Blended Learning: How Brick-and-Mortar Schools are Taking Advantage of Online Learning Options
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLENDED LEARNING: THE FUTURE OF EDUCATION</td>
<td>2</td>
</tr>
<tr>
<td>WHAT ARE THE FEATURES OF AN EFFECTIVE BLENDED LEARNING PROGRAM?</td>
<td>4</td>
</tr>
<tr>
<td>Effective Online Instruction and Dynamic Student Grouping</td>
<td>5</td>
</tr>
<tr>
<td>The Flexible Use of Space and Schedule</td>
<td>7</td>
</tr>
<tr>
<td>Data-Empowered Leadership</td>
<td>8</td>
</tr>
<tr>
<td>THE BENEFITS OF BLENDED LEARNING PROGRAMS</td>
<td>9</td>
</tr>
<tr>
<td>CASE STUDY -- ACCESS PROGRAM</td>
<td>11</td>
</tr>
<tr>
<td>A PARTNER WITH PROVEN SUCCESS IN BLENDED LEARNING</td>
<td>14</td>
</tr>
</tbody>
</table>
Ask any teacher and he or she will tell you: Today’s students learn differently, and schools must adapt in order to produce the academically successful, college- and career-ready young adults that our communities and nation so urgently need. At the same time, too many of our young people are disengaging or dropping out of their traditional schools. To get back on track, they need an option that is flexible in time and place but unyielding in its high expectations. A “blended learning” program can help schools, districts, and other academic institutions address this urgent concern.

**What Is Blended Learning? It’s the Best of Both Worlds**

While the concept of blended learning has been around for years (sometimes called hybrid learning), the term has come to represent a learning experience truly differentiated for each and every student that is not constrained by geography or rigid schedules.

Blended learning brings together the best of technology-based online learning and face-to-face instruction. Students take an individualized, focused program of courses that provides what they personally need for advancement, graduation, and beyond. They report in person to the school facility to meet with their teachers and collaborate with their peers within a flexible schedule. Students can also work on their courses anytime and anywhere there is an Internet connection.

Students benefit from the attention of both face-to-face and online educators who carefully track their progress and provide the real-time guidance they need to succeed. According to the U.S. Department of Education, students in blended learning environments achieve at higher levels than students either in fully online or purely face-to-face learning situations.

“[The] blended approach combines the best elements of online and face-to-face learning. It is likely to emerge as the predominant model of the future–and to become far more common than either one alone.”

—John Watson, North American Council for Online Learning (NACOL)

Blended Learning: The Convergence of Online and Face-to-Face Education

**Different Models for Varied Implementation**

There are many different ways to implement a blended learning program in a school or district. Michael B. Horn, Executive Director of Education with Innosight Institute, together with Innosight researcher Heather Staker, have identified three distinct clusters of programs defined by the variable of ways that administrators implement instructional time and space,
technology, and teacher responsibilities. As programs are evolving and administrators are continuing to innovate in the dynamic blended learning environment, new models are constantly emerging. The current clusters (updated from 2010’s *The Rise of K-12 Blended Learning*) are:

1. **Traditional Schools, But With Online Options**
   a. **Online Lab Model**, in which instruction is delivered by online teachers through a digital learning platform but within a brick-and-mortar lab environment. The lab is often supervised by paraprofessionals with little content expertise.
   b. **Self-Blend Model**, where students take one or multiple online courses to supplement their traditional schooling. The online courses are taken outside of the school facility, and the student’s core instruction is still conducted in the traditional brick-and-mortar setting.

2. **Blended Schools**
   a. **Rotation Model**, exemplified by a fixed schedule rotating students between online learning and traditional classroom learning. The face-to-face teacher typically is accountable for both the online and in-classroom work.
   b. **Flex Model**, in which most of the instruction is delivered by an online platform with face-to-face teachers available for on-site support. Teachers provide tutoring sessions and small group sessions. This model is often used for dropout and credit-recovery students.

