Blended Learning: How it Works in a Virtual School

Florida VirtualSchool
CELEBRATING 15 YEARS of INNOVATIVE EDUCATION

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Introduction

In the United States, 82% of school districts had one or more students in a fully-online or blended online/face-to-face course during the 2008-2009 school year. Online course enrollment is growing at a rate of 30% per year for Kindergarten through Grade 12 (iNACOL, 2011). In May 2011, the Florida House of Representatives passed the Digital Learning Now Act. This Act expands options for school choice to encompass virtual education. Florida joins three other states, Michigan, Alabama, and New Mexico, which now require students complete one online course before graduating from high school.

With the rapidly changing global market, the U.S. is taking steps to prepare students to compete with other countries that are already offering much of their education through a virtual environment. Countries like Canada, China, and Australia are offering online education to a large portion of their Kindergarten through Grade 12 student population. For example, Canada gives students in every province and territory access to online learning, and "China may be the first country to succeed in educating most of its population through the Internet [having spent close to] $1 billion to implement online learning projects in the rural country-side" *(An International and National Perspective of K-12 Online Learning and the Future of Education, 2011).*

What is blended learning?

Historically, "virtual learning" has been around for decades but has been called various names, such as correspondence learning and distance education. With the addition of technology, education has seen changes made to the traditional virtual models. This new technology allows students to learn in ways once unimaginable. Today's students have the opportunity to define their own path of learning, whether it is in the traditional brick-and-mortar school, in an online environment, or a mix of both. Blended learning is defined by many educators as a mixture of face-to-face instruction with the online environment. However, blended learning is a complex topic with many personalized options for students and schools. In "The Rise of K-12 Blended Learning," Staker defines blended learning as "any time a student learns at least in part at a supervised brick-and-mortar location away from home *and* at least in part through online delivery with some element of student control over time, place, path, and/or pace." Others describe blended learning as educational "pedagogies that change according to the unique needs of learners" (Osguthorpe and Graham, 2003).

According to Staker's recent research on industry standards for blended learning offerings, schools are using four different blended learning models:

1. **Rotation model:** Program in which students rotate on a fixed schedule between learning online in a one-to-one, self-paced environment and learning offline. The following terms illustrate variations of the rotation-model implementation:
    - **Station rotation:** Within a given course or subject, students rotate on a fixed schedule between classroom-based experiences. The rotation includes at least one segment for online learning, and then other segment(s) for activities such as teacher-led small-group or full-class instruction, group projects, and pencil-and-paper assignments.
    - **Lab rotation:** Within a given course or subject, students rotate on a fixed schedule among locations on the physical campus. One is a learning lab for self-guided, predominantly online learning, and the other(s) are classroom(s) for teacher-led instruction.
    - **Individual rotation:** Within a given course or subject, students rotate on a fixed schedule and on an individual, adaptive basis among various modalities, such as online learning, face-to-face tutoring, face-to-face seminars, and projects.

2. **Flex model:** Delivers most of the curriculum through an online platform in a supervised brick-and-mortar setting. Adults provide face-to-face support on a flexible and adaptive as-needed basis through individual tutoring, small-group sessions, and/or full-class experiences.
3. **Self-blend model:** Students take one or more courses entirely online to supplement their traditional courses. Students may take the online courses on-site or off-site of the brick-and-mortar campus. This differs from pure virtual schooling because students attend a brick-and-mortar campus for their remaining courses.
4. **Remote model:** Delivers most of the curricula using an online platform. Students learn some of the time off campus and some of the time on campus.

Why choose blended learning?

According to Dr. Barbara Means from the Stanford Research Institute (SRI) International, when she compared traditional school outcomes to the outcomes at schools that blended face-to-face and online teaching, she found that "[y]oungsters in the blended environments, with a teacher and technology, did 'significantly better'" offering that the blended-learning schools allow students "more learning time, more content, or perhaps both" (Kronholz, 2011). In 2010, the U.S. Department of Education presented research findings from various studies. The results from three of these studies (see table below) showed the effect size of student outcomes on matched pre- and posttest scores favored online learning over traditional classrooms. Therefore, "[t]hose who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction"(U.S. Department of Education).

