

## Narrative

### Need

The Berrien County Intermediate School District (BCISD), along with its constituent public and private school districts, has entered into a consortium to be a demonstration site for the Learning Without Limits (LWL) Initiative. Our consortium is seeking \$\_\_\_\_\_ to fund this initiative, which will serve as a statewide model demonstrating the value of integrating handheld and wireless technologies into the curriculum and the home. The consortium will use project funds to build upon the techniques and lessons learned through our Technology Integration Modeling Experience (TIME) model developed and used by the BCISD for the past two years. The TIME Project is a professional development model that uses wireless technologies to assist teachers with the integration of technology into their curriculum. In addition, this project will build upon a pilot handheld computer project currently being conducted with middle school students in the Niles Community Schools. The Learning Without Limits project will provide handheld computers and wireless access to over 3,000 students in grade 7. Each Berrien County 7<sup>th</sup> grade student will be in possession of a handheld computer for a truly one-to-one technology experience. This device will be used both in school and at home.

The schools in the consortium consist of 14 K-12 districts, 2 public school academies, and 2 K-8 districts. According to the latest “Kids Count (2000 census data)” report, Berrien County is one of Michigan’s most diverse counties with 18.3% of children under 18 living below the poverty level. Of the schools in the BCISD consortium, 10 of the districts have a Poverty Rate or Free Lunch Poverty percentage greater than 30% (See attachments for detail). In addition, of these 10 schools, the results on the 2002 MEAP test show that nearly 50% of these schools’ students are at the “Not Yet Proficient” level for writing. Because of this we will focus on improving writing skills across the curriculum for all 7<sup>th</sup> graders. Furthermore, this project will help strengthen the home/school connection as it relies heavily on parental involvement.

The BCISD and its districts have a history of working together on countywide educational endeavors: as a consortium they can do what one district by itself cannot. Our ISD Strategic Plan (School Improvement Plan) guides everything that we do. Our technology plan, approved June 2002, is aligned with our Strategic Plan as evidenced by the following statement from the technology plan.

**“The BCISD strategic plan, adopted May 2002 by the BCISD Board of Education, specifies that the main purpose of the BCISD will be to provide programs and service that align with both national and state standards. We believe that all of our goals are aligned with these standards and we strive to model what we encourage our local districts to strive for.”**

We believe that the ongoing use of technology will support student learning and that the teacher is the key to helping students develop the technological skills that students need to learn, communicate, and develop knowledge. For this reason, we have aligned our technology plan with the ISTE NETS Standards and the Michigan State Technology Plan as evidenced by the following statement from our technology plan.

**“The vision of the BCISD is to provide both a technology rich environment and resources that make possible the productive and efficient operation of the ISD. In addition, it is our mission to supply expertise and inspiration to our constituent schools to enable success in making technology a transparent element of their curriculums.**

**In order to realize this vision, the BCISD will pursue the following goals:**

- 1. Foster an environment that encourages life-long learning.**
- 2. Stay up-to-date and on the leading edge of technology and technology use.**
- 3. Model effective uses of technology in education.**
- 4. Provide resources and materials to enable districts to establish new learning environments.**

**We recognize the need to align our goals with state and national standards for technology and are challenged by those standards. Striving for these goals will enable the BCISD, as well as our constituent districts to augment our ability to use technology independently and in a manner that increases productivity and student achievement.”**

### **Objectives and Deliverables**

After analyzing the data, it has been determined that 7<sup>th</sup> graders would be the best target audience for this project. Although it will be a challenge, we believe that we can accomplish the goals and objectives in the allowable grant time frame while at the same time demonstrating to others the impact that wireless handheld computers can have in the educational process. The BCISD LWL project is based

upon four distinct goals. We feel that the following goals and objectives are clearly measurable and will result in helping teachers teach and students learn.

***Goal: Student achievement in core subject areas will be measurably impacted.***

**Objective:** Through the use of handheld computers, students will improve the quality of their writing based upon an increase in the quantity of cross-curricular writing activities.

*Indicators of success:*

- 1. Teachers are trained and understand how to use a standardized writing rubric.*
- 2. Rubric scores of student writing increase over the grant period.*
- 3. Students use handheld computers to complete more writing assignments.*

**Objective:** Students will use the GoKnow Suite (word processing, concept mapping, animation, web access, and simulation) included with their handheld computers to increase their understanding of core curriculum concepts.

