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INTRODUCTION

The benefits that educators value the most are the ability to reach digital native students where they live and to give each student the opportunity to participate and have a voice in class activities.
FROM A FLIPPED OR BLENDED course where significant learning takes place both in a traditional classroom and online to a course where almost all of the learning takes place online, online learning provides new opportunities to enhance teaching and learning. The stories in this booklet exemplify how independent schools are embracing the transformational potential of blended and fully online learning.

The NAIS 2011 Hybrid/Blended Learning in Independent Schools Survey found that 20 percent of independent schools offered blended and fully online courses, and 13 percent were actively planning to offer these types of courses. With an overwhelming majority of independent schools also using mobile devices for teaching and learning, many independent schools are experiencing pedagogical shifts to more personalized, student-centered, collaborative learning that includes connections to peers, experts, and resources from anywhere in the world. In courses enhanced by online learning, students are active, engaged collaborators, synthesizers, and creators of content and knowledge.

Among the many benefits of blended and fully online learning, those that educators value the most are the ability to reach digital native students where they live and to give each student the opportunity to participate and have a voice in class activities. Online learning offers expanded opportunities for students to build community, collaborate, and access learning materials and resources. In blended courses, students participate in online learning activities outside of the classroom, which frees class time for discussions, one-to-one coaching, collaborative group work, and hands-on activities. Parents, teachers, and students report that students develop an increased sense of responsibility and independence through online course experiences. Different learning styles are encouraged and supported through online learning, allowing teachers to personalize instruction.
Throughout this booklet, case studies illustrate how independent schools achieve these outcomes. One teacher uses an online Ning platform in a religion course to help students build community and feel safe enough to take risks and voice their opinions. In a flipped mixed-grade math class, students mentor, teach, and inspire each other to greater academic achievement. At a school serving students with learning differences, the personalization made possible by online learning “levels the playing field” and increases students’ independence. In a fully online media studies course, students from around the world collaborate, share insights, and develop global perspectives that are rooted in personal connections.

Faculty members and administrators share in the positive outcomes that online learning brings to a school. At schools where online learning is used, teachers and staff build personal learning networks and communities of practice both within their home schools and far beyond their schools’ physical walls. Sharing best practices and challenges in a supportive professional community inspires teachers to continuously reflect on and refine their teaching practices and to try new tools and approaches.

As schools embark on their online learning journeys, some of them have found exciting new opportunities for collaboration. From a new community of practice to a joint online course offering to an online school consortium, independent school educators can greatly enhance individual and institutional development and growth, extend their reach and offerings, and better meet students’ needs when they share their strengths. Through these stories of excellence, dedicated teachers and administrators show us what meaningful blended and fully online learning looks like. Through their enthusiasm and willingness to take risks and try innovative approaches, they lead our imaginations to new possibilities. We are grateful to these bold leaders for sharing their new practices and for their dedication to their students and schools.

Susan Booth
SENIOR DIRECTOR OF STRATEGIC INITIATIVES, NAIS
SHORECREST PREPARATORY SCHOOL’S first blended learning course, AP Human Geography, explores the patterns and processes that have shaped human understanding, use, and alteration of the Earth’s surface. Topics include such things as the nature and perspectives of geography, population, cultural patterns and processes, political organization of space, agricultural and rural land use, industrialization and economic development, and cities and urban land use. The course meets three times per week and students participate in a variety of online activities in and out of class. The entire course is housed on Moodle, a free and open-source e-learning software platform, and is virtually paper free. In its fourth successful year, AP Human Geography has become increasingly popular with students.

Every two weeks, students tackle a new course topic and a variety of online elements are used to aid comprehension. Early in the year, students are introduced to Google Docs, which is used for note taking, group collaborations, and interactive and student-centered discussion “lectures.” Voicethread is also used periodically to present material and pose discussion questions in the style of the flipped classroom. My favorite part of this course is that students have access to and are encouraged to use a variety of diverse online resources including articles, databases,
videos, podcasts, simulations, and tutorials. Some of these resources are used in class to supplement or illustrate information found in the online text. Others are used by the students to create and regularly maintain a wiki page on a country of their choice that specifically addresses all of the course topics. Students also use information found to create teacher-directed online forum posts, which include posing thoughtful questions to classmates about their research and responding to others in turn. Google Earth is used regularly with mathematical location activities and with the creation of sightseeing tours for things like the diffusion of the English language or of an element of pop culture. From time to time, we also Skype with experts in the topics we are tackling or to further develop our understanding.

Point values are assigned to each activity according to difficulty and length and a rubric clearly defines requirements for forums. Tests, online and consisting of multiple choice and essay questions, are taken in class under teacher supervision. If my favorite part of this course is resource access, my second favorite aspect is that it teaches students to be independent, active, and interactive learners. Almost all of the above-mentioned activities take place out of class with the student responsible for the quantity and quality of learning taking place. Whether they like it or not, students are involved with every aspect of learning in this course and so far it has been a very successful and fun adventure.*

*A very special note of thanks to my distinguished colleague, Wendy Drexler, who got this course off the ground. I have been fortunate enough to be able to continue her work after she moved on to use her many talents in the realm of postsecondary education.

CONTACT
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REQUIREMENTS
Students need Internet access at home, Google, Wikispaces and VoiceThread accounts; schools need computers with Internet access; teacher needs access to Skype.

RESOURCES
GOOGLE DOCS: https://docs.google.com
GOOGLE EARTH: http://earth.google.com
MOODLE: http://moodle.shorecrest.org
RUBISTAR: http://www.rubistar.com
SKYPE: http://www.skype.com
VOICETHREAD: http://voicethread.com
WIKISPACES: http://www.wikispaces.com

TECHNOLOGY
Computers with Internet connection, Google Earth, Moodle
THE DESIGN TECHNOLOGY PROGRAM, an engineering course at Holton-Arms, began over 15 years ago, as faculty members sought to create time in the daily schedule for students in grades three–six to engage in problem-solving activities by designing, constructing, testing, and modifying solutions to posed challenges. Of equal importance was providing opportunities for young girls to explore and create with subject matter and materials that were usually not part of their regular learning environment.

Over time, as the Lower School grew in size and program offerings, the time allotted for the fifth-grade Design Technology program dwindled to 45 minutes, once every six days. That was especially problematic because of the hands-on nature of the activities. In June 2010, as a solution to what was primarily a scheduling issue, the school restructured the course using blended learning. By delivering much of the content and factual material online, it was possible to capture significantly larger segments of face-to-face time that could then be used for construction activities.

Using VoiceThread and a variety of multimedia sources, faculty members create online lessons for fifth-grade students and
post them approximately three times each month. These online modules are self-contained with embedded media, so that students can complete all parts of the lesson without leaving the VoiceThread site. Each online lesson also contains an assignment that typically requires students to respond using VoiceThread. Occasionally, the teachers ask students to produce a drawing or ideas for prototypes to be used during face-to-face classes. Students complete the lessons, which require no more than 20 to 30 minutes, outside of the regular school day. About once a month, students meet in typical face-to-face classes to engage in a wide variety of design and construction activities. For example, the concluding activity for an online exploration of solar energy involves students working in small groups to design, construct, and test a solar baking device.

Facilitating the fifth-grade Design Technology class as a blended course has not only addressed the scheduling challenges, but also yields a better overall experience for the girls. The interactive nature of the online modules boosts interest and engagement in the material. Face-to-face time is rescheduled in full-day or half-day blocks to allow students enough time to engage fully in hands-on and collaborative activities. Building on the success of the first year, fifth-grade Design Technology continues to be taught as a blended course.

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REQUIREMENTS
Students need a computer with Internet connectivity in order to access VoiceThread. Responses can be made using voice, with a microphone, text, audio file, or video, using a webcam. Fifth-graders next year will be using iPads, which will expand the opportunities for creative responses. The online lessons are created using Microsoft Power Point and a variety of sources, including websites, YouTube and Discovery videos.

RESOURCES
VoiceThread, Microsoft PowerPoint, YouTube, Discovery Channel, KeepVid. Databases of visual images, graphs and charts, and resources for lesson preparation, including a wide variety of websites.
NOTICING A TREND TOWARD online teaching in the languages, Elizabeth Allen, chair of the upper school World Languages department, created a blended course for her upper level Spanish V students. She did not transfer traditional coursework to the web, but redesigned her course so that the online and face-to-face learning complemented each other. She created a student-centered environment and structured the course to allow for research, writing, reflection, and collaboration during the students’ “independent day.” (On the independent day, students are required to check in with Mrs. Allen, but are on their own after signing in.)

Mrs. Allen’s blended learning class mixes online, face-to-face, and independent research and allows for a variety of individual, partner, and group projects as well as inquiry-based assignments. Below are two classroom projects that demonstrate how blended learning occurs and offer examples of some of the software used.

Students researched modern Latin American countries and created Glogsters (online posters) of their countries.
During the course of this two-week assignment, Mrs. Allen held three face-to-face classes and two independent research days. During the face-to-face classes, students worked in small groups to discuss what they had learned, observe how their peers were approaching their research, and share information in smaller groups. In the final class, the students competed to sell a trip to their country using the Glogster and a prepared sales pitch.

In another project, students examined the immigration issue and created projects using VoiceThread. During the project, Mrs. Allen used two class periods for students to watch a documentary that juxtaposed the journey of immigrants from Nicaragua with the situation at the U.S.-Mexican border. Simultaneously, each student created a VoiceThread project in which she told her own family’s immigration story in Spanish (or interviewed someone she knew and shared that person’s immigration story) in a small group, listening and responding to others’ stories as homework.

On subsequent independent research days, students stopped by class for an individual interview with Mrs. Allen to discuss their reactions to the film and the questions it raised. Meanwhile, Mrs. Allen followed the students’ research progress by having them keep their notes and bibliographical references in NoodleTools. Mrs. Allen left comments and questions on their notecards.