Study	Number of students	Effect size
Sun, Lin and YU (2008)	113	+0.26, favoring the virtual lab condition
O'Dwyer, Carey and Kleiman (2007)	463	+0.37, online students performing better than their peers in conventional classrooms
Englert et al. (2007)	35	+0.74, favoring the online condition

U.S. Department of Education: *Evaluation of Evidence-Based Practices in Online Learning*

Blended learning merges the best of both traditional and virtual instruction and is becoming a worthy option for school districts struggling under limited budgets, "a diminished range of course offerings, teacher shortages in hard-to-staff areas such as STEM, [and the] ever-increasing pressure to boost performance" (McLester). Virtual learning courses provide a consistent format of learning for students. Content is presented in a predictable format "which increases understanding and retention of the material" (Geiman). Students are able to work at their own pace while being exposed to more interactive content.

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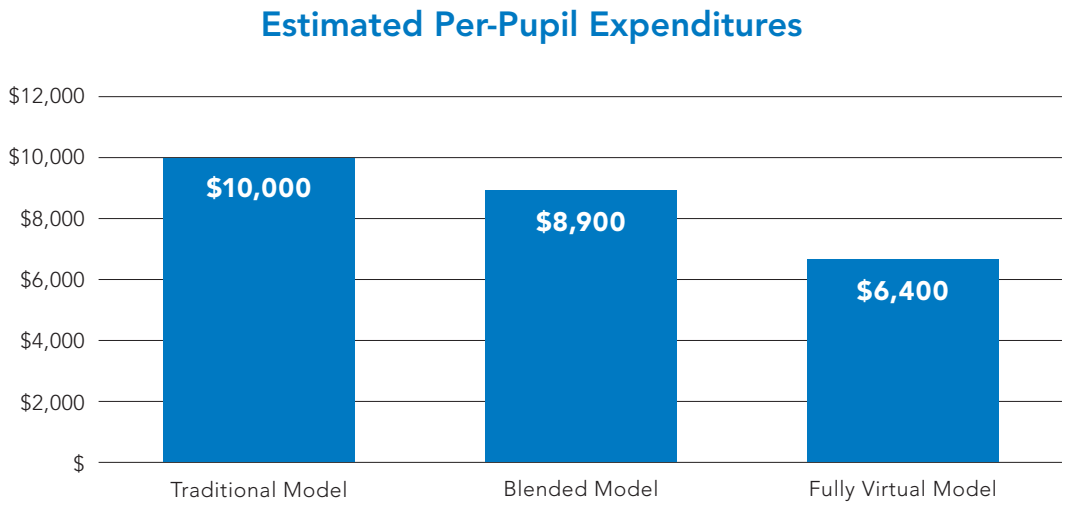
Recently, the Thomas B. Fordham Institute released a paper examining the cost of online learning. From interviews with more than fifty entrepreneurs, policy makers and school leaders, they found the national average of cost per pupil for traditional models begins at $10,000 while the blended model "has the potential to save approximately $1,100 per student" (Battaglino, Haldeman, and Laurans). Virtual learning "costs less than traditional learning and consistently achieves outstanding results" (Geiman, 2010).



Data source: *The cost of Online Learning. 2012*

Where to begin?

The most important factor when considering a blended learning model is determining the goals for the program. SRI International recently published a guide on implementing online learning labs in schools and districts. According to that guide, they recommend "putting the needs of students first…. Understanding both the potential benefits to students of online learning and the new expectations students will face in online courses is critical to implementing a successful program."

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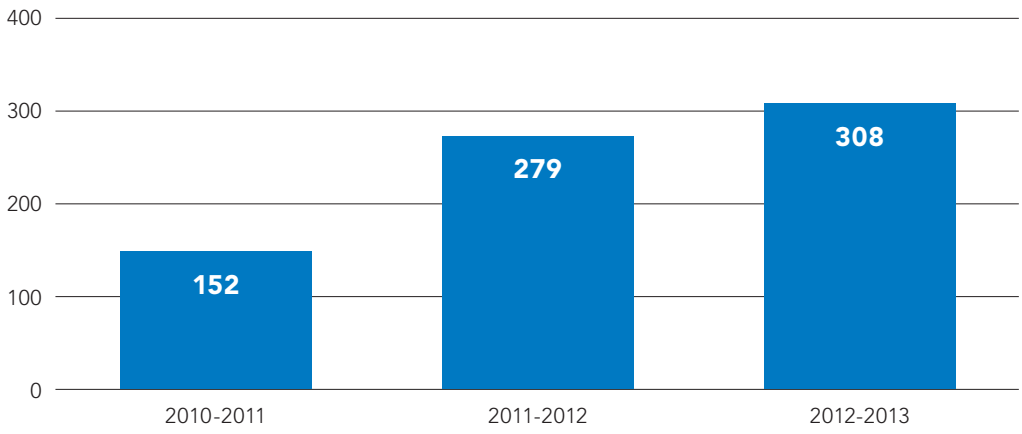
As part of the research to create this guide, SRI International studied the blended learning program offered in Florida's Miami-Dade County Public School system. Known as Virtual Learning Labs (VLLs), Miami-Dade selected Florida Virtual School® (FLVS®) as the virtual learning provider. Florida Virtual School works with Miami-Dade School District to create on-site VLLs (60 school sites from 2010 has grown to 86 school sites in 2012) where students are registered for FLVS courses allowing the district to use FLVS teachers with school personnel as an onsite facilitator.