*Indicators of success:*

- 1. Students use at least two of the tools appropriately in each core curricular area.*
- 2. Teachers will evaluate the impact of the tools on student learning and motivation in each core curricular area.*

***Goal: All seventh grade students in the BCISD Consortium will have constant and continuous access to appropriate and powerful educational technology.***

**Objective:** Each seventh grade student will have access to a handheld computer and software that can be used in the school and at home.

*Indicator of success:*

- 1. Students use handheld computers, on a daily basis, in the classroom and at home to enhance learning.*

**Objective:** Students and teachers will access online resources and tools in the school setting to create a true one-to-one learning environment.

*Indicator of success:*

- 1. Each building is an 802.11b wireless zone, enabling anytime/anywhere access to online resources and tools.*

**Objective:** The consortium will develop rules and procedures on appropriate use of handheld computers to be agreed upon by teachers, parents, and students.

*Indicators of success:*

- 1. Number of teachers, parents, and students who agree to the acceptable use rules as established by the consortium.*
- 2. Number of teachers, parents, and students keep handheld computers safe.*
- 3. Number of teachers, parents and students use handheld computers ethically and legally.*

**Objective:** Technical support for the wireless handheld computers will be provided to each building in the consortium.

*Indicator of success:*

- 1. A college student intern per building is trained and provides support 20 hours a week onsite.*

2. *Technology coordinators are trained in the set-up and maintenance of wireless technology.*

**Objective:** Teachers and students will have access to data gathering equipment for use within the core curriculum.

*Indicator of success*

1. *Teachers use the “Classroom Performance System” as a tool to enhance student assessment and learning.*

**Goal:** *Berrien County teachers will learn and demonstrate “best practices” in the use of wireless handheld computers.*

**Objective:** Teachers will be provided professional development on the use of handheld computers.

*Indicators of success*

1. *Teachers demonstrate proficiency in the use of handheld computers.*
2. *Teachers use handheld computers as a daily productivity tool.*

**Objective:** Parents will be aware of and understand the acceptable use and expectations of the handheld computer project, and will receive training in basic use of a handheld computer.

*Indicators of success*

1. *Parents attend orientation meetings.*
2. *Parents sign and return the use agreement.*
3. *Parents are able to use the handheld computers to send information back to the school.*

**Objective:** Teachers will be provided professional development on the integration of handheld computers and software throughout core curricular areas to improve student learning.

*Indicators of success*

1. *Teachers use wireless handheld computers in their daily lessons plans.*
2. *Teachers and students exchange assignments, announcements, notes, etc. using the wireless handheld computers.*
3. *Students use wireless handheld computers as a transparent tool in their daily learning.*

**Objective:** Teachers will participate in an on-line learning community to share lessons learned, concerns, classroom activities, and solutions locally, regionally, and statewide.

*Indicators of success*

1. *Participate in a monthly countywide videoconference.*
2. *Participate in at least three statewide videoconferences to share the progress of this project.*
3. *Post results on a Learning Without Limits web site hosted by the BCISD.*
4. *Participate in a listserv set up for participating teachers and administrators.*

**Goal:** *Communication between school and home will improve.*

**Objective:** Administrators and teachers will use the handheld computer to deliver pertinent information regarding school activities to parents via the student handheld computer.

*Indicators of success*

1. *Administrators and teachers use the handheld computers instead of sending paper announcements to the home.*

2. *Parents and students have access to the most up-to-date school-related information via handheld computers.*

**Objective:** Teachers will use the handheld computer to communicate with parents regarding student progress.

*Indicators of success*

1. *Teachers send progress reports home via the handheld computer.*
2. *Parents with home Internet access review their student's work and assignments via the PAAM web site.*

**Objective:** Parents will use the handheld computers to send requests, comments, survey data, etc to teachers.

*Indicators of success*

1. *Parents use handheld computers to complete surveys developed by the school and/or teacher.*
2. *Parents use the handheld computer to communicate with teachers regarding concerns, requests for a conference, information, etc.*

The above goals and objectives provide a comprehensive overview of the LWL project.