3. **More Virtual Than Traditional**
   a. **Online Driver Model**, where students receive all of their primary instruction online (through an online platform and from an online teacher) with occasional face-to-face check-ins.
   b. **On/Off-Site Rotations**, a type of online-driven model in which students come on-site on a scheduled part-time basis.

Connections Learning has further identified a subset of models currently being used by partner schools, districts, and other educational programs around the country. All of these programs fall within the Connections Learning **Fusion Model** of blended learning:

1. **Fusion Lab Programs**, which are full-time programs at a site attached to a school, including on-site teachers or paraprofessionals, online instructors, subject-area
specialists, computer labs, and wrap-around support. These lab programs often target at-risk or struggling students.

2. **Fusion Supplemental Programs**, which serve students in a blended setting for one to several courses, while they take the rest of their curriculum in a traditional face-to-face environment. These supplemental programs may be within a traditional school building or in...

**Fusion Schools**, which are complete blended schools – often charter schools - offering all subjects on a flex or rotation blended basis. Many Fusion schools are innovative high schools reaching a diverse audience and focused on producing college- and career-ready graduates. However, Connections has also developed a mastery-based, “ungraded” middle school model called **Fusion Bridge** which can accommodate over-age 8th graders. Regardless of model, because of the introduction of more accessible technology and the growing diverse needs of students, many administrators today are considering or have implemented some form of blended learning in their school or district.

Blended learning programs have effectively been used:

- As an option for non-traditional learners, student athletes, musicians, or anyone requiring a more flexible schedule
- As a solution for students who are homebound, hospital bound, or in treatment
- As an after school program
- As a credit recovery program for high school students in danger of impediments to graduation
- and much more.

**WHAT ARE THE FEATURES OF AN EFFECTIVE BLENDED LEARNING PROGRAM?**

Blended Learning programs offer a unique 21st century K–12 education experience for students, teachers, and administrators. The online curriculum, the digital instructional tools, and online teaching expertise inherent in a well-designed blended program all help to enrich the lives of everyone involved.

Blended learning programs can turn the typical school environment on its head. Rather than rows of forward-facing desks and teacher lectures, blended programs allow administrators to consider the advantages of a classroom structure with greater flexibility, a schedule with fewer constraints, and physical space with more dynamic applications. Although it may seem counterintuitive, the increase in flexibility actually gives administrators better data to monitor the academic performance of students in the program. The technology required to drive an
An effective blended learning program affords the administrator greater insight into the day-to-day progress of each student and the overall performance of each instructor.

Three critical features to an effective blended learning program are:

- **Effective Online Instruction and Dynamic Student Grouping**
- **The Flexible Use of Space and Schedule**
- **Data-Empowered Leadership**

### Effective Online Instruction and Dynamic Student Grouping

The greatest strength of the blended learning approach is the ability to personalize the instruction and address the individual needs of each student in a more effective manner. Using curricula specifically designed for online instruction (rich content, interactive media, and state-of-the-art instructional tools), online teachers lead interactive sessions and encourage class participation and discussion. Asynchronous instruction modules provide step-by-step instructions guide students through self-paced assignments and virtual labs and hands-on activities reinforce key concepts and strengthen analytical skills. This instruction can be customized for each student to encourage acceleration in students who are ahead or to provide remediation for students who are behind. Online instruction can be customized to each student’s skill level and can be adjusted on the fly because of the flexibility of the online format and the sophistication of performance tracking tools.

Within a blended learning environment, administrators are also able to rethink the classroom structure through **Dynamic Student Grouping**. Student learning “environments” can be structured in any way that suits their needs and are no longer constrained by the “stand and lecture” mode. Teachers can lead small groups of students who need additional help with a particular content issue, students can attend online classes or conduct individual, customized online activities, or students can work in peer groups on projects or other activities.
An Example of Dynamic Student Grouping

In the infographic, a traditional class of 20 students is evaluated for their competency in each subject area. Students are grouped by their mastery of the content.

**Students in Group 1** require more direct intervention. Their activities include small group sessions with the on-site teacher and time online working with specialized curriculum to help them build their foundational skills.