Virtual Learning Labs

The Virtual Learning Lab program represents a relatively new approach to instruction, and it is apparent that many distinct approaches to blended learning are rapidly emerging (Staker, 2011). As educators gain time and experience with online learning labs, implementation models will continue to evolve along with insights into what works, when, and with whom. VLLs are the product of a partnership between Florida Virtual School and individual Florida school districts; they provide opportunities to engage students in an exciting new learning environment. VLLs create an environment which allows students to reach beyond the walls of their classrooms and connect with teachers and students throughout Florida, the U.S., and beyond. Online learning lab programs like Miami-Dade are a type of blending learning, which melds elements of place-based education (education that takes place in brick-and-mortar schools) with online instruction. In Miami-Dade's VLL program, the blending occurs across course type (fully online or face-to-face) rather than within courses. Instruction for select individual courses is provided entirely online in a school-based computer lab. Students log in to online courses taught by off-site FLVS instructors. Students take one or more of these online courses during regular class periods within the school schedule. Lab monitors, called lab facilitators in Miami-Dade, are present in the labs to support students on site. The VLLs show best how to use the Flex model in a brick-and-mortar setting.

Number of Florida Virtual School Vitual Learning Labs across Florida by School Year

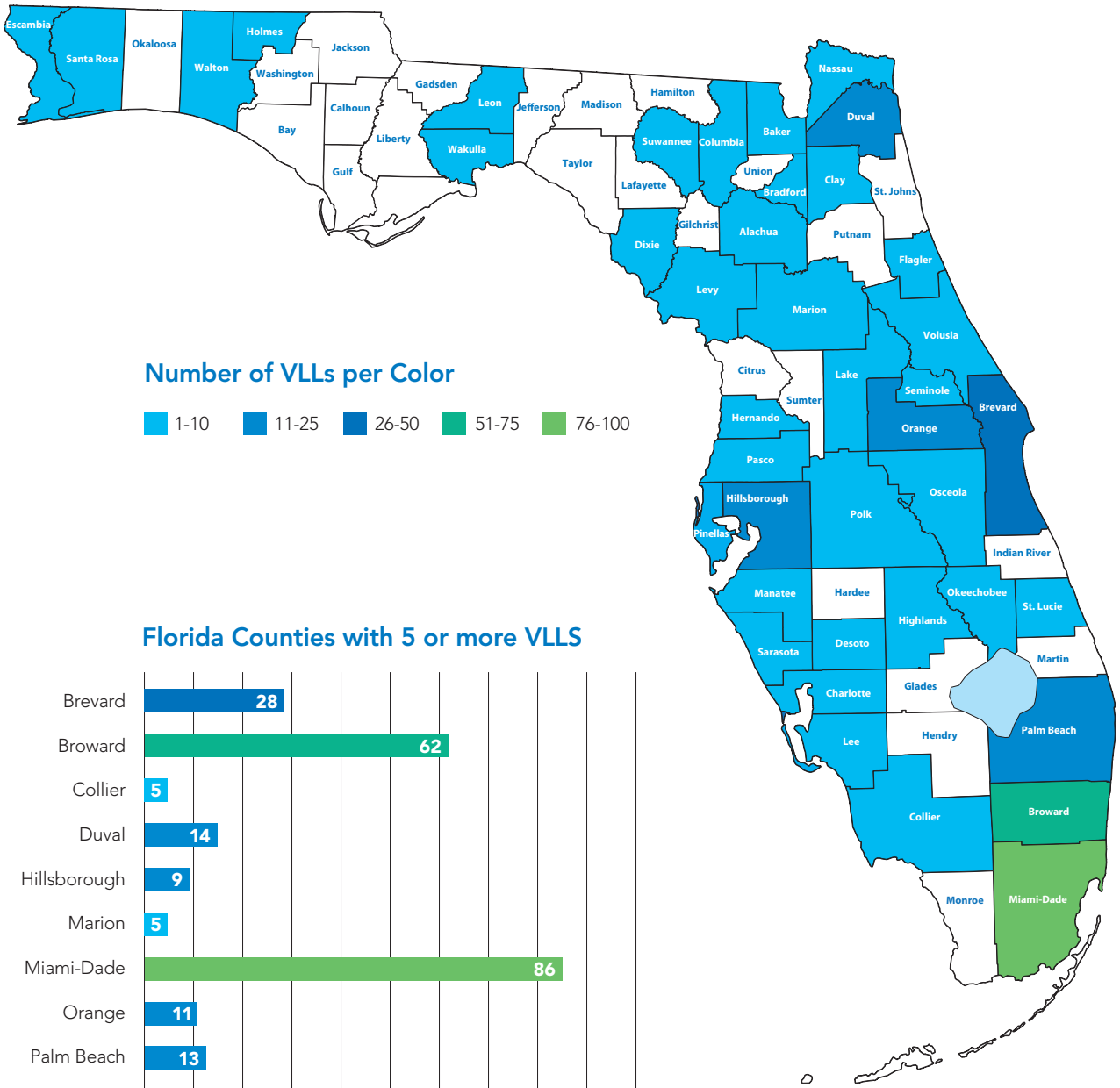


