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Developing Staff Training in Virtual High Schools

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ABSTRACT

As virtual high schools grow in numbers across America more interest is generated in how to successfully plan and implementing them. Part of planning, implementing, and sustaining successful virtual schools includes delivering quality professional development that has a positive impact upon students' achievement. This article focuses on three virtual schools at different stages of maturity in order to describe such a model.

Keywords: faculty development; teacher improvement; technology mediated learning; strategic planning in education; virtual school

Virtual schools are a rapidly growing phenomenon in American elementary and secondary (k-12) education (Berge & Clark, 2005). They are the latest and potentially the most controversial manifestation of the electronic learning (e-learning) revolution in schools. As Clark and Else noted in 1998, "For the foreseeable future, the World Wide Web … is likely to serve as an umbrella technology uniting distance education media for distributed learning … Virtual schooling is the next wave" (Clark & Else, 2003, pp. 35-36).

Distance education in today's virtual schools describes not only the education of the students enrolled, but also the professional development programs used to train the faculty and support staff working for each online school. This article briefly profiles three virtual schools, each at a different stage of development, yet each dependent upon a successful and sustained distance education program for its professional staff, in order to remain viable long into the future. As virtual schools become more accepted by the public and the attention given to the online schools shifts from their sources of funding to their standardized test scores, a model for sustained distance training and education must be in place to deliver quality professional development that can positively impact students' achievement scores on standardized tests for each school's online student population.

There are three virtual schools used in this article to explore improvements to staff development. Electronic Classroom of Tomorrow is the largest k-12, electronic school in the United States, serving almost 7,000 students. The second school is the IQ Academies high school, which is just completing its inaugural year and proudly claims its 203 students a success. The third school is entirely virtual, and to date imaginary, but ideal in its delivery of distance training and education to its staff and faculty. The first two schools provide examples that collectively will serve as the foundation for a successful professional development program. The Virtual I.D.E.A.L. school will serve as a model for future management consideration. Taking into consideration what is known about barriers to online learning, best practices in virtual schools, and how to sustain virtual schools, success of schools that take into account the Virtual I.D.E.A.L. program will ultimately have a positive impact on the long-term status and its ability to service each of its students' needs.

INTRODUCTION

The ECOT

The Electronic Classroom of Tomorrow (ECOT) was founded in 2000 and today serves as the largest online k-12 school provider in the United States, serving almost 7,000 students (ECOT, 2004). Based in Columbus, Ohio, this school enrolls only Ohio residents, drawing from a student and teacher population that is geographically spread across the state. Like most public, state-sponsored chartered schools, the ECOT high school provides a workstation and Internet access for each student and partners with course-content providers to offer curriculum through a course-management system. Each teacher begins with the provided course content and is able to adapt it to meet the needs of his or her class. Special education teachers are also available, modifying the course content and classroom activities for the students identified with special needs (B. Hartge, personal communication, June 23, 2005). Like traditional classrooms, each special education student has an individualized education program (IEP), which is meant to guide and document specially designed instruction for each student with a disability, based on his or her unique academic, social, and behavioral needs (IEP, 1999). While serving the needs of a very diverse student population and growing at an incredibly rapid rate in its five years, ECOT approaches each school year as a work-in-progress, tweaking the system to better serve the changing needs of its online student population.

IQ Academies

The Waukesha IQ Academies (IQ) was the first virtual high school in the state of Wisconsin, opening its doors Sept. 1, 2004. Wisconsin's open enrollment laws require students wishing to attend a school district other than their home district to apply to those districts during a three-week window in February of each year. While a student has until Aug. 31 to decide if he/she will attend another district, if the student does not apply in February, the opportunity to enroll somewhere other than the home district is lost (Wisconsin Department of Public Instruction, 2005). Last year, the IQ, a public charter school affiliated with the 13,000-student Waukesha School District (Waukesha School District, 2004) located 20 miles west of Milwaukee, had nearly 500 students apply during the open enrollment process, with 220 enrolling by Sept. 1. In February 2005, IQ accepted more than 1,000 applications for open enrollment and anticipated its actual enrollment to be 600 students on Sept. 1, 2005 (K. Diener, personal communication, April 14, 2005).

IQ was created to better meet the needs of students that, for a variety of reasons, did not believe their needs were being adequately addressed. Students requiring an alternative education, traveling the United States, or who were traditionally homeschooled, did not have an educational system that was working for them. The Waukesha School District recognized these needs, and in less than 10 months, energized its resources to put into place a complete online virtual high school.

