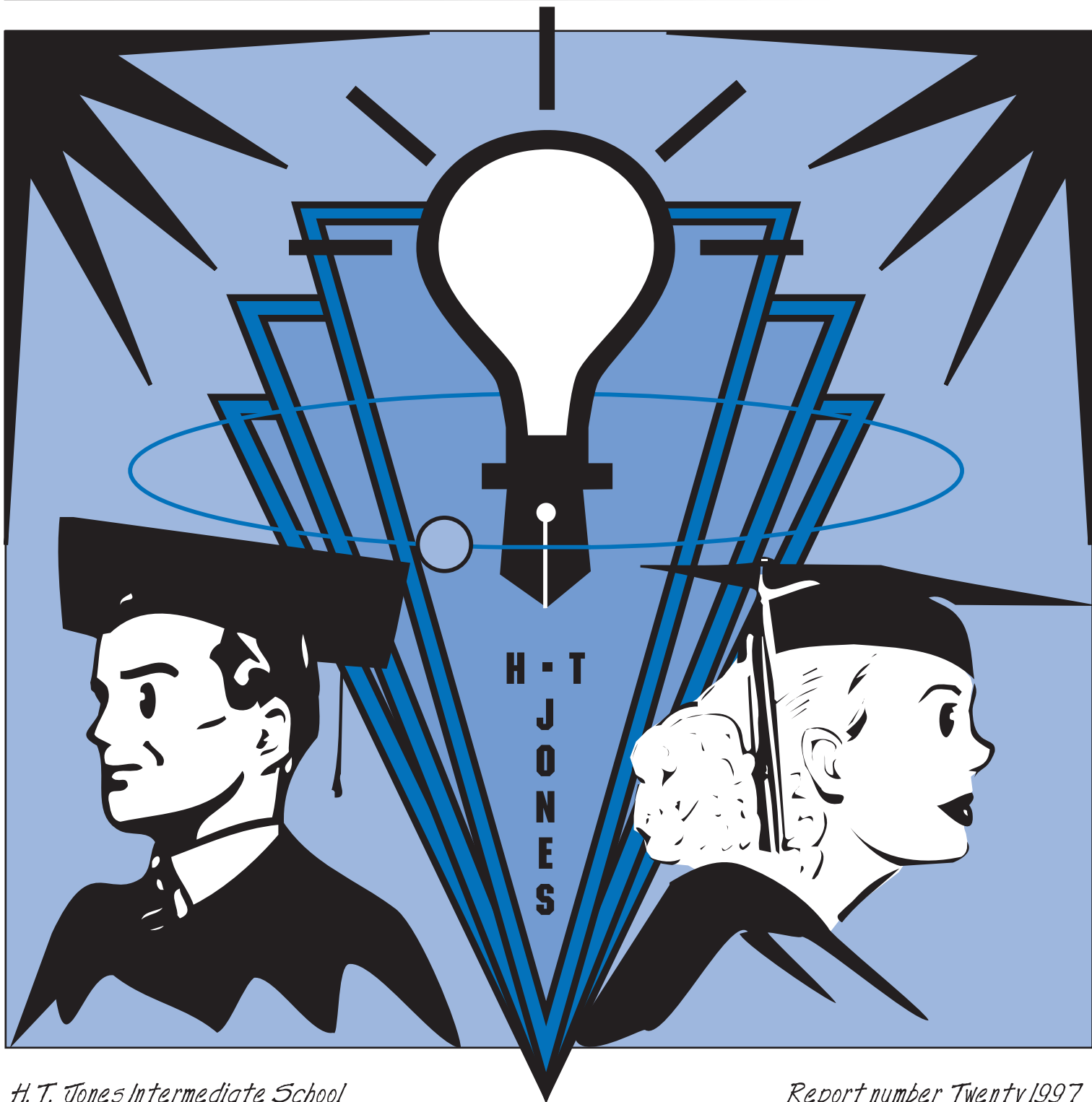


IMAGES

...OF TECHNOLOGY IN TEXAS SCHOOLS



...published by the
Texas Center for Educational Technology
University of North Texas



IMAGES of Technology in Texas Schools is published by the **Texas Center for Educational Technology**, a part of the Academy for Research and Professional Development in the **College of Education** at the **University of North Texas**.