Another part of the immigration project included a formal debate between two teams. Mrs. Allen gave students independent time to meet with their teams and to work on individual position papers that they shared with her in Google Docs.

For Mrs. Allen, the blended learning course has provided many benefits for students. By providing independent days for research and online learning, students come to class more engaged and speaking more Spanish. Also, more is generally demanded of students who attend a blended course. The course’s online component requires students to become more responsible. Online discussions can be as lively as face-to-face
discussions. All students must reflect and comment on one another’s online posts, and that gives them time to prepare thoughtful responses to discussion topics.

Students must also have strong time-management skills and be self-motivated, says Mrs. Allen. A blended learning course allows them freedom to make choices. On their independent day, they might need to study for a test in another class, and then have to complete their Spanish work on their own at another time. There are consequences, such as grade penalties and the disappointment of partners or peers, if they fall behind. Students say they like the flexibility of the schedule in a blended learning course, knowing that they are learning to work independently and to manage their time—both valuable life skills.

CONTACT
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REQUIREMENTS
Laptop/access to a computer

RESOURCES
TO VIEW AN ONLINE SCREENCAST OF ELIZABETH ALLEN’S BLENDED CLASS, VISIT http://www.screencast-o-matic.com/watch/c6lwceXkE

TECHNOLOGY
VoiceThread, Screencast, Moodle, Google Apps (docs, sites, chats), Glogster, Voki, Haiku, NoodleTools
STORIES OF EXCELLENCE

ST. MARY’S SUCCESSFUL ENTRY into online learning is the fruition of a technology program that creates a culture of innovation, a staff that supports risk-taking, and a learning environment where technology use is intentional.

So in August 2010, when a teacher, empowered by the school’s culture, took an online course and shared her experience about blended learning with her peers, the school was able to quickly respond to a grassroots plea for a learning management system (LMS). Within days, a pilot program was launched in both the middle and the upper schools, with a handful of teachers implementing the LMS in their classrooms.

The incorporation of the LMS encouraged the use of web-enabled instruction, which, in turn, allowed teachers to spend class time with students reinforcing, not introducing, new material. This concept is called reverse learning, or, more popularly, a flipped classroom. Usually, the students are introduced to a new concept via web instruction as homework, while problem-solving, discussions, or other work occurs during class time. Students had an immediate positive response, leading to the introduction of the LMS to all students and teachers in the fifth through the 12th grades at the start of the 2011 school year.
Professional development is another area in which St. Mary’s has incorporated reverse learning. Last summer, Academic Technology Coordinator Melissa Cole created a voluntary class for faculty members in which they became the students, using a combination of the school’s LMS and face-to-face (F2F) meetings. The teachers accessed online resources, studied information, created examples of reverse instruction, and participated in VoiceThread and online discussions, as they delved into the meaning of blended learning and its implications for their subject area and grade level.

During the F2F time, teachers from various grade levels and subject areas shared ideas, collaborated on projects, and tutored one another in an effort to relearn and master the skills that were presented online. In addition, because Cole organized the class through the LMS, the teachers became better users of the system and more thoughtful about how they would present content to their students.

Online professional development has become integrated into the program, as Cole keeps all faculty members who use the LMS updated through a weekly email (ePD). That email includes information about blended learning and the school’s LMS, examples of technology integration, and more. Teachers have ongoing access to the ePD through email archives and the LMS, and they can study the information on their own time, at their own pace, and at a location they choose. An added benefit of reverse and blended professional development is that the teachers get a feel for how students handle the variety of online content that they use in their world.

To complete the circle of fully integrating blended and reverse learning at St. Mary’s, Upper School Head Dr. Patti Ray and Director of Studies Dr. Carrie Steakley created a class just for parents called “What Could She Be Thinking?” The class, offered each semester during the 2011–12 school year and taught through the LMS, is the first online course exclusively for St. Mary’s parents. Limited to 25 participants, it has been an opportunity for parents to learn about the teen brain and factors that affect learning and to delve into the LMS that their daughters use on
a daily basis. Parents watched videos and read articles about brain development and learning, and they shared their thoughts about the material and advice with their peers through online discussions. The parent class had a waiting list for both sessions, and Ray and Steakley plan to offer it again in the 2012–13 school year.

CONTACT
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REQUIREMENTS
LEARNING MANAGEMENT SYSTEM RESOURCES: LMS:
http://www.haikulearning.com/
THE HOCKADAY SCHOOL RECENTLY hosted its first virtual Blended Learning Online Community (BLOC) conference, providing a forum for teachers to share best practices in creating blended learning opportunities for students. The term “blended learning” is defined in the NAIS 21st Century Curriculum/Technology Task Force’s Online Learning Guide as learning that combines a significant portion of traditional face-to-face class time with online content delivery and learning activities. Hockaday teachers’ interest in designing blended classes accelerated after several teachers took a class on the topic through Online School for Girls (OSG) in June 2010. Since then, teachers have gathered informally, often over lunch, to share new techniques. This practice has had the added benefit of increasing collaboration across disciplines and divisions.

As successful as that local community has been, we realized this fall that we needed to enlarge our group. The diversity of disciplines in it was a plus, but our members now wanted to connect with more teachers in their particular academic areas. To do that, we needed to reach outside of Hockaday, and thus the idea for BLOC was born. Led by Murry Gans, an upper school AP biology teacher, and George Hanlon, a technology teacher, we contacted several peer schools across the country that, like Hockaday, were affiliated with Online School for Girls and whose
teachers had also expressed an interest in collaborating. We all were using Haiku as our learning management system, the system we had used in the OSG course. In November, using Adobe Connect, we hosted the first BLOC conference, welcoming 18 teachers from five schools, representing the disciplines of English, history, math, science, and languages.

In our time together, we discussed how we were using Haiku as a learning management system. We shared strategies that have reconfigured instructional time, such as using screen casts to provide AP test preparation, recording lectures that students view as homework assignments, and designing writing assignments involving collaboration and peer review. These strategies have freed up class time for group work and individualized instruction. We also talked about the higher level of thinking and learning among students that we were seeing as a result of blending: class discussions that are much richer, largely because of the increased online activity; student postings that have occurred before class; and a layering of discussion that results from collaboration.

One participant said that she would enjoy seeing her students participate in these sorts of virtual conferences as well, remarking, “I would like to enable my students to discuss a topic in this way, this easily from wherever they are. The virtual atmosphere enables learning and community, which is what we want to foster in our classrooms.”

As we ended our first BLOC conference, we shared possibilities for future topics: designing blended courses, incorporating games, exploring virtual reality, and using technology in specific disciplines. We are committed to continuing the conversations with our “larger” faculty as we share best practices in creating blended classes. As Gans reflected, “Blended learning at Hockaday has expanded and strengthened our community of teachers, not only across disciplines, but across the country.”

**CONTACT**
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**REQUIREMENTS**
Internet connection

**TECHNOLOGY**
Adobe Connect, conference call
Examining the Media with a Global Perspective:

THE GLOBAL ONLINE ACADEMY MEDIA STUDIES COURSE

GERMANTOWN FRIENDS SCHOOL (GFS) is excited to venture into the realm of online instruction this year. Along with Sidwell Friends in Washington, D.C., and the Lakeside School in Seattle, as well as seven other leading independent schools across the country and abroad, GFS is participating in the launch of the Global Online Academy, a nonprofit organization offering world-class online courses—including Media Studies, Urban Studies, Math for the Computer Scientist, Global Health, and Spanish—taught by passionate and gifted teachers.

As a founding member of the Global Online Academy, GFS can now offer courses that would not otherwise be available to our students, as well as share our own teachers’ expertise with students beyond our campus and make our signature courses more widely available. The Global Online Academy program brings together great teachers and great students in an interactive, rigorous learning community; provides a wide range of courses that challenge, motivate, and stimulate students; and creates classroom identities that represent global perspectives by tapping into geographical, cultural, and ethnic diversities made possible by a rich online environment.
The mission of the Global Online Academy is to replicate in online classrooms the intellectually rigorous programs and excellent teaching that are hallmarks of its member schools; to foster new and effective ways for students to learn; and to promote students’ global awareness and understanding by creating truly diverse, worldwide, online classroom communities. Global Online courses will be limited to 18 students per class, who will work independently as well as collaborate on projects using Skype, the Internet, and the telephone. Upper School English teacher Meg Goldner Rabinowitz is proud to offer one of the inaugural courses this fall, Media Studies.

The course has been offered at Germantown Friends School for several years, but only during the 2011–2012 school year was it offered online as a part of the initial course offerings for the Global Online Academy. Two-dozen students from around the world, a truly global population ranging geographically from King’s Academy in Jordan to Punahou School in Hawaii, have enrolled in the class over two semesters.

The Global Online Academy Media Studies course is a rich interdisciplinary subject that builds a bridge between the creation of visual arts and the analysis of texts in subjects such as English or history. Students in this course develop the ability to question what a given visual text is trying to say, how it goes about saying it, and what impact the medium has on the message. There are natural connections between the close reading of visual texts and the careful consideration of issues of race, class, gender, religion, sexual orientation, age, nationality, and ability that emerge when one looks closely at the media that surround us.

The central textbook for the course will be *Media and Culture: An Introduction to Mass Communication* (Bedford/St. Martins, 2009). The course will be organized into concepts in communication studies, analysis of print media (e.g. photography), analysis of advertising media (e.g. print, television, Internet), and analysis of film (documentary and narrative film). Student work will include readings, films, research, lectures, presentations, discussions, writing, and hands-on activities.
HERE ARE TWO SAMPLE ACTIVITIES:

Media Studies Sample Activity or Lesson I: Using Voki.com to Introduce Yourself

To introduce themselves to each other, students begin by generating media using the website, Voki.com. Voki allows them to design an avatar and record a greeting in their own voices. Students have free license to depict themselves however they choose, and in their introductions, they must describe who they are, what school they attend, where they live, and their reasons for taking the course. Creating these Vokis is a way for students to introduce themselves in a low-stakes way and play around with the technology without a lot of fear or worry.