Because of its affiliation with an existing school district and an agreement with the Waukesha Teachers Association Union, all IQ teachers are employees of the Waukesha School District and most continue to teach in the classroom in addition to their online work. In its first year, IQ had one-full time instructor and 27 part-time teachers, teaching as little as 1/12th of their instructional time in the online environment. Each instructor received a computer, but was not given Internet access, under the assumption that most instructors continued to teach in a district building with Internet access. It is hoped that with the increased enrollment projections, at least five to six teachers can be hired full-time for IQ, allowing the online teaching faculty to dedicate more of their time to their online responsibilities. As could probably be expected, in some cases, it was believed that in-person classroom needs consistently trumped online classroom needs, frustrating both student and staff. More full-time online staff will help address the challenge of trying to wear both hats as an online and in-person instructor.

Distance Training and Education Efforts for Faculty

Neither IQ nor ECOT fit cleanly into any one of Schreiber's (1998) stages of technological maturity that indicate an organization's readiness to successfully implement distance training and learning (see Appendix A). Due to the nature of their business, both schools met the stage two requirement, having the necessary infrastructure and technological capability to delivery online education and training. IQ may fall a little short because of the decision to not provide home Internet access to its staff. Nonetheless, all teachers still had access either at home or at school. Furthermore, IQ's full-time staff of two (principal and secretary) simply cannot be expected to train, develop procedures, and evaluate the needs of its staff, which are also stage two expectations. Hopefully as it grows in size and resources, IQ can transition from a stage one school, providing separate and sporadic learning events, to an organiza-

tion that is more established and consistent in its training efforts.

ECOT's size and experience allow it to meet more of the stage two requirements, including approaching distance education and training with a more interdisciplinary team and maintaining adaptability and flexibility in its course offerings. By establishing a mentoring program and its formation of a partnership with the University of North Florida to develop research-based, online faculty training solutions, ECOT approaches stage three but has yet to fully commit and embrace distance training of its staff as a core belief and philosophy.

Staff Development Efforts

Ironically, for staff development, both IQ and ECOT use on-the-ground instruction as their primary mode of delivery. The fact that both virtual high schools maintain in-person education and training for most, if not all, of their staff development may not be as much of a contradiction to their focus on online education as it first seems. Rather, a mixed-mode delivery of online and in-person professional development recognizes that each school must first build a learning community among its staff members, most of whom have been trained in a in-person environment, before engaging students in their respective online communities. While not taking advantage of some of the online efficiencies, it seems both institutions are most comfortable with a blended model of professional development delivery.

IQ offered one week of primary instruction to all faculty members before its inaugural school year, and, because all teachers currently or formerly taught in the district, it was not difficult to arrange such in-person training. The training consisted of four parts:

- exploring online teaching and how it compares with in-person teaching;
- a mini-course simulation;
- technical skills training; and
- how to effectively communicate with the online student.

Because most of the course content is provided for the instructor, the training was focused on the supplemental, but very important, aspects of a course, such as classroom management, facilitating discussion, course expectations, and school policies. With more full-time staff projected for future school years, it is hoped that IQ can at least begin to have virtual faculty meetings as a first step in the distance training process.

ECOT has an established system of in-person training four times a year, lasting for two to three days, and held at various locations around the state. ECOT takes advantage of this opportunity to also hold parent-teacher conferences for students in that particular geographic section. ECOT's in-person sessions may include some technical skills training on new products or features but more often includes training on school initiatives, such as competencies and state test scores. Because state test scores are extremely public figures and are oftentimes the measure of a school's success (or failure) in the eye of John Q. Public, it is not uncommon for new charter schools and traditional brick-and-mortar schools alike to place great emphasis on achieving higher test scores. Because the state test is not yet online and must be proctored, the challenges presented in the coordination of a state standardized test at an online high school are incredible, doubling the need for all staff members' active participation at testing time.

Feedback for Staff Development

ECOT also has established an effective system for collecting feedback on training needs, incorporating suggested education and training opportunities into their quarterly meeting. This supports one of Rosenberg's (2001) five areas of transformation, when describing the new era of training and instruction, the ability to move training from cycle time to real time. Historically, training has taken some time to cycle from concept to delivery; but today, real-time turnaround is necessary and critical. ECOT's ability to turnaround its training needs from one quarter to the next demonstrates

real-time training and instruction to its faculty members.

VIRTUAL I.D.E.A.L.

The Virtual I.D.E.A.L. (IDEAL) school does not exist. It serves here as a model to point toward considerations that need to be made when managing a virtual high school. IDEAL was established five years ago. It maintains manageable growth, its students test high on the required state exams, its staff is well-qualified, and its distance education and training program would be described by Schreiber (1998) as beyond stage four. The IDEAL school is just that, yet it somehow strives to be more. What makes its distance education and training program the best? Its practices are based on research, experience, self-reflection, and successful partnerships with industry experts.