This series of TCET Reports features Texas educators who each possess several common characteristics: a willingness to take risks, a drive to see the potential of all students realized, and a belief in the power of educational technology.

Inside the pages of each report, you will see how Texas teachers and administrators are developing new ideas about teaching and learning using technology. You will get a glimpse of how their ideas took form, how they got funding, and how they built their technology infrastructure. You will hear about their search for results, and their hopes of expanding each child's intellectual capital by bringing multimedia global information into each classroom.

You will hear the stories of new Texas pioneers, educators who bravely travel new, uncharted electronic highways, in order to take their students to a new century. ♪

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Educational Technology Helps Make Things Happen at H. T. Jones Intermediate School

Overview

The H. T. Jones Intermediate School, after being closed a number of years, reopened in 1992 as a fifth and sixth grade campus in the Waller Independent School District. At first the new school in its old buildings was looked upon with a degree of disfavor by many in the community. But Principal Sharon Clark brought philosophies which are largely consistent with the 1989 Carnegie report, *Turning Points: Preparing American Youth for the*

21st Century, hand-picked her faculty, and instituted a comprehensive and non-threatening technology environment. Today, H.T. Jones is one of sixteen Carnegie schools in Texas, it is a member of the Holmes group of professional development schools, it is one of sixty-five Mentor Middle Schools in Texas, and it has active working relationships with several colleges and universities. And parents are clamoring to get their children enrolled.

Located on the edge of the

Prairie View A&M University campus, the Jones school carries out the philosophies of Herman T. Jones, for whom the school is named. Jones, a member of the Prairie View A&M staff and a principal of the Prairie View Training School, sought not only to mold the minds of his students, but also to develop their thinking skills to enable them to understand the world around them. According to Dr. Jones, each child must receive a quality education which will develop winners, not losers, and which will provide the opportunity for each child to rise to his/her full potential.

Educational technology is one of the many aids assisting the



Principal Sharon Clark has established a progressive and non-threatening environment for technology at H. T. Jones.

Educational technology is one of the many aids assisting the Jones faculty in providing quality education.



Jones faculty in providing quality education. With technology supported by a modest budget, about 80% of the school's computers are Macintosh LC IIs. The jewel in Jones' crown is a video conferencing system purchased from the VTEL Corporation. With the system's two monitors, the students can view themselves on one monitor and view their remote audiences on the other monitor which is voice activated. Transmission sources include two video cameras, an Elmo document projector, a VCR, and a computer. Overhead microphones permit the students to be heard as well as seen while sitting at a conference table, although the students normally go to a rostrum to deliver prepared messages. A fax and a phone are also included.

With compressed video transmitted over T-1 lines, Jones is a member of the Trans-Texas Videoconference Network (also

known as TECnet) which has its hub and administration at Texas A&M University. Using this network and also using gateways into other networks, Jones can participate in video conferencing sessions with virtually any other school having compressed video.

With Principal Sharon Clark and technologist Trina Davis leading the way, Jones' entire faculty is becoming technologically competent. When Clark opened the school five years ago, she hired teachers based in large part on their willingness to learn and use technology in their teaching process. She then instituted a non-threatening technology integration program which included organizing the faculty into teams and cadres. The teachers understand that they will be respected and encouraged for having tried rather than being castigated for having tried and failed. Innovation is encouraged and development by trial and error is recognized as a normal road to progress. Mrs. Clark also attributes much of the school's success to the support received from district administration. Her current superintendent, Dr. Robert Carruthers, is especially supportive.