The online resource is easily adapted and manipulated, yet it is also incredibly limited. When I was constructing my own Voki to use as a way of introducing myself to my students, I was struck by how narrow the choices were for depicting a 47-year-old-white Jewish woman who usually wears glasses and a ponytail. I had to opt for glasses far more chic than the ones I wear and a hairstyle that is probably a really good idea but one that represents a far more fashion-forward look than this teacher is able to pull off.

In addition, when I saved my Voki with a plan to return to it later, the background that was suggested for me—in fact, the background that was superimposed behind my barely-resembling-me Voki—was of a spinning dreidel in the dessert. It was as if once Voki.com knew that I was Meg Goldner Rabinowitz, based on some algorithm, it wanted to suggest a culturally relevant backdrop. Who wants a spinning dreidel as a cultural identifier?

Using this as an example with my Media Studies students, I invite them right from the beginning of the course to begin to look critically at and critique the media we generate, even something as innocuous as a Voki. When students begin to create their own Vokis, they, too, are struck by the limited offerings. The exercise invites students to reflect on the ways that creating a Voki allows them to introduce themselves to
each other although not in a fully comprehensive way. It introduces the idea to students that they will be simultaneously creating, producing, and evaluating media.

As one of my students commented in her self-reflection at the end of the course, “One of the most memorable assignments for me was creating my Voki. I’d never heard of Voki before, so using the website and creating my Voki was an entirely new experience for me. Since we are all such dynamic and multifaceted individuals, I think it’s really difficult to try to capture ourselves with a cartoon picture and a short description of who we are. However, it also reminds me that media is all about snapshots, rather than the whole picture. News reports, articles, etc. all try to capture huge movements and boil them down to a 20-second spot on the news or two short paragraphs in a newspaper.”

**Media Studies Sample Activity or Lesson II: Photo Essays to Commemorate 9/11**

For the first major assignment, students are asked to select an iconic image to commemorate the 10-year anniversary of 9/11 and to write a 200-word photo essay describing their choice. One GOA Media Studies student from King’s Academy in Jordan began her photo essay by writing, “My name is Fakher, and I am a Muslim from Jordan, but I am not a terrorist.”

When reflecting on her work in her self-evaluation at the end of the course, Fakher described her 9/11 essay as the effort of which she was most proud. “The 9/11 essay was both challenging and interesting in that I got to discuss a very important event to both Americans and Muslims. I wrote something from the heart, and I felt like I was really bringing a new point of view to the course. During our Skype call, my classmate Jackson (from Sidwell Friends in Washington, D.C.) and I talked about it, and we went deeper in the discussion, which, at the end, turned out really well. Jackson clarified for me that many Americans understand the truth about Arabs and Muslims, and they know that they are good, civilized human beings and not terrorists.”

Rachel Kovan (a student from the Cranbrook School in Michigan), described her response to the assignment, “For me, by far,
the most memorable piece of work I generated for this class was my September 11th photo essay. I enjoyed completing this assignment because it was timely, assigned very close to the anniversary of the 9/11 attacks. Seeing the destruction and devastation caused by the 9/11 attacks when looking through various photographs online was very powerful. My photograph showed some of the honorable firefighters who worked to help with the destruction caused by the attacks. Also, this project was very memorable for me because I found it very interesting to see the work of my classmates. Because the Global Online Academy includes students from many different schools and diverse areas and backgrounds, the photo essays were very different as well. Everyone had a different perspective on the 9/11 attacks. I really enjoyed being able to compare my work with the work of my classmates and to see what they came up with.”

CONTACT
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REQUIREMENTS
Students must log onto the page daily and spend seven to 10 hours a week on course work. Weekly Skype appointments with teacher and small group Skype work every other week. Students are in dialogue and discussion with other students each week online and through Skyping. They must show a willingness to be flexible and organized about working across time zones. Students also need to be good self-advocates and know when to ask for help from both online instructor and support network at school.

RESOURCES
Computer with camera and audio, Jean Kilbourne’s Can’t Buy My Love: How Advertising Changes the Way We Think and Feel (Free Press, 2000), access to contemporary magazines, a scanner, good strong Internet connection to access Haiku page, Skype, VoiceThread, Skype, and software such as PowerPoint and Photoshop.

TECHNOLOGY
Haiku Learning Management System, Voki, Google Docs, Prezi, VoiceThread, Skype, and software such as PowerPoint and Photoshop.
WHAT DOES IT MEAN to use technology as a pedagogical method? That is a challenging question for teachers who are bombarded with new technologies for our classrooms. It is one thing to use technology occasionally and another to integrate it into the pedagogical process. Two years ago, everything changed for Sandra Switzer, an upper school religion teacher at The Lovett School, and her students. For the first time, technology became integral to the classroom—directing, enlivening, and strengthening the educational process. She and the students had “flipped.”

Flipped classrooms are all the rage, and yet often the examples shared merely displace face-to-face lectures with video lectures for homework—students watch the videos and take notes at home instead of at school. Switzer wanted a more interactive learning mechanism, so she used Ning, a social networking site to develop an online classroom that would effectively facilitate student-directed, cooperative learning.

Switzer identified multiple goals and asked her students to help her integrate them. A primary goal was to make homework enjoyable, meaningful, and constructive. To achieve that end, Switzer had to loosen her hold on the direction of student
learning. She shifted from teacher-generated journal prompts to student-generated online conversations under the assumption that students would engage more authentically if given ownership of the discussion topics. Students have developed a detailed rubric that articulates the learning goals and have almost total control over the content. They are required to make two online posts (in response to a comment or to initiate a discussion) in which they develop and demonstrate clear and accurate, written communication and higher-level critical-thinking skills. In doing so, they must also draw connections between the topic, class, and another context, such as a current event or their own independent research or experience.

Switzer has found that students have performed at a higher level and experienced improved learning as a result of the new approach. For their part, students report that both articulating their own thinking and hearing the diverse ways others perceive and evaluate information has helped them develop a more integrated understanding of the material. Students also have said that they enjoy the discussion posts more than any other form of homework they had been assigned because they have had so much freedom to frame class material according to their individual learning interests.

For instance, one athlete connected his personal experiences of running as a form of meditation with the spiritual benefits of Buddhist meditation by summarizing a link to research. Students also say they appreciate the opportunity to hear diverse views, so an unexpected outcome has been an increased openness to new, often competing, ideas.

When she developed it, Switzer also hoped that the online classroom would strengthen trust and encourage students to take intellectual risks. Early in the term, students identify qualities of a “good” conversation, such as humor, respect, affirmation, clarification, divergent ideas, and understanding, among others. Students must then incorporate those characteristics into their written discussions. The hope is that students will always speak honestly, which will inevitably
lead to conflicting views. When this happens, students are asked to identify why a statement is problematic and to seek clarification. That increases both student learning and trust by giving the original speaker an opportunity to be more precise and reconsider how his or her comments have been perceived.

By learning to communicate at the level of ideas, always mindful of maintaining healthy relationships, students learn to negotiate even the most emotionally charged issues. The online classroom has proven to be a mechanism that eases the tension between competing goals of breadth and depth. Ongoing discussions weave seamlessly into class time, making it easier to cover more material while simultaneously addressing details and complexities.

Switzer comments on the change:

The Ning has provided a mechanism for student-directed, inquiry-based teaching. It afforded me insights about every student’s knowledge base, critical-thinking abilities, self-awareness, communication skills, character, missing information, and misinformation. I gained a more accurate sense of their interests, which helped me conform my teaching to their academic, social, and emotional needs. This deepened the overall sense of trust, community, and self-directed learning.

The Ning liberated me as a teacher. I could never completely predict the questions or direction of student discussions; I was not “in control” in the traditional sense. My syllabus and core content provided the point of reference to which class was connected, but I found myself focusing less on detailed lesson plans and more on how to most effectively respond to the underlying needs and questions of my students. I was given the gift of letting go of structure and embracing my creativity as an intellectual. I was challenged to read more widely and deeply to encounter them where they needed answers. Thus, the Ning restructured the power dynamic of the classroom, drawing me in as a co-learner and co-teacher.
And she describes the student response:

Very quickly, my students developed a trust that enabled them to share far more than they could have in the classroom. The risks that are necessary to create this kind of context are easier online. Students could write at their own pace, revise their comments, and consider what others had already said, and they were “safe” behind a screen where they couldn’t be interrupted or ridiculed. Many commented about that in their evaluations, thankful for the way it helped them contribute in class more comfortably. As a result, the classroom dynamic was radically affected. Students were relaxed, prepared, and eager to share. Conversation was ongoing, flowing from classroom to Ning and back to classroom very organically. Students shared more, listened more attentively, and cooperated with the learning environment. Perhaps most significant, I did not have a single disciplinary issue in any of my classes for the entire semester. I have never had my classes develop such a sense of community, camaraderie, and kindness.

CONTACT
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REQUIREMENTS
Internet access, web 2.0 site (blog, network, wiki, other)

RESOURCES
NING: http://www.ning.com/
“SOCIAL NETWORKING GOES TO SCHOOL,” BY MICHELLE R. DAVIS (http://www.edweek.org/dd/articles/2010/06/16/03networking.h03.html)
LAURA DEISLEY’S BLOG: http://thenetwork.typepad.com
ONE OF THE INTERESTING parts of this case study is that, as recently as just a few years ago, St. Andrew’s School had little, if any, technology to support student learning—only desktop PCs in computer labs with limited capacity and an aging wired infrastructure. In the summer of 2010, however, it became the first school in the nation to implement a full 1-to-1 program for all grades from kindergarten through 12th. It added an entirely new infrastructure, including 490 iPads, and over 100 MacBooks, in addition to an interactive whiteboard in every classroom.