The number of FLVS VLLs across Florida almost doubled from 2011 to 2012 as depicted in the chart above.

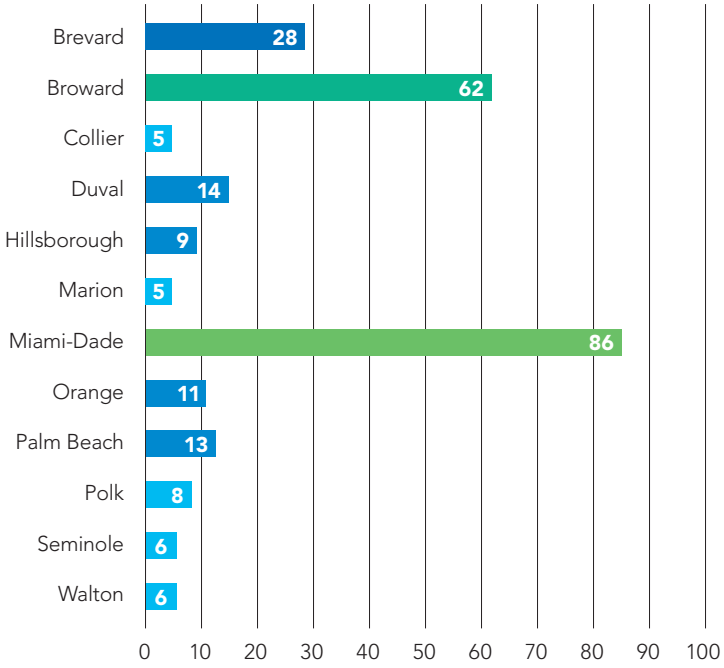
In addition to the Flex model, FLVS has implemented the Self-blend model as demonstrated in the FLVS Part-Time program. Students are able to enroll in courses of their choosing at any time during the year. Students often use FLVS courses as a supplement to their course load or as an opportunity for credit recovery. A most recent addition to the Self-blend model occurred in Collier County, FL, where gifted fifth graders took the FLVS middle school critical thinking skills course (known as M/J Critical Thinking, Problem Solving and Learning Strategies) to meet the differentiated instruction requirement on their IEPs.

Across the state of Florida, the requests for blending curriculum are increasing. With the Digital Learning Now Act, school districts are looking for ways to use blended learning with their existing curriculum.

Map of Florida Counties with VLLs in School Year 2012-2013

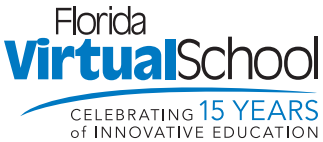


Florida Counties with 5 or more VLLS



About Florida Virtual School

Florida Virtual School (FLVS) is an established leader in developing and providing virtual Kindergarten through Grade 12 education solutions to students nationwide. A nationally recognized e-Learning model, FLVS, founded in 1997, was the country's first state-wide Internet-based public high school. In 2000, the Florida Legislature established FLVS as an independent educational entity with a gubernatorial appointed board. FLVS is the only public school with funding tied directly to student performance.
Access the school at **www.FLVS.net**.



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January 2013