**Students in Group 2** are in danger of falling behind and, again, direct intervention is in order. The administrator of this program has decided that sessions with both online and on-site teachers will help these students move to the next level.

**Group 3 students** are showing greater mastery and more competency in the subject area, and are completing some of their curriculum online individually. In addition, these students are working on an enrichment project in a student group.

**Students in Group 4** show the highest level of mastery and are working both in groups and through online classes on enrichment.

Notice that in both cases of project work, students from all groups are invited to participate. This mixed grouping encourages struggling students to learn from their peers and students with greater mastery to exhibit leadership skills, a key component in 21st century learning and skill development. Assessment of students is not conducted one time, but on a continuous basis throughout the program. Students advance from one group to another and generate a continuing cycle of learning and achievement.
The Flexible Use of Space and Schedule

Blended Learning programs can vary in the amount of time spent on-site, the role of the face-to-face teacher, and the prevalence of technology as the primary instructional delivery mechanism. What is common to all is the blend of some time in a brick-and-mortar location and some instruction delivered online with an element of student control over time, place, path, and/or pace.

Location Example: The “Infusion Lab” and the Fusion Cafe

A full-time blended learning implementation often includes a physical location—frequently an oversized classroom—where students work with their subject-expert teachers, online curriculum, and each other. In the “Infusion Lab” example, the function of the classroom space is re-imagined—the location is staffed by highly qualified, certified teachers (face-to-face as well as online) supported by expert mentors and aides.

There are multiple ways for students to learn in this environment. There are subject-specific areas where students and teachers meet in small groups or one-on-one, depending on students’ needs. Students don’t just learn online in a “bull-pen”—they work face-to-face with core instructors and subject area specialists. Students who need more intensive intervention and direct instruction will get it, while students who are ready to move ahead can do so.

Full-time Fusion programs typically also include a “Fusion Café,” a safe, friendly place to study, snack and socialize. Fusion schools often features extended hours and multiple shifts to accommodate busy student schedules.

In this example, the Fusion blended learning school day is extended; staggered schedules ensure that teachers are optimally scheduled with plenty of planning time. Teachers are supported with ongoing professional development and the collegiality afforded by a flexible classroom schedule.
Students and teachers are equipped with computers which they can use anywhere in the school building as well as at home. Included presentation and web-conferencing tools add an extra dimension to teaching and learning.

**Blended Learning Schedule Example**

The typical blended learning student schedule is anything but typical. Students have the flexibility they are seeking without sacrificing a quality education.

This sample student is a nationally competitive athlete who has practices every afternoon Monday through Thursday and spends Friday traveling to competitions. He also likes to sleep in on Mondays to recover from his demanding weekends. He is completing his US History course, his French III course and his Web Design II course from home, field house, bus and motels as his schedule allows.

**Data-Empowered Leadership**

Blended learning models allow school administrators to closely monitor the progress of each class and the activities of the virtual teachers as they guide students through the program. Inherent in the technology-driven blended program, a web-based education management system enables administrators to access information about each student, class, assignment, and teacher at their fingertips. The education technology solutions* required for effective data-empowered leadership are:

**Education Technology Solutions**

**Integrated Systems**

An education management system integrates online content from multiple curriculum providers and easily communicates with your existing student information system. Students navigate all of the online resources easily and student achievement data flows seamlessly through the school.
High-Quality, Dynamic Content

When it comes to blended or online learning, not all curricula are the same. The most effective blended programs use online content that includes multi-modal instruction and adaptive technology to keep students engaged and instruction personalized.

Analytics and Automation

School leaders require effective data views in order to gain insight into each and every student including attendance, assessment performance, and mastery-based reporting by common core. Time-intensive tasks like data entry and attendance taking should be automated in the system allowing teachers to spend more time teaching.

Applications That Enhance Student Motivation

Keeping students in a blended learning program engaged requires unique, innovative instructional tools—from virtual lab experiments to math games to activity trackers. These cutting-edge instructional tools reinforce key concepts and core skills.