Organizing for Technology

The Jones school follows a technology integration plan which has produced a high level of technology infusion within the

school curricula. The plan, instituted by Principal Sharon Clark upon reopening the school, is comprised of three key components: (1) organization of teams and cadre, (2) the core team, and (3) the benchmarking process.

Organization of Teams and Cadres

All Jones faculty are members of three types of teams—an academic team, a discipline team, and a special purpose team or cadre. The academic team creates smaller learning environments for team-oriented instruction, a recommendation in *Turning Points*. Each team member specializes in a topical area and provides interdisciplinary instruction and experiences in that area. In support of these teams, faculty members are also organized into cadres with each cadre providing specialized support for his/her academic team. Through these cadres, the teachers are empowered to lead and make decisions affecting all aspects of

With Principal Sharon Clark and technologist Trina Davis leading the way, Jones' entire faculty are becoming technologically competent.

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the school environment. Five cadres exist to provide support in the following areas: Service-Learning, Special Populations, Discipline, Technology, and TAAS.

The technology cadre is charged with staying abreast with all aspects of educational technology, and members of this cadre are available to instruct and assist teams and other cadres in making successful application of appropriate technology in their curriculum offerings. Technology cadre members assist the full-time technologist in monitoring and evaluating the technology portion of the campus improvement plan, and they make recommendations for the next year's campus improvement program.

The Core Team

A core team exists to be the

technology pacemaker. This team, which consists of the principal, librarian, library technology assistant, and technology coordinator, analyzes the progress and problems of the technology initiatives and recommends corrective action as needed. It establishes the benchmarks for technology integration and monitors their appropriateness as conditions change. It also makes budget decisions regarding equipment acquisition and use of funds.

The Benchmarking Process

Benchmarks, which are reset annually by the core team, establish progressive goals in technology mastery for faculty members to achieve.

The Jones technology integration plan is based on seven focal areas with expectations and benchmarks for each area. The focal areas of the plan are (1) e-mail, (2) electronic gradebooks, (3) distance learning, (4) presentation stations, (5) teacher created media, (6) software use, and (7) resources.

Within each focal area a series of benchmarks have been established leading from a basic beginning to desired competency. Looking at each area individually, the initial benchmarks seem to represent very modest expectations. But considering all seven areas collectively, and considering also the current state of technical

competence and utilization of the Jones faculty, the progressive series of benchmarks have provided a reasonable, yet ambitious, series of attainable steps to technical competency.

(1) E-Mail

Electronic mail was considered to be an easy and fun function as well as a useful one for technology beginners. The e-mail benchmark for the first year was to check e-mail once a day. As the year progressed, it became apparent that checking once a day was not often enough. The second year benchmark of checking three times a day proved to be more efficient. E-mail is now an accepted and appreciated means of communication at Jones.

(2) Electronic Gradebook

Making the transition to *Macgradebook* proved to be a difficult benchmark to achieve. Not fully trusting themselves or the

Benchmarks, which are reset annually by the core team, establish progressive goals in technology mastery for faculty members to achieve.

system, many teachers kept their standard gradebooks in parallel with their electronic gradebook. The second year benchmark was the same as that of the first year except that the network version of *Macgradebook* was used. Electronic grade books became generally accepted, and are now used throughout the district. Grades are now submitted to *Excelsior* software on the district's mainframe from each teacher's gradebook disk.

(3) Distance Learning

Jones has one or more computers in each classroom, and a network modem provides Texas Education Network (TENET) access from any of their computers. The original benchmark in this area was for each teacher to have a TENET address. Several of the teachers are now using TENET on a regular basis as a teaching tool, and via the school's own router, teachers and students have direct access to the Internet. Video conferencing projects (via VTEL facilities) along with E-mail and desktop conferencing (using CU-SeeMe) are now benchmark items.