A Strong Beginning

A well-trained staff is critical for sustaining IDEAL's programs and to meet the needs of students. Training staff at IDEAL begins with a structured program for beginning distance instructors, following many of the topics identified in IQ's training. The difference between the two is that IDEAL takes advantage of the particular strengths of in-person and online instruction. Rosenberg (2001) notes, "With all the potential of e-learning, it might be easy to dismiss traditional classroom training as completely antiquated—of no value down the road. Although e-learning has a great deal to contribute, it does not mean the end of a classroom learning" (p.120). Similar in concept to ECOT, the IDEAL school gives all incoming staff an assessment to determine the level of individual technical and instructional skills. Tobin (2004) cites ever-changing teacher competencies to justify the need for the development of competencies for online teachers as well as continuing professional preparation and training for online teachers. This assessment is based on the Educational Technology Standards and Performance Indicators established for all teachers by the International Society for Tech-

nology Education (ISTE, n.d.). ISTE identifies six areas of focus:

1. technology operations and concepts,
2. planning and designing learning environments and experiences,
3. teaching, learning, and the curriculum
4. assessment and evaluation,
5. productivity and professional practice, and
6. social, ethical, legal, and human issues.

Because of its virtual nature, special emphasis is placed on needed technical skills, and any technical remediation is completed before the first week of distance training. In addition to the preweek assessment and technical training, new instructors also are required to complete online learning objects that introduces available administrative and support services, tutorials on copyright and policy issues, and an exploration unit on the components of a successful online course. IDEAL also uses its preweek session to have the instructors introduce themselves, describe their background, and share some of their personal interests. Completing these components online before the actual in-person session demands preparation, encourages camaraderie, and builds skill development, similar to what the instructors will soon be expecting from their students.

Finally, the week of training arrives and sessions are presented on the following items:

•   distance learning technology and its impact on learners;
•   how distance instruction ties in with the institutional mission;
•   fundamentals of and assistance with course development and adaptation;
•   techniques for encouraging interaction;
•   development of back up and contingency plans; and
•   an opportunity for addressing concerns (Clay, 1999).

Each session builds upon the previous and adequately connects the school's mission and vision with the online classroom teacher's responsibilities and expectations. One unique way that IDEAL uses to insure this connection is made by its new teachers is through formative and summative assessments. Instructors are quizzed and must complete practice exercises demonstrating formative, or short-term, learning. Instructors also must demonstrate summative learning, evaluated by how effectively they are able to implement training topics into their own virtual classroom, measured by a three-month, six-month, and nine-month classroom "visit and evaluation." To help insure their success, trainers teaching the introductory sessions to new teachers can earn financial incentives based on their students' ability to connect session training with students' classroom learning. Success in the classroom is evaluated by the administrators' ability to quantify interactivity, learning, and growing, something that remains quite a challenge in an online school. Sunal, Sunal, Odell, and Sundberg, (2003) offer a Checklist for Online Interactive Learning (COIL), which centers on four main topics: student behavior, faculty-student interaction, technology support, and the completeness of the learning environment. Classroom teachers at IDEAL appreciate such an assessment because it is research based and can provide data to support both successes and future opportunities in their virtual classrooms.

The successful integration of online training and in-person training reinforces Rosenberg's (2001) other indicators necessary to transform distance training and instruction. Using online training both as a precursor to live instruction and as a follow up to classroom training deftly blends the strengths of the two modes of instruction. Holding the trainers accountable for their instruction and subsequently holding the instructors accountable for implementing what they have learned, encourages all participants to make the connection between training and performance. And, finally, by maintaining online materials, information can remain current and accessible when needed (e-Learning, pp.7-8).

Variety

As IDEAL's training program moves beyond the first weeks, variety becomes an integral part of its continued success. Just as teachers need to find ways to reach students of all learning styles, distance training programs need a variety of opportunities for learners with varying styles and preferences. Clay (1999) advocates for online programs that include mentoring, group sessions, one-on-one labs, printed materials, listservs, regular discussion sessions, and observation of others' courses. Not only does the variety address the needs of different learning style, but most of the learning options allow educators the opportunity to explore skills and technologies they could ultimately use in their classroom as part of their own instruction. Clay acknowledges the reinforcement of skills as valuable by noting that "experience shows that training simply won't 'take hold' unless support is ongoing, with job-embedded opportunities for practice" (1999).