For teachers, that created the ultimate challenge: the discovery, adaptation, and eventual use of those devices. St. Andrew’s had taken a leap ahead in its technological resources available for teachers, and it asked a great deal of its faculty in the year that followed. Today, the school has many stories about how teachers effectively used those different technologies. An excellent case in point is Jesse Lazzuri, who truly embraced them and, in the process, discovered a new way of teaching and learning.
Mrs. Lazzuri, who taught seventh and eighth grade, initially took a step back and looked for opportunities where the new technologies might supplement the way in which she delivered content in her classes. The characteristics of her classroom changed significantly over that first year. For example, she began using classroom wikis as a place to store and deliver content to students, leaving behind the daily battles with the copy machine and class time spent handing out paper. She converted her lectures to keynote slides with her voice dubbed over them and posted them on the class wikis. She used both Keynote and Quicktime to demonstrate laboratory techniques and review possible outcomes with students. She examined every aspect of her classroom, looking for digital solutions, all of which resulted in several major changes—not only for individual students, but also for her overall classroom.

Individual students have experienced perhaps the most important and dynamic changes. Instead of having information given to them at prescribed times for prescribed purposes, they are now able to take more control over its delivery. For example, if they miss a point, students can push “Pause” on their iPads during a keynote lecture or rewind during a lab technique review. Students have access to lessons on the material 24 hours a day, seven days a week, from anywhere in the world. The lower-order thinking skills that have traditionally been offered during class time are instead assigned at home where students have more control over the pace and style of delivery. This has saved time and resulted in a more efficient and exciting classroom experience.

Students can now enter a classroom that focuses on discussions about the content as opposed to having to spend their class time recording the content from a whiteboard. They can concentrate on questions about the material, collaborate with others who have different perspectives, share ideas, and solve problems—all of which increase the retention of knowledge.

In addition, students are more engaged because they have more time to work in labs and take other inquiry-based approaches to their own learning rather than just listen to
lectures. Finally, the opportunity to access educational content anywhere in the world, 24 hours a day, seven days a week reduces the stress level for those students who may have to be absent for a variety of reasons.

Mrs. Lazzuri’s role has shifted as well. Her instructional technique has transitioned from delivering content to helping students apply it. She no longer dictates when, how, and the pace at which students receive content. Instead, she has become more of a coach in the classroom, visiting lab groups, discussing ideas, offering different perspectives during investigations, and guiding students as they design their own classroom experiments and work towards solutions. She now helps students as they direct their own learning.

Overall, Mrs. Lazzuri’s use of the iPads and other new technologies has dramatically transformed her students’ experiences in the classroom, the resources available to them, and her role as a facilitator rather than deliverer of learning. Her classes still meet for the same time over the course of the day, but her students are able to use their time much more efficiently and dig deeper into content and its application to real-world solutions.

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RESOURCES
A cloud-based solution (wikis or other platform to post and collaborate on work).
Access to computers where students can consume, create, and collaborate with covered content. Student email accounts and a willingness to take risks and adapt to change.
IN DAVID METZLER’S “FLIPPED” classes, the roles of class time and homework time are partly reversed, with the goal of maximizing high-level mathematical thinking in an interactive setting. He spends very little time lecturing in the classroom; instead, students watch short video lectures at home as part or all of their homework. Students’ time in the classroom is spent working in groups on investigations, problems, and projects. The amount of face time is the same as in a regular class, but the proportion of class time when the students are working actively and interacting with the instructor has increased, since the lecture has been pushed into what used to be purely homework time.

The video lectures fall into three categories. Some lectures introduce a topic, such as conic sections, and give students the necessary background and terminology so that they can jump into meaningful classroom investigations or problems the next day. Other lectures provide solutions to sample problems, which students can use as models for their own work. Sometimes students do a simple problem or two at home.
right after watching the video; sometimes the video problems are preparation for trying to solve more-challenging problems in class the next day.

Lastly, some videos are recaps of classroom investigations, which bring together student insights in a coherent framework and put them into standard mathematical language. For example, AP Calculus AB students do an in-class investigation involving the control of a hypothetical machine that makes sporks, which leads to the concepts of continuity and the derivative. Class time constraints usually do not allow for a discussion that takes the students’ intuitive ideas and guesses about these concepts and makes them precise; in that case, such a synthesis takes place in a video that they watch at home.

On some nights, the students’ only homework will be video, but often it is a mix of video and a few straightforward problems. More challenging problems are saved for class work, where the students can discuss them in groups—which encourages peer teaching and learning—and, when necessary, get appropriate hints from the instructor.

For example, many students struggle with problems that take a straightforward application of a concept (e.g. find the tangent line to a curve at a given point) and reverse the roles of the given and the result (find the mystery point at which the tangent line will have a certain property). Assigning such problems as homework is often pointless and frustrating, since even confident students can get stuck right at the start of the problem. Doing such a problem in class, however, allows the instructor to give just enough hints to get each group unstuck and enables each group to pool its thoughts and solve the problem. Hence, flipping can increase the average level of difficulty of the problems that students address.

The greatest advantage of flipping comes from increasing the class time available for projects, investigations, and multipart problem-solving. For example, on the first day of Trigonometry/Precalculus, students go outside and take turns riding a bicycle, observing the motion of the wheel, and formulating questions,
such as “How does the rotational speed of the wheel relate to the linear speed of the bicycle?” and “How does the choice of gear affect the relation of the pedal speed to the wheel speed?” Asking students to formulate their own questions, and then to make their own conjectures about those questions, takes significant time, so any increase in the available class time facilitates those activities. In that way, flipping enables more focus on teaching process skills, not just content.

Similarly, activities like one-day mini-projects or larger projects that span multiple class days are somewhat easier to find time for in the flipped classroom. The goal is always to have students think more deeply, be more challenged, and connect more concepts. For example, students in two sections of AP Calculus AB played the roles of competing companies selling sporks. They used calculus to try to determine the optimal price for their product. Over the course of several days, each section repeatedly reset its price to react to the other section’s latest price and the resulting change in market conditions. They developed the key formulas themselves and had to combine those formulas with intuition and educated guessing about the right course of action. Such a multiday activity is possible in any classroom but takes time, and flipping the classroom can provide extra room for such activities.

Flipping the classroom is not a panacea, but it can help move teaching in the direction of more interactivity, challenges, and connections in a student-centered framework—while still retaining the ability to have lectures and direct instruction when needed.

CONTACT & TEACHER
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TECHNOLOGY INVOLVED
There are many options for both recording and posting video lectures, depending on the teacher’s preference and what works best with her or his computer system. Compatibility with what is already on the computer is the trickiest part and needs to be addressed case by case.
SOME RECORDING OPTIONS:

• Flip video camera, recording teacher at the board—uploads via USB interface.
• Document camera plus screen recording software (e.g. Windows Media Encoder, Screencast-o-matic, Jing)—records teacher’s writing on paper or a small whiteboard. Camera may require special software to display on computer such as eBeam interactive suite.
• Pure screencasting—teacher types or writes (using a stylus device) directly on the computer, which is recorded by screen recording software. Teacher can use Word, PowerPoint, drawing programs, Geometer’s Sketchpad, Scientific Workplace, web-based applets, etc.

SOME POSTING OPTIONS:

• YouTube—easy to create account and upload. Can make videos public or unlisted. Public videos can have the advantage of reaching a larger audience than just the teacher’s students.
• Vimeo
• iTunes U
• Local course management software, e.g. Moodle. Can be used to link to the other sites.

REQUIREMENTS

The teacher needs some way to record video lectures and a site to post the lectures, as described above.

RESOURCES

DAVID METZLER’S YOUTUBE CHANNEL “DAVIDMETZLER”
http://www.youtube.com/user/davidmetzler

SAMPLE VIDEO (ON 4X4 DETERMINANTS)
https://www.youtube.com/watch?v=laUFpVI0hK8

SCREENCAST-O-MATIC (FREE SCREENCASTING APPLET)
www.screencast-o-matic.com

LIVESCRIBE SMARTPENS
www.livescribe.com

EBEAM INTERACTIVE WHITE BOARDS
www.interactive-white-board.com

SCIENTIFIC WORKPLACE
From Tradition to Innovation:
TRINITY SCHOOL’S WORLD LANGUAGES PROGRAM

Imagine an elementary school classroom where language learning is personalized. Listen to students learning various languages with focus and speaking with enthusiasm. Observe fluent adult speakers conversing with students in small, multi-age conversation groups based on language proficiency. Delight in children’s growing understanding of world cultures through project-based learning opportunities.

In a shift from traditional Spanish language instruction, Trinity School has adopted an innovative approach to teaching world languages to students in kindergarten through sixth grade. This shift is rooted in the school’s 2008 Strategic Vision, which opens with the following: “Trinity School strives to prepare students to be responsible, productive, and compassionate members of a global community by placing the child at the center of the learning process.”

Trinity’s World Languages Program combines language acquisition through Rosetta Stone’s Online Classroom with a global-awareness curriculum developed by Trinity teachers. The 2011-12 school year marked the second year of this program, and students can now take 14 languages—including Mandarin, Russian, Spanish, and Vietnamese.
STUDENT CHOICE
Students are not only able to choose a language, but also their learning is self-paced and self-directed. Their online language acquisition is accompanied by more traditional language practice and assessment activities. While some students decide to practice their language using apps on the iPad or through the creation of a video, other students use notecards and classroom games to solidify their language comprehension.

GOAL-SETTING AND REFLECTION
A blended learning environment with the teacher as facilitator allows students to take ownership of their learning. Reflection journals, assignment calendars, and question notepads are three tools that students can use to record new knowledge, set short-term and long-term goals, and keep track of questions that they have throughout their learning journey.

CONVERSATION GROUPS
The online classroom, an immersion environment for acquiring a new language, is coupled with conversation groups that give students an opportunity for face-to-face practice and dialogue. Members of the Trinity community (faculty, staff, parents, alumni, and others) lead such conversation groups, allowing students to ask questions and practice what they are learning with peers and a fluent adult. These groups meet regularly at the school, but occasionally students use Skype to work with their conversation group leaders.