(4) Presentation Stations

Initially each teacher was asked to use an LCD panel once a week in lesson presentation, and even this simple requirement presented difficulties until they learned that the panel had to be at a certain level to the screen for the

projection to be seen clearly. The expectation was then increased to twice a week. Well equipped presentation stations are now available to each team. These stations consist of a Power Mac, CD-ROM library, color printer, large screen monitor, color QuickTime camera, and AVerkey TV Converter. Teachers are expected to develop competence with all these components, assisted by the leadership of the technology cadre.

(5) Teacher Created Media

During the second year of implementation, every teacher, individually or as part of a team, was to complete a multimedia presentation. The expectation is still that teachers will create

presentations as a means of enriching their instruction, and also that they will have their students making and delivering multimedia presentations. As examples of what can be done in this area, the librarian, Pam Saladino, has prepared a library program to help students to peruse the Bluebonnet Award books. One of the academic teams created a presentation on Colonial Williamsburg. Content mastery teacher, Lenora Cermin, and her students have prepared a number of such presentations. They have prepared class biographies of individual students. Kwanza, a modern-day movement among African Americans to retain and celebrate their cultural heritage, is



Trina Davis, technology coordinator at H. T. Jones, enjoys working with students such as (left to right) Melody Amstutz, Buddy Gray, and Irati Victoria.

one of their innovative programs. Even the Coke-Pepsi Challenge has been included, this one by students of Trina Davis.

(6) Software Use

The benchmark here is simply that teachers will select and use appropriate software in their lessons and document that use in their lesson plans. Software for the sciences has been the most prevalent, so purchases began there but have now moved to other areas such as social studies, language arts, music, and art.

(7) Resources

Initially the expectation involved using human resources as a support system on which to call

for help. Teachers are now expected to be able to do research using CD-ROMs and online resources. They are also being encouraged to expand their university collaborations, publish, and make presentations at professional meetings.

University Collaboratives

The Jones school participates with, and receives support from, several universities in a number of projects.

Texas Education Collaborative

The Jones school is a charter member of the Texas Education Collaborative (TEC) organized in 1992. TEC, which is a Center for Professional

Development and Technology (CPDT), is based at Texas A&M University in College Station. Its purpose is to find avenues of restructuring teacher education in ways that accommodate the varied characteristics of learners and incorporate technology into classroom instruction. In addition to providing technically competent student teachers, TEC helps schools obtain evolving technology systems, provides staff development experiences in instructional applications of these systems, and originates numerous collaborative projects. With over three million dollars of TEA funding, TEC has placed emphasis on acquiring technology equipment and software and on providing professional development experiences to member school faculty and to teacher candidates.

Starting with three colleges, eight schools in five districts, and five business partners, TEC is expected to serve 38 schools in seven districts before the year 2000. A current technical highlight of the collaborative is the support it receives from TECnet, a network of T-1 lines linking Texas A&M, Prairie View A&M, Jones Intermediate school, and other member schools with compressed video conferencing systems operating at 0.375 MBps. TECnet also provides a direct data feed to the Mosaic server in Texas A&M's College of Education. Through



ESL teacher, Pura Gonzalez, assists Bobby Gonzales at the rostrum of the Jones school's videoconferencing system.



At the videoconferencing monitors, Sharon Clark (l), and Trina Davis (r) show their enthusiasm for their videoconferencing system and its uses.

gateways, connections are frequently made to other video conferencing systems. GTE, which is the carrier between Texas A&M and the Jones school, has been very supportive of TEC. As a means of encouraging further development and application of distance education, GTE has also donated a building and provided significant financial support for the Center for Distance Learning Research at Texas A&M.

TEC accommodates a large number of projects. Current and anticipated projects encompass such areas as reading diagnosis, writing labs, mathematics assessment, planetary environment, travel portfolios, TAAS tutorials, and community workshops. One of

the premier projects at the Jones school is a project called Cultural Connections. This project, which makes major use of the school's video conferencing facilities, will be described below.