*Adapted from “The Rise of K-12 Blended Learning,” Heather Staker et al., May 2011

THE BENEFITS OF BLENDED LEARNING PROGRAMS

Because blended learning brings together the best of technology-based online learning and face-to-face instruction, students have access to a focused program of courses delivered in multiple modalities to keep them connected, teachers have a dynamic environment in which to deliver the instruction and varied roles which facilitate a partner approach to teaching, administrators have information delivered in real time through robust technology platforms, and all participants finally enjoy real anytime, anywhere learning. As the models evolve, so do the limitless benefits:

- **A continuum of options for each student:** Blended programs can include both full-time and supplementary offerings. Districts are finding it useful to embrace a portfolio approach to online/blended learning opportunity. This fulfills the need for the kind of universal access to online/blended learning long promoted by organizations like iNACOL, the International Association for K-12 Online Learning. Some public school district leaders are considering multiple full-time blended charter schools while also looking for ways to expand their on-site as a source of courses for students headed for graduation.

- **Strategic roles for all teachers:** In practice, blended learning programs often develop complementary roles for the in-person and online teachers. In cases where those roles
are defined and coordinated, outcomes have been positively impacted. The face-to-face teachers’ energetic commitment to “the whole student,” is enhanced by the data-driven collaboration with their online, subject-focused counterparts. One important impact of blended learning should be that these various aspects of teacher best practice can be distributed and scaled to maximize student achievement.

- **True anytime/anywhere learning**: Blended learning students have participated in courses in the learning labs, at home, in the community, and at their base schools—and now they are asking for mobile access as well. Given the ubiquity of technology in these young people’s worlds, combined with the continued development of content and instructional support that can live “in the cloud,” emerging definitions of blended learning should focus less on the either/or combination of face-to-face and online and more on the vision of learning blended into all aspects of our lives.

**Implementing a Blended Learning Program**

Starting a blended learning program requires an analysis of the need. What is the model that is right for you?

1. **Traditional Schools, But With Online Options**
   a. Online Lab Model
   b. Self-Blend Model
2. **Blended Schools**
   a. Rotation Model
   b. Flex Model
3. **More Virtual Than Traditional**
   a. Online Driver Model
   b. On/Off-Site Rotations
4. **Fusion Lab Programs**
5. **Fusion Supplemental Programs**
6. **Fusion Schools**

Schools benefiting from blended programs include: a Detroit site-based program for students who have dropped out of high school; a Maryland suburban district that created a blended “non-traditional” school to meet the needs of juniors and seniors balancing jobs and family; and an inner-city elementary school that provided a blended summer school program and improved both attendance and performance. There are few limitations to the way a blended learning program can be configured.

Depending on the kind of blended program you want, your school will need to provide mentors to guide students through their courses, or partner teachers to collaborate with online
teachers. You will also need to provide a physical location and technology for students to do their work—for example, a computer-equipped classroom or a computer lab.

**CASE STUDY – ACCESS PROGRAM**

**ACCESS Program: Prince George's County Public Schools, Maryland**

ACCESS is a partnership of the Prince George’s County (Maryland) Public Schools and Connections Academy/Connections Learning. ACCESS delivers supplementary courses in a blended learning environment specifically for 11th and 12th graders who have specific credits needed for graduation—either courses they have dropped or failed, or courses they simply never had time to fit into their schedules. Diverse in background and achievement levels but highly motivated to succeed, students make their own way across this 500-square mile district to take advantage of ACCESS.

The Prince George’s County Public Schools (PGCPS) district reflects the county’s diversity. Of its more than 125,000 students, 74% are African-American, 17% are of Hispanic descent (a concentration that grows yearly), and 48% qualify for free and reduced lunch. While PGCPS has worked tirelessly to keep its graduation rate near 85%, the overall rate has dropped from 89% since 2002, and certain sub-groups—particularly young men, students with special needs, and students of Hispanic descent—continue to lag significantly.

