these experiences?**
Summit Public Schools

How to help students achieve lifelong success?

- Cognitive Skills
- Content Knowledge
- Experiences
- Habits of Success

Source: Summit Public Schools
8 experiences Summit provides students

1. Student agency
2. Individual mastery
3. Access to actionable data and rapid feedback
4. Transparency in learning goals
5. Sustained periods of quiet, solitary reading time
6. Meaningful work experience
7. Mentoring experiences
8. Positive group experiences
What & how to integrate

Individual playlists

Source: Summit Public Schools
What & how to integrate

16 hours/week of Personalized Learning Time with self-directed learning cycle

Source: Summit Public Schools
What & how to integrate

Comprehensive scope & sequence through graduation that is transparent

Source: Summit Public Schools
What & how to integrate

With transparent, rich, rapid feedback

Source: Summit Public Schools
## A day in the life of a Summit student

### Time for projects & mentors

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30</td>
<td>Begin to arrive; work on personalized learning plan</td>
</tr>
<tr>
<td>8:25</td>
<td>Schools start with project time (math &amp; science)</td>
</tr>
<tr>
<td>10:20</td>
<td>Break</td>
</tr>
<tr>
<td>10:35</td>
<td>Personalized Learning Time</td>
</tr>
<tr>
<td>11:35</td>
<td>PE or sustained reading time (using Curriculet)</td>
</tr>
<tr>
<td>12:35</td>
<td>Lunch &amp; recess outside</td>
</tr>
<tr>
<td>1:20</td>
<td>Project time (English &amp; history)</td>
</tr>
<tr>
<td>3:15</td>
<td>School ends; can stay &amp; work on personalized learning plan</td>
</tr>
</tbody>
</table>

**Note:** On Fridays, the student spends most of the day on her personalized learning plan & has a one-on-one check-in with her mentor.
What & how to integrate

8 weeks per year of expeditions

Source: Summit Public Schools
Implementing blended learning

Design the teaching experience
Design the student experience
Organize the team
Choose a SMART rallying cry
What’s the best use of face-to-face time?

- Mentor
- Facilitator
- Tutor
- Evaluator
- Counselor
Integrating motivators into blended designs

Some of the tactics from the field

- Extend reach of great teachers
- Specialization
- Team teaching
- Awards for achievement
- Grant authority
Implementing blended learning

- Content
  - Design the teaching experience
- Technology
  - Design the student experience
- Facilities
  - Organize the team
  - Choose a SMART rallying cry
The right product architecture? It depends…

IBM Mainframes, Microsoft Windows

- Compete by improving functionality & reliability
- Proprietary, interdependent architectures
- Modular open architectures

Dell PCs, Linux

Compete by improving speed, responsiveness and customization
12 considerations when picking software

1. Existing inventory
2. Full-time or supplemental—how many hours?
3. Price
4. Student experience
5. Adaptability or assignability
6. Data
7. Efficacy
8. Flexibility
9. Compatibility
10. Alignment
11. Provisioning
12. Single Sign-on
Implementing blended learning

Content
- Design the teaching experience

Technology
- Design the student experience

Facilities
- Organize the team
- Choose a SMART rallying cry
What’s the best use of brick-and-mortar space?

- Safe
- Clean
- Inspiring
- Available
- Flexible
Intrinsic Schools

Source: Steve Hall, Hedrich Blessing (Wheeler Kearns Architects)
Intrinsic Schools

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Intrinsic Schools

Source: Steve Hall, Hedrich Blessing (Wheeler Kearns Architects)
Choose a SMART rallying cry
Design the teaching experience
Design the student experience
Organize the team
Choose the model(s)
Identify and prioritize assumptions
Shape the culture
Content
Technology
Facilities
Test and learn
Adjust!
Adjust!
Blended

Using Disruptive Innovation to Improve Schools

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