Numerous staff development workshops are held which teach skills in areas such as Macintosh Basics, ClarisWorks, QuickTime Movies, Aldus Persuasion, Screen Play. Operation of laser disc players, CD-ROM drives and scanners and Internet accessing through Mosaic are also taught. Using the compressed video conferencing facilities, teaching candidates share these skills with their counterparts at other Professional Development sites.

Other University Collaborations

In addition to Jones' participation in the Texas Education Collaborative, Jones participates in a number of other collaborative projects with Texas A&M and also with Prairie View A&M, Baylor College of Medicine, and the University of Texas. The University of Texas Health Science Center at Houston has provided support for Jones' Community Technology Program. They are a Project Intercon partner, they actively support Jones' annual health fair, and they assist with the training of science teachers. The Baylor College of Medicine has donated a Power PC and is using Jones as a pilot site for testing and evaluating health related software. When asked how she acquires so many collaborative relationships, Jones' principal, Sharon Clark denies doing anything special. "When people with the same beliefs about education get

Jones participates in a number of other collaborative projects with Texas A&M and also with Prairie View A&M, Baylor College of Medicine, and the University of Texas.

together, anything can happen,” she states.

Jones recently participated in an extensive architectural design project in which architecture students at Texas A&M and Prairie View A&M embarked on a collaborative project to design an ideal school building for the Jones school. Jones students as well as faculty participated by expressing their desires for features to be included. Not only did the college students get useful real-world experience in their project, but the

“When people with the same beliefs about education get together, anything can happen” — Sharon Clark.

Jones students benefited by associating with the collegians and by getting first-hand insights into the world of architecture. They also gained an increased appreciation for the value of video conferencing in communicating and displaying designs and models. Mrs. Clark says that the way the students rose to this occasion was nothing short of amazing.

Jones’ location on the edge

of the Prairie View A&M campus makes it a prime candidate for extensive collaboration with the university, and a large number of such activities are being pursued. Projects currently underway include language arts, the performing arts, social sciences, and physical sciences. In these projects, Prairie View A&M students come to Jones and give instruction. Jones students also go to the Prairie View A&M campus to use laboratories, gymnastic facilities, and libraries. They also use their video conferencing facilities to communicate with one another. The architecture project described above is but one example of this type of collaboration.

Jones also benefits by having student teachers and interns from Prairie View A&M and Texas A&M. In addition to student teaching, Prairie View students come to gain observational and field experiences. Video conference sessions are conducted between Jones faculty and the faculty of the Prairie View College of Education. Each year a teacher at Jones demonstrates effective teaching strategies for preservice teachers via the video conferencing facilities.

Cultural Connections

Cultural Connections is a distance learning application designed to foster true collaboration among students,

teachers, and university partners. Created by Dr. Lauren Cifuentes and Dr. Teri Metcalf of Texas A&M University, Cultural Connections seeks to use multimedia and distance technologies to “mediate personal growth and the sharing of personal identities among young adolescents across sites.” Educators at Jones are particularly proud of their success with this program. Jones classes have been connected to classrooms across the state and to other classrooms across the nation.

A particularly close relationship has developed between the Jones school and the Berta Cabaza Middle School in San Benito ISD.

A particularly close relationship has developed between the Jones school and the Berta Cabaza Middle School in San Benito ISD. Coordinators Trina Davis at Jones and Ester Gonzales at Berta Cabaza have collaborated on several innovative lessons for their students and their campuses. Using interactive video conferencing, their students have engaged collaboratively in regional

Once a month, Jones' weekly faculty meeting focuses on technology.

research projects, open debates, holiday units, and community units. Based on the book, *I Felt Like I Was From Another Planet* by Norine Dresser, the students learn about a number of multi-cultural issues, and then they draw from personal experiences and formulate and share feelings based on these issues. For example, they studied the background and meaning of St. Patrick's Day, and they read a story about the feelings of a foreign student being ridiculed for not wearing green on St. Patrick's Day. Then using video conferencing, the students at the two schools took turns relating their feelings, and they gained better understandings of one another's points of view. In these holiday projects, the students interview family members and others about how holidays were celebrated in earlier years, and they determine similarities and differences between earlier and current practices. Each student

chooses a person associated with the holiday and writes a speech or poem about that person or writes a letter to that person. Using video conferencing, the remote locations also share these activities with one another. Many of the students choose to use HyperStudio to prepare multimedia presentations of their work.