However, some additional details will need to be addressed as the project proceeds. One such detail is the development of policies that will guide the project. Because all the members of the BCISD Consortium participate in the E-rate program they presently have technology use and acceptable use policies that should address most of the issues (security, fair use, virus protection, etc.) that are of concern. The one area that most existing policies may not address is the use of the handheld computers by students outside of the school. For that reason, the BCISD consortium will develop rules that address, loss, damage, and in-home use. As stated in the objectives, parents will need to agree to these policies before students will be allowed to take the devices out of the school. The Center for Highly Interactive Computing in Education (HI-CE) at the University of Michigan has found in schools it has worked with, the loss or damage rate to student assigned technology is usually less than 2%. If, for some reason, a parent does not agree to the out of school policies, the student will have access during the school day but will not be able to use the device at home. Our budget allows for some loss and damaged equipment. We estimate that the monitoring and enforcement of these policies will increase the total cost of ownership only slightly, but will require more vigilance on the part of participating school personnel.

All Berrien County schools are “Career Pathways Schools” and focus efforts on assisting students to choose wisely for their future careers. The “Career Pathway” is a part of all curriculums from grades 1 to 12. Our community partner, “The Partnership for Lifelong Learning” (the organization just received the “2002 Governor’s Award for Educational Excellence”) will focus on working with students and parents on career possibilities and are committed to helping to market the project.

The BCISD will coordinate the entire project and will provide staff and facilities for all of the professional development activities. Each BCISD consortium member will designate one teacher leader from each building to work with the project management team. The individual schools will work closely with parents to ensure the success of the project. We view parents as one of our most important partners. We will be working with GoKnow to assist us with professional development and best practices in using handhelds in the classroom. Andrews University will provide student interns and also advise and assist as we conduct building surveys to establish building wireless zones. Our technology partners (Palm, Precision Data, EduTek Midwest) will not only supply hardware and software but have committed to providing additional training and support to the project.

We are ready to act immediately. Having determined how many students we will be working with, the handheld computers and software can be ordered as soon as the grant award announcement. The building site surveys will be undertaken and wireless access points ordered and installed. Our suppliers have assured us that we can have all hardware delivered and installed by the beginning of December. In conjunction with one of our partners, GoKnow, we have a proposed training and implementation calendar developed. A detailed timeline of the grant activities will be found in the attachments section of this grant. We are ready to “hit the ground running” and are confident that the timelines we have set are reasonable.

### **Planning and Implementation**

The hardware and software purchased under this grant will be used to support the learning goals of the project. Hardware and software, although a major purchase, are merely the tools that will be used

to help students learn. The portability of handheld computers will make it possible for students to access the software tools that they need at any moment, even while on the bus or at home. The GoKnow software for use on the handheld computers was selected because it contains the tools necessary to assist students in the writing process. The wireless aspect of the handheld computer will allow students to send and receive information from the teachers. The teacher, using the GoKnow Suite will be able to control what information is sent to the student handheld computers. In addition, teachers will also have access to the wireless Classroom Performance System to assess student learning in the classroom. Students from Andrews University will be available in each building to provide technical support, upgrade systems, and do simple maintenance on the hardware and software.

The key to the success of this project lies in the professional development provided to administrators, teachers and parents. The professional development activities will begin almost as soon as the grant announcement is made. Our technology partners as well as BCISD instructional technologists and curriculum specialists will provide the professional development. The training will focus on how to use the acquired technologies and software along with strategies and activities for addressing the goals and objectives of the project. Because there will be so many training activities, we will make use of our videoconferencing facilities to conduct much of the professional development. This will make it more convenient as participants will not have to travel for many of the activities. In addition, we will use the “train the trainers” model. One teacher leader will be designated in each building that will be trained and supported by the training staff. They will then train the remaining teachers in their building. BCISD Consortium members have committed to using some of their Title II Part A and Part D funds to support these professional development activities. In addition, we will use at least 25% of the grant funds for professional development. (A detailed timeline of activities will be found in the attachment section.)

Because this project is focused on the improvement of student learning in the area of writing across the curriculum, all instructional activities are based upon the Michigan Curriculum Framework.

The project also is linked to the No Child Left Behind legislation and Michigan's Education Yes! Initiative. In addition, the project relies heavily on strong parental involvement and support, which should result in better student learning and motivation. The relatively low cost of handheld computers as compared to traditional computers make it possible to supply every student with the technology. The low cost and high impact of this program design insures the sustainability of the program and should allow it to be replicated at other grade levels and in other school districts.

