ABSTRACT

Why build a virtual school? The rationale for the virtual school project arose from the need to address the shortage of teachers, especially in the area of advanced placement (AP) classes that school districts experience from time to time. Houston Independent School District was interested in providing a cost-effective model of instructional delivery that would positively affect student transportation issues and related expenses. In addition, there was a need to improve middle school students’ academic skills in preparation for high school and college. Reclaiming the home school market in the greater Houston area was another benefit that was anticipated. In addition, a virtual school would prepare students for a 21st century learning environment.

INTRODUCTION

In Texas, during the latter part of the twentieth century, the superintendent of the Houston Independent School District (HISD) envisioned the implementation of a distance learning vehicle, a “virtual school.” The Superintendent, Dr. Rod Paige, now U.S. Secretary of Education, recognized the potential of technology to revolutionize education in the new millennium. After much deliberation, research, consultation and contacts with professionals from Houston universities, he was given the approval by the HISD Board for the Virtual School Project in the fall of 1999.

Dr. Gaye Lang, an administrator in HISD, was chosen by the School Board to serve as project manager. Dr. Lang had demonstrated considerable skills in leadership and other characteristics in the inner-city school she headed while also serving as a part-time instructor at the University of Houston main campus. Additionally, she had acquired training and experience in various technologies while working with Region IV of the Texas Education Agency. Therefore, she was quite knowledgeable of possible contributions technol-
ogy can make to positively affect the pedagogy essential for maximizing achievement.

The project manager was expected to assume roles including the completion of the design and creation of the final virtual school proposal, acquisition of approval of competent staff, and then administration of the futuristic method of education delivery for the HISD Virtual School. These tasks became quite a challenge since there were no other public schools in the state which had initiated such a program. It became apparent that no other public school in this country had developed a distance learning instructional tool for middle school students (grades six to eight). Therefore, the realization surfaced that perhaps the project manager’s task could be compared with some early explorers and astronauts who had experienced “going where no one else had gone before.”

PURPOSES

The purposes of this chapter are as follows:

1. Describe demographic data concerning HISD and its efforts to maximize learning through the implementation of technology.
2. Identify the rationale for the virtual programs, including the mission and goals.
3. Present literature concerned with perceptions regarding the effects of technology in education.
4. Describe the development and implementation of the virtual program in HISD and some problems encountered.
5. Identify budgetary and evaluation issues addressed, as well as perceptions of staff.
6. Identify future trends in technology which may result in new pedagogy.

The goals of the HISD Virtual School Program include the following:

1. To provide opportunities for high school and middle school students to acquire some course credits online that can foster preparation for special college entrance exams.
2. To enable students to acquire enrichment courses online that can foster preparation for special college entrance exams.
3. To permit students to participate in advanced placement (AP) classes which will permit them to increase skills in specific areas.
4. To assist students with special needs, such as skill weaknesses due to deprivations encountered, in order to achieve greater success.
5. To permit homebound instruction in order to accommodate students with medical problems.
6. To permit students from our districts and others to acquire skills desired to enhance their technology skills.
7. To enable students to experience different types of teaching styles which enhance their learning style.
8. To provide activities which are interesting, motivational and meaningful and foster critical thinking.
9. To expose participants to audio and visual experiences online which help to clarify particular concepts and skills.
10. To enable students to become skillful in using email to communicate with other students and teachers.

OVERVIEW OF THE HISD AND ITS VIRTUAL COMPUTER PROGRAM

The Houston Independent School District is the largest district in Texas and has often served as a model in the implementation of new methods, materials and strategies to enhance learning. The