In preparing for an open forum or debate, the students research the issue on the Internet, develop community surveys on the issue, analyze the survey results, and formulate debate arguments. Students at both schools use their electronic connectivity to prepare joint portfolios. By the end of the school year, they have obtained a thorough understanding of one another's cultures as well as gaining an increased understanding of their own cultures.

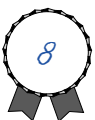
In another Cultural Connection project, six classrooms at Jones are exchanging e-mail communications with six classrooms at the Sturgeon Lake Indian Reserve School in Alberta, Canada. They ask questions of each other and learn of the effects their different environments impose on their everyday life. They share recipes and exchange newsletters.

How do the students feel about their Cultural Connections experiences? "Distance learning helped me to understand other cultures," says one. "I also made

friends through the connection." Another student says, "I interacted with people of different races. It was fun meeting new people and getting over my shyness for speaking in front of people." One mother, Denise Lovett, spoke extemporaneously at a packed District Site-Based Committee meeting when the subject of technology was the issue. Denise's daughter, Kim, who had moved on from H. T. Jones to the seventh grade, had benefitted greatly from her Jones experiences. "Kim would give anything to be back at Jones with Ms. Davis," her mother reported. "She would love to work on projects and use the technology."

Mentor/Keypal Programs

As a result of electronic connectivity, students of Jones are able to make informative contacts with subject matter experts in many locations. They have communicated with NASA scientists, film makers, writers, and engineers, to mention a few. Many college students at Texas A&M and at Prairie View A&M also make themselves available. These college students not only become friends with their Jones communicants, they become a source of encouragement and character development as well as helpers in academic areas. CU-SeeMe, in addition to e-mail, is being used for some of these contacts.



Lunchtime Technology

Kristin Long exemplifies the enthusiasm of several of the students in the distance learning group at Jones. Kristin and others were so frequently asking if they could come in at lunchtime or after school to work on their projects. Because of their eagerness, Trina Davis created Lunchtime Technology. According to Trina, some of the students best work took place at lunchtime. The students would come during lunch, camp out in my room, and create. We eventually expanded our lunchtime club to include a representative from each homeroom on our team.

Community Technology Program

With funding from the University of Texas Health Science Center at Houston, the library/technical center at Jones is open for a series of technology training workshops for community citizens. These workshops are organized into four-week sessions meeting for two hours a week. Community interest has exceeded all expectations. Besides attending these workshops, community members are encouraged to use the lab facilities in an open lab setting. The funding has been used to purchase software and to assist with teachers salaries.

In response to a survey, community members indicated

major interest in learning word processing and the Internet. They also are learning desktop publishing. One mother seeking employment learned to prepare a job resume. Other townspeople have learned to prepare business cards and do other things helpful in their jobs. A few elderly people are using the facilities to research and compile their genealogies and family trees. They are also learning to use the Internet to study and research areas of their own interests.

Staff Development

Because Sharon Clark personally interviewed every candidate teacher when reopening the Jones school, technology staff

development has been quite successful at Jones. The teachers expressed their commitment to technology before being hired. Clark was not necessarily looking for prior technology expertise, but for a willingness to learn the needed skills and a willingness to integrate the technology into the curriculum. In her retreats and pre-school orientations, Sharon used the works of Joel Barker and others to help her faculty become mentally prepared for change, and she created a non-threatening environment with freedom to fail without repercussion. In most cases, the faculty lived up to their commitments.