Among those PGCPS students who do graduate, nearly 50% are not able to pass all four of their state-required High School Assessment exams and therefore must complete special projects in order to qualify for a diploma. SAT scores lag Maryland as a whole by more than 190 points.

It was in this context in January 2010 that PGCPS began seeking partners for what it called a “non-traditional high school.” The district envisioned a combination of technology-facilitated and face-to-face instruction to provide a more personalized path to graduation for students who had previously struggled in the conventional classroom—including those capable of doing accelerated work as well as those in need of credit recovery.

**ACCESS in Action: Year 1**

As a Maryland-based online learning pioneer with nearly a decade of experience serving K-12 students in a variety of settings across the nation, Connections Academy (now officially called Connections Education) was thrilled to encounter in PGCPS a Maryland school district so clearly intent on innovation. In response the district’s call for partners in early 2010, Connections proposed a blended learning approach that combined high expectations with flexibility of time and place. Up to 60 full-time students would benefit from face-to-face staff guidance in a
physical “learning center” provided by the district, as well as 24/7 access to top-notch online curriculum. Students would be able to earn their way to more virtual, anytime-anywhere engagement – not having to report daily to the learning center - through good attendance and performance. Expert online teachers would collaborate with face-to-face staff to accommodate student needs. The entire program would be tied together with a constant flow of learning data to permit dynamic differentiation. The sharing of responsibilities between the partners was established as follows:

**PGCPS**

- Physical “learning lab” facility for blended program
- Computers and Internet access for student use in learning lab
- Face-to-face staff (teachers and/or paraprofessionals) to supervise learning lab
- Outreach, recruitment and admission of students

**Connections Learning**

- Online curriculum aligned to national and state standards
- Connexus® technology platform for delivery of curriculum and management of student data
- A Maryland-certified, expert online teacher for each course
- Data management and reporting plus Program Management

**A Day in the Life of ACCESS**

From the time the ACCESS labs open at 9:30 am Monday through Thursday, they are populated until early afternoon with a light flow of students whose base schools are evening or alternative programs or who are literally down to their last few credits before graduation. After signing in, students can work in either lab; the Partner Teachers strive to get to know all of the students so they can provide support interchangeably. Students will typically spend a couple of hours on each lab visit, accessing their courses on the computers, participating in online tutoring sessions and taking advantage of hands-on resources like the portfolio-prep guide that reminds them how to do formatting and references for papers they’ll submit to their online teachers. The Partner Teachers monitor their progress to ensure positive forward momentum but also to share any observations with the online teacher at scheduled weekly consultation sessions.
After 2:30, when the regular PGCPS schools let out, the trickle of students into the labs turns into a torrent. On any given day, as many as 30 students might be working in each lab for a minimum of one hour each, often stretching to two hours. Face-to-face small group math intervention is available one or two afternoons a week, depending on demand, while online LiveTutor sessions are available in all subjects. Students enrolled in courses as diverse as Chemistry and English work side by side, headphones on to concentrate on the audio track of the Connections Teachlet® online animations, microphones flipped down to converse with the online teacher when in synchronous sessions. Students arriving nearer to the end of the session focus doubly hard to complete lessons and units before the lab closes at 5:30. (The ACCESS staff has pledged to building Principal Agnes Brown-Jones not to stretch their days to 6 or 6:30 the way they did in the first months of the program, since the security guard is supposed to be able to turn his attention to the building’s evening high school program after 5:30.)

Visitors often comment on the quiet hum in the two labs even when filled to capacity, noting that such concentrated harmony is unusual for teenagers from dozens of different high schools congregating together after regular school hours. The ACCESS staff credit the students’ focus to the motivation factor: each lesson completed, each unit test aced brings them that much closer to a diploma – and their name on the ACCESS labs’ Wall of Honor listing each student who has successfully completed a course. When the clock strikes 5:30, the ACCESS students reluctantly pack up, head home, and log right back on.