GLOBAL AWARENESS
Trinity’s mission to prepare children to become “responsible, productive, and compassionate member[s] of the expanding global community” is realized in part through the World Languages Program. Not only are elementary students learning a second language, but they are also increasing their awareness about world cultures and global diversity. Children are able to learn about people and places that connect to the language they are studying. Through collaborative learning with peers (some who may or may not be learning the same language), they also gain knowledge about the expanding global community.
The World Languages Program is a tangible realization of the school’s vision to personalize learning for elementary students. This blended classroom environment, in tandem with 21st century teaching and learning, is an excellent example of moving from tradition to innovation, with the child at the center of the learning process.

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RESOURCES
TRINITY SCHOOL WEBSITE, WORLD LANGUAGES
http://www.trinityatl.org/academics/world_languages
WORLD LANGUAGES TEACHERS’ BLOG
www.trinityweblog.org/worldlanguages

TECHNOLOGY
Rosetta Stone Online Classroom (Version 3), Internet access and laptop computer, headset with USB port
AS A FOUNDING MEMBER of Global Online Academy (GOA), a consortium of independent schools that seeks to “replicate in online classrooms the intellectually rigorous programs and excellent teaching that are hallmarks of its member schools,” Cranbrook Schools has embraced the opportunity to explore the integration of online and face-to-face learning. Already familiar with a global classroom setting, a small group of students chose to broaden their experience even further by being among the first students to enroll in a GOA course in September 2011.

Throughout the semester, the students, the site coordinator for the GOA, and the director of technology met every three weeks. Those meetings created an opportunity for students to share their experiences with each other. Administrators gathered feedback about best practices for a blended learning environment. The following observations are based on the students’ feedback.

EXPANDED OPPORTUNITIES
Through the Global Online Academy, students are able to experience a rigorous college preparatory curriculum in topics not available in their traditional classroom setting, fostering
deeper exploration of particular areas of interest and passion. Further, because the online classroom included students from around the world, it expanded the overall learning experience with global perspectives and a broader cultural literacy. Teachers transformed their courses by adapting their curriculum to a global setting that engaged students beyond their own school boundaries. Both students and teachers developed new skills simply by being in an online learning environment.

**STUDENTS AND TECHNOLOGY**

Students remain constantly connected to family and friends through a variety of social media, so an assumption might be that an online learning environment will be natural for them. However, each student who elected a GOA course did so with a different set of skills. And they all needed time to acquaint themselves with a variety of technologies and learn how to adapt familiar technologies to a new learning environment. A student described her experience of learning a new application for her class, but then found that she could apply it to other classes. Teachers also explored the use and integration of new technologies, even in courses that they had previously taught in a traditional setting.

**LEARNING 24/7**

As the GOA courses do not have a synchronous component, the flexibility afforded in an online environment was replaced with a perceived need to continuously engage. Defined time periods were replaced with multiple “bursts” of time throughout the day, ranging from a few minutes to several hours. Both teachers and students were able to benefit from greater flexibility with time. Students were better able to manage complex schedules that included athletic practices/ tournaments as well as musical rehearsals/performances. Teachers were available to meet evenings and weekends, yielding greater continuity of communication. However, greater flexibility also required students and teachers to structure and manage their time differently than they would in a conventional classroom setting.
VIRTUAL CLASSROOM

Students electing a GOA course initially indicated that the online and physical classroom setting had little in common. They all felt that the technology disconnected them from valuable classroom discussion and the ability to develop relationships with other students. That is one of the challenges of an online learning setting.

However, as the semester continued, students also began to observe and recognize similarities. One student noted that his initial discomfort with the online classroom environment decreased when he recognized elements similar to a traditional classroom. For example, just as in a regular class, some students posted (spoke) more frequently, others were first to post (raised hand first), and others were reluctant to participate in the discussion.

FACE-TO-FACE CONTACT

Students electing GOA courses had frequent contact with their teachers throughout the semester. However, they also felt that a regular face-to-face meeting time with someone at their home school was important. Through regular meetings in our school, students began to develop a culture around their online learning experience—one that could be shared with other students both within and beyond the setting of their home school.

As colleges and universities expand online opportunities at an exponential rate, students must be prepared to learn in environments where they have less face-to-face contact. Similarly, when they enter the business world, young workers will need to be fluent in online environments. Being able to effectively manage and blend both traditional and online modes is an increasingly important skill.

Developing a well-designed and engaging curriculum is an important component of any learning environment, including the online classroom. As schools move forward to create learning environments that blend both online and face-to-face instruction, it will also be important to recognize that students must develop
new learning skills. Creating an environment where students can fully engage in an online environment, feel supported within their school, and cultivate collaboration within and beyond their school are the hallmarks of learning excellence.

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REQUIREMENTS
Membership in Global Online Academy Consortium

RESOURCES:
GLOBAL ONLINE ACADEMY
www.globalonlineacademy.org

“Transforming Education: Learning Powered by Technology,”

“Going the Distance: Online Education in the United States 2011,”
I. Elaine Allen and Jeff Seaman, Babson Survey Research Group and Quahog Research Group, LLC, 2011.
During the 2010-2011 academic year, Marlborough School student India Y. ’12, then an 11th grader, submitted an essay about the Khan Academy and founder Salman “Sal” Khan as part of the school’s Guerin Prize essay contest. India’s essay, which identified Khan as the living American she most admired, won the competition, enabling her, along with faculty chaperone and head of Marlborough’s mathematics department, Dr. Chris Talone, to meet Khan in person. Little did India know that her words and this encounter would lead to a groundbreaking partnership.

At their meeting in the summer of 2011, India, Dr. Talone, and Khan discussed a pilot program that the Khan Academy had implemented with the Los Altos School District where they had, in essence, “flipped” the classroom. Students watched video lectures at home and then completed what would normally be “homework” in the classroom. Khan had been eager to take that approach a step further by creating a pilot class that integrated students of all grades and skill levels into the same class, where students could also mentor one another. After recognizing that Marlborough—a school that is influential in its
community, relatively small, and open to innovation—offered an ideal environment in which to pilot this type of math class, Khan and Marlborough launched a mixed-grade Khan Academy Pilot Class at the start of the 2011-2012 academic year. Close to 20 percent of the students excitedly volunteered for the class on the first day it was offered.

The class has two students in Pre-Algebra, three students in Algebra I, two students in Geometry, two students in Algebra II with Trigonometry, three students in Statistics, two students in Precalculus, and two students in AP Calculus AB. Because of this mix, mentoring naturally occurs, with the older students often guiding the younger students. It is not uncommon for the Algebra I students to help the Pre-Algebra students, the AP Calculus students to help the Precalculus students, and the Precalculus and Statistics students to help the Algebra II with Trigonometry students. Because of the mixed grades, just about every student has assisted another student at some point in the year.

The older girls are role models for the younger girls, who see them learning more complicated math, which inspires the younger ones to achieve. Also, because students frequently teach students, they have a better understanding of concepts that they have learned in past years.

By all accounts, the class has been a complete success. Students arrive, open up their laptops, and start working independently. Dr. Talone sees first hand that it offers “a powerful alternative learning model where every single student in the class is engaged and working at her own level for the entire class period.” Sometimes he has to “kick them out of class when the bell rings—they don’t want to leave!” The structure of the class also changes the role of the teacher, enabling him or her to spend additional time with each student and become more of a “coach, cheerleader, clarifier, and learning director” rather than just a lecturer. And, as Khan predicted, frequent collaborations between students emerge spontaneously.
The national media has noticed as well. A March 11, 2012, *60 Minutes* segment, “*Khan Academy: The Future of Education?*”, included classroom footage shot at Marlborough School and in the Los Altos School District and reinforced the opinions of the Marlborough school leaders when they first considered this program: Khan Academy is shaping the way students learn, and Marlborough School is thrilled to have brought it to their campus.

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**REQUIREMENTS**
Students complete online modules and textbook problems for each concept. At the end of each unit, they complete an assessment that the teacher writes based on what they have learned.

**TECHNOLOGY**
Online learning through Khan Academy and other resources as needed.
How does a school integrate online learning into its high school curriculum? How is quality defined in this environment? What support can a school offer to spark teacher innovation, collaboration, and leadership? In 2011, Punahou School undertook to answer those and other questions as a founding member of the Global Online Academy (GOA), a small consortium of select independent schools committed to bringing intellectually rigorous programs and excellent teaching online.

Punahou’s approach was to forge a community of inquiry and practice. Beginning in the fall, a cohort of six teachers and four administrators met for one hour every six days to map out how they might introduce and implement successful online learning at the high school. The teachers, many of them new to online learning, were selected to develop courses in the areas of computer science, English, music, science, and Spanish. One member taught her course as part of GOA’s official launch last September.
The cohort design was inspired by the notion of “finding the bright spots” proposed by Chip and Dan Heath in their book *Switch: How to Change Things When Change is Hard* (Broadway Books, 2010). Generating a bright spot for online learning, the teachers and administrators in the cohort shared information, tools, and strategies and engaged in discussions that ranged from the practical to the philosophical. Inquiry focused on questions such as: “What’s an opening activity for students online that can spark engagement and exchange?” and “How will online learning change education?” They worked together to decipher the mechanics of Skype and Haiku, a learning management system, and tackled questions of privacy and copyright.

While the teachers gained familiarity with the new medium, thinking about teaching and learning in new ways, they also identified and articulated elements of best practices that are significant and applicable in any learning environment. The piloting of coursework raised issues that enlightened their classroom teaching. One math teacher found that the majority of his students did their homework after midnight, prompting him to rethink class scheduling and redirect class time to a blended model. His students, he realized, were gravitating toward learning outside of the classroom on their own time, and online education offered a vehicle to capitalize on this trend.