Much of the credit for the state of technology at Jones goes to



Irati Victoria is proud of his HyperStudio creation.

Trina Davis. Serving at first as half-time math teacher and half-time as technical coordinator, Trina is now a full time trainer and coordinator. She trains the technology cadre, and she also helps train the full staff. Once a month, Jones weekly faculty meeting focuses on technology, and Trina and the technology cadre do large group training. The technology cadre also performs small group training as needed by individual teams, and Trina helps out there as needed.

Each Monday is designated as Technology Monday, and many teachers take advantage of after-school training opportunities. Initially, Technology Monday was devoted to training the entire staff in such areas as using electronic grading and in reading programs such as Reading Renaissance Program and Accelerated Reading Program. Then small group instruction and individual exploration became feasible, and teachers would explore the use of browsers, Telnet, video conferencing as well as various software packages. Now Trina Davis goes to different academic teams on request and teaches them to use Quick Cam, make slide shows, or use integrated software packages. This is done during planning time as well as after school. She also still gives general instruction when needed such as use of new laptops or scanners.

Pura Gonzalez, a Jones ESL teacher, was resistant to technology at first, but she now is an enthusiastic advocate.

"This is the best thing that could have happened to me and to my children."

Trina is also the network administrator, and as such she maintains Jones local area network and their video conferencing facilities.

Benefits of Technology

When asked about the value of technology in the education process, both Sharon Clark and Trina Davis agree that the whole culture of the school is enhanced. The interdisciplinary instruction and activities made feasible by

Bill Atkins, district music director and Jones band teacher, ... now has eight computers in his music room, and he wants more.

technology help everyone see how the pieces fit together in a systematic whole. They also credit technology with leveling the playing field and bringing out talents and inquisitiveness that otherwise might be suppressed. A case in point is that of Mario. Mario and his family of seven lived in a single room. To do his homework, Mario and his siblings went one at a time to the family car. Mario was troublesome at school and had no desire to study or learn. I will be quitting school soon, was his reasoning. In an ESL class one term, Mario was asked to prepare a bi-lingual presentation on his family. As the teacher guided him in creating a multimedia presentation, Mario became intrigued with the technology. He related to it naturally. Taking it from there, Mario became an expert in HyperStudio and a model student in general. When one of Mario's sisters, who received no encouragement from her parents, wanted to drop out of school, it was Mario who convinced her to stay.

Because of the dramatic change Mario made in his life, he was invited twice to Austin. Once was to make a multimedia presentation to Skip Meno (then education commissioner) and to the state board of education which Mario did with skill and poise. The other trip was to explain what technology has meant to him to a meeting of middle school



Trina Davis observes as (left to right) Casey Williams, Steven Rose, Travis Betts, Armando Gutierrez, and Kristina Smith work on projects at workstations in the Jones library.



Dr. Robert Carruthers, Superintendent of Waller ISD, is a strong supporter of educational technology at H. T. Jones and at other schools in his district.

administrators. Mario now has a marketable skill and an ambitious attitude that can enable him to make good use of it.

Pura Gonzalez, a Jones ESL teacher, was resistant to technology at first, but she now is an enthusiastic advocate. "This is the best thing that could have happened to me and to my children," she acknowledges. Pura says that one of the more valuable benefits her students gain from using technology is that of making connections between initial effort and results. It helps them learn how to find and use resource materials and to relate a finished product to the resources and efforts that go into making the product. They learn that things don't just happen without effort on someone's part. Their world expands to people and things far away.

Bill Atkins, district music director and Jones band teacher, resisted technology initially, especially when told that all future purchase orders would be done electronically. Then realizing that academic applications would likely follow business applications, Atkins enrolled in a short musical technology course at the University of North Texas, and he was converted. He now has eight computers in his music room, and he wants more. Because music requires so much repetitive practice, Atkins says the computers have helped tremendously with





Several computer clusters in the Jones library serve the students in their project work.