Year 1 Results

At the end of Year 1, the 2010-11 school year, the ACCESS team took a careful look at the program’s outcomes – including student achievement, stakeholder satisfaction, and overall program effectiveness. The results, most of them very promising, helped shape Year 2.

Perhaps the easiest measure to track was course completion. Of the 563 course
enrollments in Year 1, 80% were completed (including about 15 that were extended to the very end of June to allow students to complete). Of courses completed, 85% were completed with a passing grade.

A PARTNER WITH PROVEN SUCCESS IN BLENDED LEARNING

Connections Learning has established itself as an expert and responsive partner in deploying educationally effective, cost-efficient blended learning programs. Through the Connections “Fusion” Blended Learning Model administrators offer an innovative, inspirational, and individualized blended learning approach in their schools, districts, or charter organizations. Fusion provides a unique 21st century K–12 education option including the curriculum, the instructional tools, and expert online teaching staff needed. Administrators set the schedule and then allocate the space, face-to-face professional or paraprofessional staff, and student hardware to facilitate the classes. Fusion is the premier blended learning model leveraging the power of Connections Learning’s dynamic education management system, Connexus®, and the expertise of veteran certified online instructors.

Why choose Connections Learning’s Fusion model?

- More than 700 public-school tested, standards-aligned K–12 courses
- Differentiated instruction and individualized support from certified teachers.
- Data-empowered leadership through Connexus®, our education management system
- Dynamic student grouping
- Flexible use of space and schedule
- Ongoing professional development to bring out the best in every student.

The Mission of the Fusion Model

The mission of each Fusion-inspired blended program is to maximize academic achievement for students who need an alternative to the traditional classroom. Fusion fulfills its mission by reaching students for whom a cutting-edge blended education guided by a philosophy of individualized and flexible instruction provides the best pathway to school success. Fusion values its ability to provide these students with everything they need to thrive in a blended learning environment: top-quality curriculum; specially trained, highly qualified teachers; a
powerful digital education platform; essential technology tools; and very real connections linking school, family and community.

Connections Learning draws upon Connections Academy LLC’s solid decade of experience in serving students outside the traditional classroom setting. Founded in 2001, Connections Academy is a leading, fully accredited provider of high-quality, highly accountable virtual education for students in grades K–12. Connections Academy currently operates 23 virtual public schools in 22 states, and has nearly 40,000 students enrolled and almost 500,000 courses delivered in 2010-2011, with over 100,000 students served and 1,000,000 courses delivered in the past 10 years. All courses meet or exceed state and national standards (including the Common Core), and the program is accredited by multiple agencies including AdvancED and the regional accreditors. Additional detail on our curriculum and course offerings by grade level is provided in the Connections Learning Curriculum Guide available at www.connectionslearning.com.

This robust curriculum is integrated into a proprietary education management system developed specifically for use in K-12 virtual programs. Over the past decade, the Connections curriculum, platform, and method of online teaching have produced the highest academic performance of any family of K–12 schools in the country.¹ In January 2011, Connections Academy became Connections Education with two divisions – Connections Learning and Connections Academy. The Connections Academy division will continue to focus on serving full-time virtual public schools, while Connections Education brings this accumulated expertise in online teaching and learning to school districts around the nation.

Proven Effective

Only the Connections Learning Fusion blended learning programs offer online courses that have all been “public school-tested” and a model that has demonstrated success in school districts and Infusion Labs around the country. Our online program works, and we have the state standardized test scores to prove it. Connections Academy schools regularly meet or exceed state benchmarks in core subjects, and Advanced Placement® students using the Connections program outscore the national average on the AP® test. Our program also gets top marks in user satisfaction: more than 96% of parents agree that our curriculum is high quality, and 92% say their students agree they are making good academic progress at their Connections schools.

To find out more about a partnership with Connections Learning, contact us at (888) 440-2890 or visit us at www.connectionslearning.com/blendedlearning.

¹ Based on the percentage of schools operated making Adequate Yearly Progress (AYP); state report card ratings; and the overall percentage of enrolled students in the program rated as proficient or above on state standardized tests.