A Spanish teacher found that the precision required to teach online—where verbal and physical cues are less easily read—honed her instructional practices in her face-to-face classroom. Student feedback from those enrolled in GOA courses was vital to the overall process and reaffirmed the importance of student/teacher relationships in ensuring the quality of the learning experience.

Along with inquiry and practice, members of the cohort became persuasive advocates for the role of online learning in education. Teachers made presentations to peers, administrators, and trustees, inspiring support throughout the school community. They observed many of their colleagues’ initial skepticism turn into interest as each department put
forth proposals for online course development. The cohort generated new curricular options for students and professional opportunities for teachers. The school is offering five online courses in the summer, while two cohort members are preparing to teach classes for GOA this fall.

As a school explores online learning, it can ensure that process and product are aligned with its mission, vision, and values. For Punahou School, success has centered on the belief that teachers and administrators need dedicated time to explore together what it means to teach in the new-media environment. Through the process, they have reaffirmed a culture of innovation that thoughtfully embraces change.

**CONTACTS**

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**REQUIREMENTS**

School’s ability to provide substantial time for the professional development of those involved.

**RESOURCES**

International Association for K-12 Online Learning, “National Standards of Quality for Online Courses,” August 2012.
TOWER HILL SCHOOL BEGAN moving into the online learning space in spring 2011. We conceived of the idea as a way to allow us to continue summertime professional-development conversations for faculty members throughout the school year. As our school head began to share the story of developing this platform, the head of school at The Independence School, a PK-8 feeder school also located in Delaware, mentioned that she would be interested in learning how her school might benefit from partnering with Tower Hill—but from the academic perspective instead of the professional-development perspective. Thus began our official foray into online learning.

By May of last year, Tower Hill School and The Independence School had agreed on the parameters of an online learning relationship. The Independence School was looking for an accelerated mathematics program to offer its advanced math students in the seventh and eighth grades, and Tower Hill agreed to supply instructors to teach Algebra 1, Algebra 2, and Geometry at an accelerated pace. The framework called for an online course that would be 100 percent online, combining asynchronous and synchronous modules. Given that these
were middle school students, administrators felt that there should be a resource person within the home institution (The Independence School), to whom the students could turn for extra help, further explanation of problems, and the like. We identified that person and finalized the working structure.

Reaching agreement on a framework was the easiest part of this online learning relationship. The proximity of the schools was a key factor in enabling us to construct a learning program that would meet the needs of the students as well as the teachers. We held several face-to-face meetings with administrators and instructors, and that time was very fruitful.

One of the outcomes was an agreement that we would hold the first class session at The Independence School so that the students could associate a face with their online instructor, leading to a feeling of “knowing” the instructor as a person in the larger, local community. Just prior to that, we also held a meeting with the parents of the students, so that they could ask questions of us about the curriculum and how the classes would be held. The biggest concern among the parents, which we were able to allay, was whether an online course would be of a permissible quality—a concern that remains pervasive about K-12 online education.

Both schools anticipated that the earliest months of the school year would present a number of challenges. And, at the beginning of the school year, that anticipation became a reality: It took about two months to work through all types of issues—everything from hardware to rotating schedules to expectations for synchronous sessions. After that, however, everything has run on a fairly even keel.

Now that the school year is winding down, we have the opportunity to look back and reflect on the experience as a whole. What have we learned? To other schools considering a similar arrangement, we recommend the following:

**Treat the experience as you would a merger.** When two or more schools join to provide an educational experience, the cultural
and operational differences that are found in each school will inform—and reform—the process of the learning experience. Each school is distinct, so it stands to reason that each administrative unit is just as distinct. Therefore, each partner answers “How we do school?” differently. The management of this relationship is of paramount importance. It takes skillful diplomats to work with all stakeholders, whether those diplomats are administrators or teachers.

**Recognize that frameworks are pragmatic, not operational.** Creating a framework for how a given class will work is a necessary exercise, but no one can predict how it will all actually play out. In other words, one should plan for re-planning. Make the original framework flexible on purpose, and never consider anything as “set in stone.” We often hear of the need for schools to be flexible and creative; nowhere is this more applicable than in this kind of venture.

**Communicate, communicate, communicate.** With differences in school cultures and operations, the importance of communication cannot be understated. Varying levels of communication are required between and among every type of constituency. Plan to spend significant time communicating, whether instructor:student, instructor:administrator, administrator:administrator, instructor:parent, or even administrator:community. Even in only a handful of classes in one discipline, communication is something that each party expects and deserves, if such a relationship is to work well.

**Enjoy serendipity.** One of the most serendipitous moments for us occurred mid-year, when an instructor noted that a student was experiencing real growth as a person because the online medium was forcing him to be much more communicative and expressive than usual. His parents noted it, his work reflected it, and he shared it verbally during a synchronous session. As educators, we like to see such maturation, yet it can sometimes surprise us. Enjoy it when it happens! It’s just as possible in an online environment as in a face-to-face one.

**Be clear on nuts and bolts.** Although we discussed reports and grades upfront, each school was accustomed to different
approaches to them. The issue is a cultural as much as an operational one, but it must be considered. Since one school is supplying another school with curriculum and instruction, it is vital to resolve issues about grading (e.g., letter grades versus number grades, as well as different grading scales) and the content of grade reports. One school may be accustomed to interim or quarterly reports that contain a certain amount of narrative plus a mark, while another school may be accustomed to a mark only, with no narrative.

Another major consideration is scheduling. What kind of schedule does School A have, as compared with School B? Given those schedules, when can a synchronous session occur between instructor and student? Communication, as stated earlier, is key. One last item worth mentioning is vacation timing and schedules: Do both schools share breaks, or do they follow different schedules? Negotiating various break schedules can take up more time than one expects.

**Do not underestimate instructional time and effort.** Somewhere, somehow, many people have gotten the notion that online teaching is less time-consuming than teaching a traditional class. As independent schools, we like to provide outstanding instruction; if we’re going to offer a class, we’re going to do it well, or we won’t do it at all. The amount of time it takes an instructor to teach an online class is, at the very least, equivalent to the time involved in teaching a face-to-face class. Indeed, for less tech-savvy instructors, the time spent teaching an online course will probably be even greater. Instructors need to know how to perform a handful of tasks and that they will have frequent recourse to the system administrator for the learning management system. Professional development is needed, and someone has to provide that, as well.

Online learning is its own ecosystem, and although many efficiencies can be realized by using a learning management system and offering courses online, the time and effort involved in making it happen are not insignificant. Schools need to plan for it, both financially and culturally.
Consider expectations versus assumptions. Perhaps most important, the notion of expectations versus assumptions should be on the minds of everyone involved in an online learning venture. You might assume, for example, that it will take a great instructor three or four days to “load” a full-year class into a learning management system, whereas in reality it will probably take three to four weeks and perhaps longer. As a second example, you might assume that an instructor needs five hours a week to run an effective course, when reality suggests that the expectation should be closer to 10 hours a week. The bottom line is that schools need to assume less and expect more when it comes to what it takes to run an online learning program.

As you contemplate what your school’s involvement with online learning will be, keep in mind that, with all the talk about the marvels and efficiencies of today’s technologies, independent schools must invest heavily in faculty development in order to enjoy the fruits of those marvels and efficiencies. In the end, this pursuit is just as much about teaching and learning as our traditional programs. It is delivered via another medium, however, and that medium requires its own skillset.

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REQUIREMENTS
Learning Management System operated by partner offering the course(s)

RESOURCES
Team of self-starters with flexible minds and research methodologies (In other words, there’s so much out there that team members need to undertake their own research, choose what makes sense to their school(s), and move forward on their own terms.)
FOR STUDENTS WHOSE LEARNING differences prevent them from achieving success in a traditional classroom environment, technology levels the playing field and allows them to overcome challenges in reading, organization, processing speed, and other roadblocks to successful learning. Thus, technology at Lawrence is embedded and integrated into the learning and teaching that takes place each day. The use of assistive technology and an array of other ever-present tools help bridge deficits in executive function and language processing and allows students to learn and explore in a manner consistent with their skills and interests. They are expected and specifically taught technology and assistive technologies as part of the curriculum.

Middle school students use school-provided laptop computers that stay at Lawrence in laptop lockers when they are not being used in the classroom. At the upper school’s wireless campus, all students use laptops or tablet computers to engage in learning activities, conduct research, and complete classroom assignments. High school students are expected to take their own convertible tablet computers to all classes and use them for homework and long-term projects.
We also use many online tools to support students with management and organization. Tools like Google Docs allow collaboration among students for everyday documents and projects. In addition, the auto-saving feature helps many students who struggle with naming and saving files, while the search function allows students who have organizational challenges to quickly and efficiently retrieve files.

Our middle school uses a closed social network called Saywire (www.saywire.com) to create wikis, blogs, and threaded discussions in a closed environment that is available 24/7. Many teachers in the middle school use Saywire daily for reflective writing on current events and for discussions that students who use assistive technologies might struggle with in a typical classroom. High school math teachers have been using Khan Academy videos to allow students to review concepts learned in class on their own time. Khan Academy’s coaching feature is especially important for collecting data on the progress of individual students who are struggling with concepts and for helping in their remediation.

The school has also installed system-wide tools like Read & Write Gold and Inspiration software in all student and staff computers for ubiquitous access to assistive technology tools, regardless of Individualized Education Program (IEP) requirements or a student’s specific learning disabilities. Such anytime-anywhere access to assistive technology tools takes the stigma out of any individual student’s use of them. We are currently implementing a cloud-based book-delivery system called Bookstream (www.bookstream.com), which includes integrated assistive technology tools like text-to-speech that students can use at school and home to have access to their books on any web-based device.

