

Villa Duchesne/Oak Hill School positively transforms student learning by standardizing on HP technology

change + hp

“As we continue to creatively leverage HP technology, we open up even more opportunities for students to learn in ways that suit them best, giving them confidence and helping them achieve their full potential.”

– Stephanie Moore
Director of Instructional Technology
Villa Duchesne/Oak Hill School



Solutions for the adaptive enterprise.



Educational benefits are delivered when technology is integrated into curricula in a way that assists exploration, discovery and collaborative learning.

Without focused applications, even the most powerful technology does not directly help students learn. Educational benefits are delivered when technology is integrated into curricula in a way that assists exploration, discovery and collaborative learning. Understanding how to apply technology is a much more complex, long-term, and critical area for educators to embrace and integrate into the classroom.

Stephanie Moore, Director of Instructional Technology for Villa Duchesne/Oak Hill School (VDOH) – an independent Catholic school for students in Pre-Kindergarten through 12th grade – has not only come to understand how to leverage and infuse technology across her curricula, but she has learned how to share this with other educators. In December 2003, in recognition of her successes, Moore was chosen as the National Education Technology Leader of the Year by [Technology and Learning Magazine](#).

During her career, using PCs and the Internet as an instructional tool to support inquiry and discovery in the classroom, Moore has witnessed an improvement in students' morale and motivation, and over time, an elevation in achievement. Particular benefits are experienced by students identified with learning disabilities because they are able to have their individual learning styles met by using technology, enabling many of them to keep pace with the rest of the class.

Embracing classroom technology challenges

In spring 2002, Moore joined VDOH to leverage the technology that was already in place and build upon it for more effective instruction. Moore recalled, "The school asked me to implement technology-based educational instruction. Many of the 87-person faculty wanted to embrace technology, but needed guidance to actualize an effective school-wide plan."

Standardization of technology also was a key objective for Moore. She explained, "I wanted to avoid creating the burden of support found with a diverse range of equipment. VDOH needed to standardize across all technology levels – evaluating and pre-defining specifications for equipment – to keep operations and support as simple and cost efficient as possible."

The school faced physical issues with its older buildings. Moore noted "VDOH has a signature 75-year-old stone building with satellite buildings across 60+ acres, which, while beautiful to look at, posed some serious hurdles when we were considering network cabling and power requirements associated with technology. The facilities just don't have the raw electric supply to cope with every computer being corded."

Networked schools direct VDOH to HP

Soon after Moore's arrival at the school, VDOH purchased HP XE4100 Notebook PCs for the teachers, and provided them with dial-up access from home to encourage learning and research. The teachers participated in a 13-week technology class developed by Moore that gave them graduate credits at a local university. Upon completion of the training, they had the confidence to start integrating the use of PCs into their individual curricula.

Moore's next task was to empower every ninth and tenth grade student by ensuring they had full-time access to a standardized PC. She reflected, "As VDOH is a private school, we were able to ask the students to purchase a computer upon acceptance into these grades, but I wanted to be able to standardize on a PC to simplify classroom support and offer the families a reasonable purchase price by negotiating educational and volume discounts. In particular, I wanted to select a PC that would not hinder a student's developmental growth – I consider a 10-pound notebook PC to be too heavy."

VDOH investigated Tablet PCs and liked the flexibility of using both handwritten and keyboard input, as well as the lighter weight formats that they offered. Moore noted, "By being able to draw angles, pictures and hand enter data, the Tablet PC has far greater application in the classroom than a regular laptop. The Tablet PC also stops students from hiding behind the screen in class and teachers can comfortably maintain eye contact."

HP has a broad spectrum of products and services that make up a comprehensive suite of solutions available to education customers.

The Tablet PC, by its design, answered a lot of the instructional concerns that teachers expressed. It also addressed the facilities' concerns by offering imbedded wireless networking capabilities and battery-based operation. The Tablet PC also meets various physical needs, including fitting into existing student lockers.

VDOH is a member of 21 Network of Sacred Heart Schools nationally and discovered quite a few schools within the group already had standardized on HP equipment. "Their testimony to the equipment quality and reliability was outstanding," said Moore. "We like the fact that HP also has a strong educational support program. We evaluated a number of Tablet PCs and found many of them to be heavier than the HP Tablet PC, and some didn't have the durability of a hard screen. The form-factor of the HP Tablet PC also was a little more secure in our opinion and it can come with a three-year warranty, and three-year accidental damage coverage – an important consideration in the classroom environment."

The school standardized on HP and developed a purchase plan which included 300 HP Tablet PCs for students in the ninth and tenth grades, with 16 units being for teachers working with those classes. The VDOH plan also included a DVD/CDR/ROM drive, a USB flash drive and an extra battery with every PC. The latter allows the students to use the PCs all day long without plugging them in, provided both batteries are charged overnight at students' homes. Charging stations are provided for hourly charging at school.