The BCISD has been involved in other technology consortium grants in the past. For example, the BCISD received multiple regional Technology Literacy Grants and for two years the BCISD has been the fiscal agent and project manager for two statewide MTIP grants. The BCISD has a history of being successful in implementing grants and sustaining programs started by grant activities.

### **Project Management**

As fiscal agent, the BCISD will be responsible for the successful implementation of the LWL Project. The Director of Instructional Technology and Media Services will be the project director. It will be his responsibility to oversee and direct all project activities. A project manager will be contracted to guide the day-to-day operation of the grant with 100% of his/her time devoted to the project. This person will preferably be a former technology coordinator who has deep knowledge of the ways schools work, technology and curriculum expertise, and experience working with vendors. A key part of the management team will be the Principals' Advisory Committee. It is important that all building principals are aware of and approve of all the activities of the grant. Without their 100% cooperation this project will not be possible and at this point they are excited about the project and are looking forward to its implementation. The BCISD instructional technology and subject area consultants, along with the assistance of from our technology partners, will provide the majority of professional development activities. An organizational chart along with vitas of key project personnel can be found in the attachments section.

We have a good relationship with the technology partners we have contacted to date. They are working hard to provide excellent prices for their products and also to provide other value added services. We are working with the BCISD Board of Education to allow us some flexibility in our bid requirement policies. Most of our technology partners are participants in the REMC Bid-Buy program that means we can probably waive local bidding requirements. Our budget and budget detail along with in-kind contributions can be found in the budget section of this grant.

### **Project Evaluation**

A mixed-methods evaluation model will be utilized for this grant. Both quantitative and qualitative performance indicators will be used to gauge the extent to which the four program goals are achieved. The formative measures will provide critical feedback to be used in the planning and implementation phases of the project, while summative measures will provide evidence of goal attainment and overall grant performance. Instrumentation related to both of the formative and summative measures will be designed, administered, and interpreted by the external evaluator, Lakehouse Evaluation.

The formative measures will be collected, analyzed, and utilized in planning program improvements at the end of the first, second and third quarters of the grant. The summative measures will be used along with the formative measures at the end of the fourth quarter of the grant to gauge the merit and worth of the project. Regular meetings with the project coordinator, the technology staff, and the external evaluator will occur at least twice per quarter. At these meetings continuous improvement data will be presented as collected for use in future professional development trainings and to aid in program implementation.

Both quantitative and qualitative data measures will be presented in accepted and appropriate statistical procedures while addressing both the validity and reliability of the performance indicators. The results of these measures will be the evidence leading to the creation of verifiable claim statements about goal attainment and project performance.

## **Demonstration Role**

As a demonstration site, we are inviting those interested in finding out how wireless handheld computers can be used to improve student learning to visit our schools. One of the advantages that our project has is that it is a countywide project being undertaken in 18 school districts and 20 buildings. We will be able to demonstrate a diverse range of situations that should meet the needs of anyone wishing to observe and replicate the project. We will welcome site visits scheduled by our project manager.

We will also maintain a Berrien County Learning Without Limits web site. This web site will chronicle the entire project from its beginning to its conclusion. We will also attempt to provide a journal of all the activities that we conduct as we progress through the project. The web site will allow web users the ability to e-mail questions, and we will post answers to these questions on the web site.

Our budget proposal includes the funds to conduct three statewide videoconferences. The first conference will be held at the end of February and will concentrate on the issues surrounding the start-up of this project. The second conference, in June, will feature the progress and preliminary results up to that point. The third and final videoconference will be held in October of 2003 to report progress on the first year of the project. All of these videoconferences will feature members of the management team, trainers, teachers, students, and parents, when appropriate.

Additionally, we will disseminate information about our project by submitting presentation proposals for the major conferences held throughout the state such as MAME, MIEM, and MACUL, as well as the various subject level conferences and administrator conferences.

We also plan to videotape the various activities conducted during the grant period. The video will include interviews with key personnel, teachers, parents, students, community partners, and vendors. The purpose of the video will be to explain the procedures, processes, and pitfalls of such a program so it can be replicated in other areas.

We believe that by equipping students with wireless handheld computers, training teachers in their use and partnering with parents and community, we can create a strong and healthy learning

environment for our students. The key is to provide students with the tools necessary to enable them to learn anytime, anywhere. We feel that this project provides a terrific opportunity for other schools to learn from what we will accomplish.