Another web-based service we use is Fluency Tutor (http://www.texthelp.com/North-America/our-products/Fluency-Tutor). Our seventh through 12th grade students use it as needed as an intervention to help build oral reading fluency and comprehension. However, we have also used it system-wide in our middle school grades to help build baselines for all our middle school students in the areas of oral reading fluency and reading comprehension.
Looking historically at some assistive technologies that have become mainstream applications—speech-to-text, text-to-speech, GPS, and concept mapping software—helps students accept and embrace assistive technologies as a way of working smarter, not harder. As a school, we have specifically selected software and web services that will work together, in the classroom and at home, for students to have all of the tools they need to be independent in schoolwork.

We have also selected tools that can enhance learning in the classroom by giving students more possibilities to work independently. For a classroom teacher, this means that we are providing differentiated instruction and, in some cases, interventions to students who need it in a destigmatized environment that keeps track of their online activities and provides progress monitoring opportunities for teachers. By providing online feedback to students within an online service (like in Khan Academy and Fluency Tutor), students and parents are able to see their own areas of strengths and weaknesses, making their education more personalized and meaningful.

Ultimately, all this technology levels the playing field for students with learning differences to learn more independently so that time spent in the classroom is devoted to applying and analyzing information instead of learning facts. More opportunities for each of our students to access information on their own only helps us encourage them to be lifelong learners, regardless of their learning differences.

**TEACHER**
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**REQUIREMENTS**
Faculty and students need computers or mobile devices with access to assistive technology tools such as Read & Write Gold (installed software) or RWG Web Apps (web-based assistive technology tools). Schools must also provide professional-development opportunities for staff to learn the software or a technology integration specialist to help faculty and students with using and being trained on assistive technologies.

**RESOURCES:**
www.texthelp.com    www.saywire.com
www.khanacademy.org  www.bookstream.com

**TECHNOLOGY**
Laptops and convertible tablet computers, Texthelp System’s Read & Write Gold Software, Dragon Naturally Speaking by Nuance, Inspiration Software, Internet access
As a founding board member of Online School for Girls (OSG) and one of its first teachers, I come to this discussion of best practices in online education not from a perspective of an individual school or organization, but from that of an online teacher. At the time I began the task of developing OSG’s course models, I was a veteran teacher with 14 years of classroom experience at Westover School (Middlebury, CT). I believed that taking what I already do in my face-to-face (F2F) classroom and translating it into digital space would be a matter simply of engaging with new technology. But my experience was significantly different than what I expected. Having now taught several different online courses at OSG, both academic courses to students and professional-development courses about online education to teachers, I have come to realize that the mindset and skillsets needed to succeed in the online educational world are not always the ones you might expect. So what, in brief, are the skills needed by a new digital teacher to succeed?

**Persistence and creativity:** People often believe that extensive tech-based experience is key to developing new online content,
so only a school’s most tech-savvy teachers should consider delving into digital education. I have found, however, that it is rarely the programs that you start off knowing how to use that are important, but rather the programs that you end up knowing how to use. Teaching online requires you to start by envisioning how your class will work and then to seek out the technology to help you create that vision. That technology is almost always out there in some usable form, but you must be persistent enough to find it and comfortable enough with the process of trial and error to learn it.

**Fearlessness:** A successful online course isn’t just translated from F2F and thrown into digital form. You must create it from the start within the digital framework. That requires an online teacher to fearlessly step outside of his or her comfort zone and try new techniques. Also, just as in our F2F classrooms, true development online comes just as often from our failures as from our successes. Moreover, online work can be more daunting because your failures are documented or recorded. An online teacher easily frozen by the perils of perfectionism will find online teaching more difficult and less rewarding than someone who is willing to try, even knowing that not all attempts will succeed.

**Empathy and flexibility:** One of the greatest challenges when teaching outside of the F2F model is the difficulty of connecting with students during both those “Aha!” moments, and the “What?” moments. The varied methods of visual and audible interaction make it possible for a teacher to just as closely monitor student understanding, but it takes a shift in perspective to see and feel those moments online and the ability to put yourself in the students’ shoes.

At Westover School, we don’t view digital course development, and participation in programs such as OSG as both teachers and students, as drains on school resources, as we once feared they might be. Instead, the synergy of information and techniques that our online teachers have brought back to our traditional faculty members have triggered significant
changes in the ways in which everyone views the technologies of blended learning, and feels empowered in changing their curriculum. By seeing hands-on examples and trying technology firsthand, as our in-house experts have shared their experience and provided accessible knowledge to their colleagues, more and more teachers at Westover have begun blended learning initiatives.

Any school interested in implementing any level of digital programs should not only consider the many benefits of these platforms, but also the skills and supports needed to ultimately ensure the success, sanity, and satisfaction of the teachers who are creating the content. The easiest and most obvious support is in the form of technology. A teacher in the process of developing digital coursework should not be limited by slow equipment or out-of-date programs. The initial investment in advanced technology will save time in course development as well as improve the quality and level of innovation of the final project.

In fact, the most important support a school can give a new online teacher is the gift of time. Trying to develop online coursework while carrying a full traditional teaching load may often be like having two full-time jobs, especially for a new online teacher. At Westover, we have prototyped a system in which an online teacher, such as one teaching for OSG, may temporarily reduce his or her F2F course load, to balance the time commitment. That single change has had a huge impact on faculty members’ ability to devote time to developing effective online courses without compromising traditionally F2F courses.

In conclusion, embarking into the digital world of blended and online learning should be a thoughtful step for any school, and it should carefully consider the personal experiences of the online teachers during the process.
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REQUIREMENTS
High-speed Internet access, up-to-date computer equipment, and programs

RESOURCES
Helpful for new online teachers:
INACOL “NATIONAL STANDARDS FOR ONLINE TEACHING”
http://www.inacol.org/research/nationalstandards/iNACOL_TeachingStandardsv2.pdf
INACOL “NATIONAL STANDARDS FOR QUALITY ONLINE COURSES”
GLOBAL ONLINE ACADEMY (GOA) is a nonprofit, global partnership of leading independent schools that offers online intellectually rigorous programs and excellent teaching—the hallmark of our member schools.

In March 2011, Lakeside School invited representatives from 15 peer schools to its Seattle campus for a three-day conference to discuss what excellent online learning and teaching looks like, why it’s important for today’s students and teachers, and how a partnership of peer schools can lead the effort to provide a 21st-century education.

Global Online Academy launched in April 2011 with 10 member schools and five courses. We now have 23 member schools and will offer 19 courses during the 2012–2013 school year, summer classes, and professional-development courses for teachers. Through this consortium, member schools engage and partner with one another on many levels, allowing them to multiply and enhance their strengths as they continue to define academic excellence.

All of GOA’s member schools are dedicated to educational...
excellence and innovation. Yet as technology transforms the way we work, connect, share, and learn, our students require new approaches to learning that supplement and enrich the traditional classroom structure. GOA provides a robust online classroom experience that ensures our students are adequately prepared for success in work and life.

Students participating in our classes share their local and personal views on global issues with students from all over the world—and are exposed to a bevy of perspectives from their classmates that they otherwise wouldn’t encounter. Students develop a global awareness that bridges schools, towns, cities, and countries.

When taking an online course, students learn new ways to study and manage their time. They learn how to effectively collaborate with classmates who aren’t sitting next to them and how to advocate for themselves. Learning online encourages deep critical thinking and holds students accountable in an environment that promotes creativity, individuality, and initiative. In an online classroom, students have more time to formulate their answers and can access material and work from any point during the semester.

As members of GOA, teachers become part of an expanded network of excellent educators with whom they can collaborate and share ideas and inspiration. All GOA teachers participate in an extensive training program and receive support and development throughout the year—learning pedagogical techniques and technological skills that are not only useful online, but will also enhance their teaching in brick-and-mortar classrooms.

With new resources available to them and expanded networks to tap into, teachers bring back to their brick-and-mortar schools fresh ideas and skills. Teachers can directly incorporate what they learn from teaching online into other classes to engage students outside of the classroom through video, online discussions, or even electronic portfolios. Teaching online gives
In his 2012 NAIS annual conference keynote address, Microsoft Corporation founder Bill Gates said, “One of the great pieces of work in this area [online education] is being done by a group of independent schools and it’s called the Global Online Academy... For example there’s a class taught on 9/11, and you have kids from many different religions...talking about how it’s perceived in their country, how they think about that and talking with kids here in the U.S. and seeing the different perspective. And so, you gain this unbelievable ability to bring diversity into those classroom discussions... It’s efforts like that that are really going to point the way.”

As top-tier independent schools, it is our responsibility to drive educational innovation and use our resources to help develop this new field that will expand and deepen the learning experience for all students. The founding members see GOA as a proactive way to continue to define educational excellence in the modern, digital age.

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RESOURCES
www.globalonlineacademy.org
INDEPENDENT SCHOOL ONLINE CONSORTIUMS

KISKI VIRTUAL SCHOOL FOR BOYS

THE SCHOOL

The Kiski School
Boys, Boarding School, Grade Levels: 9– Postgraduate
Total Enrollment: 210 students
1888 Brett Lane
Saltsburg, PA 15681-8951
(724) 639-3586
www.kiski.org

LOCATED IN WESTERN PENNSYLVANIA, The Kiski School has operated as a boarding high school for boys since 1888. Kiski students are afforded individualized instruction in an environment that focuses on the unique learning styles of boys. Small class sizes provide a setting for teachers to interact with each student during every class meeting and for students to interact with and learn from each other. Our aim is to deliver a version of “The Kiski Experience” in the form of a new online learning program called the Virtual School for Boys (VSB). In September 2012, Kiski will launch two VSB courses with plans to expand to a fully-accredited degree-granting high school program by 2016.

VSB will be available to students who are participating in homeschool or cyberschool programs. Through the incorporation of virtual meeting software as well as Kiski’s highly-developed content management system (CMS), learners will receive synchronous, honors-level, college-preparatory courses. These classes will emulate the best traits of Kiski, from challenging coursework to expert faculty instruction.