Working with HP beyond PCs

HP has a broad spectrum of products and services that make up a comprehensive suite of solutions available to education customers. It supports the development and wide adoption of standards in hardware architectures, software interfaces and interconnects – delivering solutions in a consistent fashion that address the

challenges of maximizing return on IT investment, improving performance, mitigating risk and increasing agility. VDOH recognized this value and not only pre-defined the Tablet PCs and Notebooks, but selected specific servers and printer models to leverage these advantages.

The School installed two HP ProLiant servers – an ML370 and ML330 – for file and print sharing. It deployed a variety of monochrome HP LaserJet 4100 printers for each of three floors in the main building so students are never too far from a printer. Four HP Color LaserJet printers – two 2500s and two 4600s – also were implemented, two in the art department and one each in the media center and laboratory, together with a wide range of other HP LaserJet printers conveniently placed throughout the community.

Finally, VDOH installed a wireless network to overcome the limitations of cabling within the older buildings. This wireless capability enhances 1:1 computing, and enables the students to work wherever best meets their needs.



Realizing the vision

Today, teachers have embraced the available technology as a matter of course, including utilizing electronic grade books and corresponding with parents via e-mail. "We are actively using our web site as a means of keeping the local community and parents informed as well as having student information posted there – in fact, 67 percent of the teachers now maintain class-related web pages," said Moore.

She continued, "The faculty has begun their movement through the reluctant stage of infusing technology into aspects of the curriculum. PCs are used for productivity purposes – word processing, spreadsheets and Internet access – and for running selected education software packages, such as the Microsoft Suite, Inspiration, Geometer Sketch Pad, and Windows Journal. VDOH has a sister school in Taipai, Taiwan and students even

At a glance

- **Organization:** Villa Duchesne/Oak Hill School
- **Located:** Saint Louis, Missouri
- **Founded:** 1929
- **Size:** Pre-kindergarten - sixth grade, 386 boys & girls; grades 7-8, 120 girls; grades 9-12, 290 girls and 87 faculty.
- **Telephone:** 314-432-2021
- **URL:** www.vdoh.org
- **Primary focus:** According to the vision of St. Madeleine Sophie Barat, the foundress of the Society of the Sacred Heart, Villa Duchesne/Oak Hill educates its students to live effectively in an ever-changing world. As a member of the Network of Sacred Heart Schools in the United States, Villa Duchesne/Oak Hill operates as an independent Catholic school for students in grades Pre-K through 12.

co-create presentations with peers from that school via the Internet and HP Tablet PCs.”

Transforming student learning

Moore witnessed the transformation in a particular student that was struggling, identified with some learning differences including dyslexia. “With the HP Tablet PC, this student is now more organized, engaged and more importantly, her grade point average doubled in just over one year! The technology has had a very positive impact,” said Moore.

VDOH is taking a leadership role in demonstrating how HP technologies can dramatically change the way education is delivered and how students can work and learn more effectively by using them. Over the next couple of years it plans to widen use of the HP Tablet PCs from seventh through twelfth grades.

From an operational perspective, the standardization on HP products across many levels of the infrastructure enables the School to enjoy a simplified support environment and keeps operational overhead optimally low. Moore observed, “Choosing to work with HP technology has been a valuable experience. Over and over again, HP has stepped up-to-the-plate. We even helped beta test the second-generation Tablet PCs and its design engineers incorporated a lot of our feedback. Our students were instrumental in the design of the Tablet PC portfolio case. I communicate my expectations to HP and they are always met.”

Moore concluded, “As we continue to creatively leverage HP technology, we open up even more opportunities for students to learn in ways that suit them best, giving them confidence and helping them achieve their full potential.”

Challenges

- Implementing technology-based instructional education.
- Enabling teachers and students to have access to a consistent standard of technology.
- Cabling for networks and providing suitable power within old buildings for new technology.

Solution

- HP Omnibook XE4100 notebook PCs for the teachers.
- 300 HP Tablet PCs, each with an additional battery.
- Industry-standard wireless network.
- Two HP ProLiant – an ML370 and ML330 – for file and print sharing.
- A variety of HP LaserJet printers, including models 4100, 2500 and 4600.

Results

- Many teachers have embraced technology – 67% percent of them now maintain class-related web pages.
- Technology is infused into every aspect of curricular areas – having a very positive impact on students.
- A simplified support environment keeps operational overhead optimally low.
- School buildings remain essentially untouched via wireless networking and mobile PCs.

For more information on how working with HP can benefit you, contact your local HP sales representative, or visit us through the Internet at our world wide web address: <http://www.hp.com>

© 2004 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

5982-5931EN, 04/2004