Knowledge Management

Rosenberg (2001) describes online training that is supported by expert modeling and stories, learning from others' mistakes, and having the opportunity to reuse information after learning. The reuse of information refers to knowledge management, and, once again, IDEAL is at the forefront of the virtual training field. Where as training and instruction is focused on specific learning outcomes, is sequenced for memory retention, and may contain presentation, practice, feedback, and assessment components, knowledge management focuses on the organization of content, is sequenced for optimum reference, and is centered primarily on effective presentation (Rosenberg, 2001). IDEAL's knowledge management archives contain many how-to's, alternative instruction and assessment strategies, and many tutorials on school and student policies and procedures. The database is easy to search and tracks hits on various information modules, to help identify future training and instruction opportunities.

Identifying and Assessing Needs

IDEAL's ability to use data from the knowledge management archives is vital to the proper identification of future training needs. While feedback and user input is another valuable collection tool, the data provides not only a basis from which to start, but also a means to measure progress over time to determine the success of training and instruction efforts. The power of data in sustaining distance training efforts cannot be overstated. Data can justify a major investment in new software or additional support expenses. In IDEAL's case, data can be used to demonstrate competency and achievement of individual or school goals, and it also can be used to challenge both staff and students to raise the bar higher in all forms of instruction and learning. Identifying and assessing needs for distance training is an important aspect of Rosenberg's (2001) learning architecture and the IDEAL's continued success.

Variety of Teaching Methods

IDEAL's successful preweek assessments, remediation, and topical learning objects, combined with its week of in-person instruction, added to its extensive knowledge management database, and integrated into a system that stresses accountability, data-driven decisions, and constantly assessing learning and training needs, allows its well-trained staff to focus its distance education and training efforts on larger, school-wide initiatives. No longer are instructors learning how to make templates in Microsoft Word, but instead are using discussion board software to consider how to improve literacy, create common assessments, improve communication channels with parents and students, and how to align curriculum to state and national standards. In another chat room instructors are brainstorming at how to integrate more team-building exercises into the curriculum, while others are comparing classroom statistics to identify instructor strengths and areas for improvement. IDEAL is able to remain at the forefront of distance education and training through its continued creative use of online learning tools and its desire to

tackle challenging issues facing most high schools today.

Barrier to Sustaining Distance Education

Cho and Berge (2002) identify 10 barrier clusters to establishing successful distance education and training programs:

1. technical expertise,
2. administrative structure,
3. evaluation/effectiveness,
4. organizational change,
5. social interaction and quality,
6. student support services,
7. threatened by technology,
8. access,
9. faculty compensation and time, and
10. legal issues.

Ohio's ECOT seems to have already addressed many of these barriers. Through its preassessment, technical training, and quality internal support, its teachers are technically competent and can adapt to new technologies. It has provided a computer and high-speed Internet access for its staff members and pays its faculty well compared to brick-and-mortar institutions. ECOT's quarterly meetings encourage social interaction and community, and its willingness to accept feedback and evaluation helps include all staff in the development of the training process. ECOT's needs seem to revolve around an integrated learning architecture and a more substantial investment in online training opportunities for its staff. Like most schools, it struggles with implementing accountability and successfully managing the rapid growth of its student and teaching populations. While it has already started initiatives concerning competencies and state test scores, better use of its online resources will allow it to reach a new level of success when addressing organizational issues and goals.

Wisconsin's IQ has taken the first step towards sustaining distance education and training just by entering the virtual high school arena, yet there is certainly room for improvement. Faced with a small administrative staff, limited student support services, less provisions for faculty access, and no unique compensation packages, the challenges ahead of IQ are formidable but not impossible. As enrollment increases, more full-time teaching and administrative staff will generate increased opportunities for online collaboration and the development of a knowledge management system. Two more years of experience will solidify its new instructor training initiative and perhaps lead to a preassessment to determine both teaching and technical skills. Increased administrative support may allow for more detailed assessment of classroom instruction and measurable student learning. The key to IQ's future success is continued growth and constant evaluation of the support services and offering instructional opportunities to its teaching faculty.

CONCLUSION

The IDEAL school focuses on the future. While it may be impossible for any one school or district to achieve the comprehensive success of the distance education and training efforts modeled by IDEAL, various components and strategies are attainable and can be matched in terms of quality and sustainability. The IDEAL school may best serve as a reminder that a school's commitment to its teaching staff is constant and unending, and consistent and determined effort is required year in and year out.

These three virtual schools are each at different stages of maturity. Successful and sustained distance education and training for all three schools revolves around continued growth, organizational commitment, quality resources and instruction, and measures of accountability. Not surprisingly, these factors are really not much different than the standards of success identified by brick and mortar institutions. By examining the current status of staff training that exists in a virtual high school and planning the direction a model program should have, school administrators can better plan to close the gap, while overcoming common barriers and identifying staff development needs.

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