In VSB classes, students will navigate through a three-dimensional learning environment as avatars and use a vast array of tools to
learn, communicate, and create. This aspect of learning breaks the mold for online education, and sets new standards for how students participating in an independent-study program can interact with their teachers and with each other in real time. Given that the courses in the VSB are not self-paced, or asynchronous, the program truly models the traditional Kiski classroom experience. Students are being taught by a Kiski teacher who is available to answer questions and provide extra help, and who will be teaching inside of an actual, albeit “virtual,” classroom.

The interactions that this live instruction offer enhance learning for the student and the teacher, allowing for flexibility and feedback not necessarily attainable in traditional online education. Because every lesson will be recorded live, students will have the opportunity to go back and review each one as it was presented. Faculty members will also be able to go back and review the lesson, doing self-critiques or allowing for outside observation. All of the content that is delivered within each lesson will be shared via the Kiski CMS as well as Google Applications for Education for each member of the class.

The VSB program began during the 2010-11 school year when Kiski partnered with a local university research team to study “best practices” for teaching boys in an online learning environment. Best practices for teaching boys in a traditional environment include, among others: Gaming, Open Inquiry, Teamwork, Novelty and Surprise, Personal Realization, and Motor Activity as Michael Reichert and Richard Hawley describe in their book, Reaching Boys, Teaching Boys: Strategies That Work—and Why (Jossey-Bass, 2010). The goal of the university team study was to see how these traditional best practices translated in the online, virtual experience.

Four Kiski teachers and about 150 Kiski students participated in the research project. The results of the study were extremely valuable and directly informed the philosophy behind VSB as well as the platform that we ultimately chose for the program. Subsequent program development, testing, teacher training, and hands-on student experiences allowed us to build VSB into a fully functioning virtual learning environment that will create new opportunities for Kiski to engage students beyond our physical campus.
To read more about best practices and the development of the program please visit: http://kiskivsb.org/what-makes-us-unique/.

The principal aspect that makes VSB distinct among online learning programs is real-time teaching. Synchronous learning allows students to experience the best qualities of a traditional classroom: live, interactive instruction from an experienced teacher; public-speaking skill development; and the opportunity to use technology in a way that will prepare them for the societal and workforce changes of the future.

VSB’s virtual learning platform is another distinctive aspect of our program. It offers a controlled environment that is easy to use and designed strictly for education. In addition, the application that we use to conduct our classes is “cloud-based,” which allows for streamlined use anytime on almost any computer. Various other programs are seamlessly integrated, such as Google Apps and Skype, which makes connecting to students, teachers, and content very simple. VSB truly offers the best of a traditional education setting with the benefits of cutting-edge technology, which together promote high-quality teaching and learning.

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**TECHNOLOGY INVOLVED**
The Virtual School for Boys uses a synchronous meeting application called “Host a Virtual Event” (HVE). This program offers the capability to connect with multiple students through chat, voice, and web cameras in a real-time environment. The students use computer based “avatars” to navigate through a virtual environment that aims to simulate learning. Coupling the HVE application with our online learning management system creates a powerful system of virtually based learning and online course organization that includes downloadable class notes and video lectures as well as homework tracking and submission options. These features combine to set HVE apart from others like Second Life because its purpose is not to promote socialization through meeting new people, or experiencing new worlds. Rather, the goal is to encourage students to collaborate on concentrated topics as well as to promote many of the relationships and practices that occur in a traditional classroom.

**REQUIREMENTS**
HVE is a cloud-based application that allows for easy access from both a student perspective and the VSB perspective. The fact that there is not an extensive installation streamlines the process and enables the students to get started sooner and with greater
It also does not require massive amounts of computing power or technical knowledge to participate in class. This gives HVE an advantage over other platforms, such as Second Life, which has problems handling a large amount of people in one space, and therefore is often not conducive to learning. The goal of an avatar-based learning environment should be for the technology to blend into the traditional classroom experience, rather than to emphasize the new medium. With the “Host a Virtual Event” application, Kiski and The Virtual School for Boys are taking significant steps to make this experience an actuality.

**RESOURCES:**


VSB VIDEO:

http://youtu.be/Nvx-hYzv1uo

VSB WEBSITE:

http://kiskivsb.org

HVE WEBSITE:

www.hostavirtualevent.com

VSB RATIONALE ARTICLE:

http://tinyurl.com/kiskivsb
SINCE THEIR FOUNDING, INDEPENDENT schools have focused on carrying out their missions. Until recently, schools have seen those missions as community and space driven—and carried out locally. The Internet has made possible greater opportunities for travel and connections, however, so schools have been both expanding their mission-reach and working together to meet collective goals in new ways.

The winter and spring of 2009, a group of four independent girls schools (Harpeth Hall School, Holton-Arms School, Laurel School, and Westover School) discovered an opportunity to work together to expand the reach of their missions. Online education had expanded significantly at the college level over the previous 15 years, and online education at the K-12 level was also at the start of astronomical growth rates. However, as these four schools began to look at the types of online schools available, the quality of them, and their missions, they did not see anything that followed the independent school model. As it was currently practiced, online education did not jive with the educational philosophies, missions, pedagogy, or research that these schools held as important.
Thus, as an innovative alternative, they founded Online School for Girls (OSG) under the common beliefs that online education is an increasingly powerful way to learn and that an online learning environment geared toward the ways that girls learn best has great value. The schools also knew that by working together they would be able to expand their current curricular offerings, connect their students and faculty members in new ways, and learn how to incorporate the best of online learning pedagogy into their face-to-face classrooms.

The founding schools based their visionary work in research about how girls learn best with technology: when feeling connected to each other, when collaborating with each other, when given an opportunity to express creativity, and when applying what they learn to real-world problems. The founding schools worked quickly to build their online classrooms around “connecting” and “social” technologies to accomplish their goals. Within three months, they had developed the school’s mission and guiding philosophy, the organizational structure and business plan, and the educational tenets and pedagogy.

The founding schools also wanted to bring a girls’-school ethos to the organizing principles and structure of the new Online School for Girls. Understanding that as educators of girls we are stronger when we work together, the founding schools created a way for any school that educated girls to become a part of their new consortium. Moreover, they encouraged schools that joined the consortium to participate in the ways that made the most sense (and brought the greatest strengths) from their community. In that way, the new Online School for Girls was able to build on an established girls’ school ethos that is nonhierarchical, valuing of individual contributions, and accepting of ideas.

The results of the vision, philosophy, and ethos started to come to life in the fall of 2009 with two pilot courses; five courses followed in the spring of 2010. The school’s initial courses focused on upper-level course work and began with a strong commitment to science, technology, engineering, and math (STEM) courses. Focus on STEM courses and expanding upper-level course work have remained priorities for the program ever since.
During that year, six additional schools—Atlanta Girls’ School (Atlanta, GA), The Ellis School (Pittsburgh, PA), Hockaday School (Dallas, TX), Marlborough School (Los Angeles, CA), St. Mary’s Episcopal School (Memphis, TN), and St. Paul’s School for Girls (Baltimore, MD)—joined as members. The school also began expanding its consortium through a Charter Affiliate program, which allowed schools around the country to help build the academic program and enroll students in courses. That year, 12 schools joined as Charter Affiliates, helping the network stretch to Massachusetts, Virginia, Minnesota, Louisiana, New York, and New Jersey.

During the 2010–2011 school year, the school expanded even further. Two additional schools became members of the consortium network: Miss Porter’s School (Farmington, CT) and School of the Holy Child (Rye, NY). And 24 more schools became Charter Affiliates, including the first network schools in Hawaii, the state of Washington, Washington D.C., and Pennsylvania. Under the leadership of Molly Rumsey, the school’s Interim Director in 2010-2011, courses were expanded to include additional AP offerings and the first classes in the arts. Mrs. Rumsey also set the groundwork for a successful new OSG summer program. In November 2010, the school hired Brad Rathgeber, the school’s first president of the board of trustees and an administrator at Holton-Arms School, to become the first full-time director, effective for the start of the next school year.

In addition, during the 2010–2011 school year, the school began to offer its first professional-development courses to help train faculty members to incorporate online learning pedagogy into their classrooms and to connect educators to colleagues around the world. Through the process of creating the first online independent school courses, the school understood and was able to articulate the advantages that mission-driven online learning had over face-to-face instruction: increased time for reflection, greater differentiation of instruction, substantive and built-in cross-cultural connections, and requirements for all students to have an equal voice in the classroom. Therefore, the first professional-development course that the school created was in “Blended Learning.” Subsequent professional-
development courses focused on “How to Teach Online” and “Flipped Classrooms.” By the end of the 2010–2011 school year, more than 200 teachers from four countries (the United States, India, the United Kingdom, and Canada) and 20 states had taken professional-development courses.

In 2011–2012, student enrollment was more than double the levels of the previous year, as the school expanded course offerings for students even further, adding its first foreign language course, Japanese I, and additional arts, science, and social science courses. The school also launched OSG Summer and OSG Extension as well as expanded professional-development courses, including a successful collaboration with the National Association of Independent Schools. And, in October of 2011, the school received full accreditation from the Middle States Association of Colleges and Schools.

Although the school is still young, it has been able to grow quickly without compromising quality and high standards. That has been the result of the strength of the traditions of its member and Charter Affiliate schools, along with the ingenuity, thoughtfulness, and care of the teachers, administrators, and board members, who have tirelessly worked to make the Online School for Girls a great success.

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REQUIREMENTS
Cloud-based systems relying upon regular computer access and a stable Internet connection

RESOURCES
http://bradsblog.onlineschoolforgirls.org

TECHNOLOGY
Haiku Learning Management System, supplemented by video, voice, and text collaborative tools (VoiceThread, Skype, Google Docs/Hangouts/Mail, etc).
For additional resources on online learning, including research reports and guides specifically for independent schools, go to www.nais.org/go/onlinelearning.

THANK YOU
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