With Pura Gonzalez at the rostrum, a class of students observe the videoconferencing monitors as they listen to the speakers.

day-to-day fundamentals. He uses software programs that drill the students in rhythms and note names. He hopes soon to acquire an Amadeus program that will evaluate what a kid plays and point out strengths, weaknesses, and errors. His also uses his current software to help him rewrite parts for individual students based on their own strengths and weaknesses. The computers help me in day-to-day fundamentals, Bill Atkins says, and when it is time for drill, the computer serves as another director.

Superintendent Carruthers is a convinced advocate of educational technology when used properly. In fact, he would love to have a cyberschool. Carruthers cites communications and access to outside resources as major educational benefits. Referring to the reading levels of Jones students as spanning a spectrum from second grade to eleventh grade, he says there is no way the Jones library can stock such a wide range of reading materials. But through the Internet, they can get exactly what they need. In addition, teachers can share lesson plans, and everyone benefits.

At the H. T. Jones Intermediate School, technology, with strong administrative support in a non-threatening environment, is a major ingredient in making good things happen. ☺

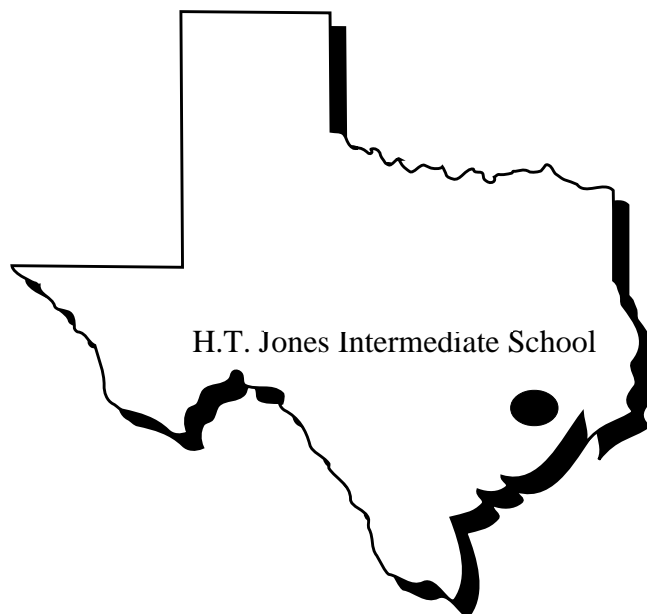
TECHNOLOGY PROFILE OF H. T. Jones

LOCATION: The H. T. Jones Intermediate School, situated on the edge of the Prairie View A&M University campus, is located just off of U.S. Highway 290 approximately 40 miles northwest of Houston. The Jones school is a part of the Waller Independent School District.

NUMBER OF SCHOOLS AND STUDENTS: The Waller Independent School District consists of one high school, one middle school, one intermediate school (H. T. Jones), and two elementary schools. The Jones school has approximately 500 students in grades five and six.

TECHNOLOGY SUMMARY: The H. T. Jones Intermediate School has a variety of Apple computers ranging from Apple IIe s to Power Macs, and is a member of the Texas Education Collaborative Network (TECNet). The school's videoconferencing facility features two monitors, two video cameras, overhead microphones, an Elmo document projector, a VCR, and a computer, and is provided by the VTEL Corporation. With its own router, the Jones school has direct access to the Internet. GTE provides the telecommunication that supports both videoconferencing and the Internet access.

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The Texas Center for Educational Technology (TCET) stands as one piece of an impressive infrastructure created by the Texas Education Agency to bring the benefits of technology to Texas public schools. At the heart of TCET's research and development agenda lies its mission: to promote research and development collaboration between industry and education in order that technologies and applications can be integrated into the public school system.

TCET's organizational structure is uniquely collaborative. Public school educators, teacher training institutions, and technology vendors work together, sharing perspectives and creating a dynamic environment aimed at restructuring Texas public schools to meet the challenges of the 21st century.

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