

**L'Anse Creuse Middle School North
Handheld Pilot Project Proposal**

Project Manager:

Beth Broder, Technology Coordinator

Project Goals

- Introduce students to a technology resource that will benefit them throughout their scholastic, work, and personal life.
- Expand technology to a 1:1 student-to-device ratio to promote student learning.
- Continue the access to handhelds that was begun at the Elementary level.
- Increase technology proficiency for students and staff
- Increase student motivation
- Promote anytime/anywhere learning
- Promote better communication between school, parent, and child

Outcomes

- Create meaningful experiences that promote technical skills (ISTE Standard I)
- Incorporate technology ethics into the curriculum (ISTE Standard 2)
- Encourage teamwork and collaboration (ISTE Standard 2)
- Teach students personal management (ISTE Standard 3)
- Have students track their own progress (ISTE Standard 3)
- Use technology to collaborate, publish, and interact with peers, staff, and other audiences. (ISTE Standard 4)
- Use a variety of media and formats to communicate information and ideas effectively to multiple audiences (ISTE Standard 4)
- To process data and report results (ISTE Standard 5)
- To evaluate and select new information resources and innovations based on the appropriateness of specific tasks.

Teachers Involved

Although all staff have been provided handhelds, the program targets 6th grade teachers whose students already have limited experience with handhelds,. Team planning time is being used for professional development on handhelds for all staff, and will continue during the 2003-2004 school year.

Expected Use

At a minimum, we expect all 6th grade staff to use handhelds as an organizational tool for students who have purchased them. Additionally, the building has purchased a class set of handhelds to be used to meet curricular objectives. Programs that will be encouraged include word processing, spreadsheet, and planning applications.

Observation/journal forms for record keeping

We will be developing surveys, questionnaires, and observation forms for staff throughout the school year. The instrument we use will be flexible depending on the information we desire. We will also use this information to set the direction of future professional development.

We will develop a questionnaire for students to gauge their use of technology to achieve academic benchmarks. The questionnaire will be administered in the fall and in the spring for analysis of the program's effectiveness.

Specific Steps

1. Handheld program is established at Green Elementary through a Project 2000 Grant
2. 6th Grade teachers teleconference with 5th grade students and teachers from Graham Elementary
3. Building Technology Team determined that the best way to achieve our technology goals was to have our staff continue and expand the handheld program begun at the elementary
4. Building Technology Team allocated Technology Bond funds to be used for the purchase of handhelds for every teacher and one class set of handhelds to be purchased for sign-out by teachers. Peripherals were also purchased including cameras, charging stations, keyboards, presentation devices, synchronization cables, print adapters, and expansion cards.
5. We met with Bev Polega, Dan Sapp, and Leslie Thirjung to garner support at the district level for professional development, software, and infrastructure needs.
6. Informational sessions were conducted at 5th grade orientation for parents whose children will attend MSN next fall.
7. Handhelds were distributed to staff and an initial training took place during team meetings devoted to technology issues.
8. Professional development will continue at team meetings for the duration of the current school year and next year.
9. By September, 2003, the building will establish a handheld technology team to discuss the issues related to handhelds in the classroom. This team will consist of teachers, students, parents, technical staff, and administrators.
10. Formative evaluations will be conducted throughout the 2003-2004 school year so adjustments can be made. A summative evaluation will be conducted at the end of the 2003-2004 school year to determine whether the program should be continued in the 6th grade and expanded to the 7th grade.

Focus questions to be answered by pilot

- Does 1:1 computing result in increased student performance?
- Are handhelds a practical solution to the limitations of desktops and laptops in the classroom?
- Are there viable handheld applications that promote achievement of district and state benchmarks?
- What were the most successful uses of the handheld technologies by students, teachers, administrators?
- With adequate professional development, will teachers adapt the use of handhelds in their instruction?
- Will use of handhelds promote a more constructivist ideology?
- What problems occur that are unique to the use of handhelds in the classroom and what are possible solutions (i.e., beaming, game playing, classroom management, storage, labeling, transportation, theft, loss, etc.)
- What safety and security concerns need to be addressed?
- How durable are the handhelds in a middle school environment? What is the rate of repair/replacement?
- How will the handhelds work in conjunction with the current network structure?
- Are parents willing to support financially the use of handhelds by their children in school?
- What is the best model to use for handheld integration ("ownership" vs. "loanership", shared set, assigned classroom set, etc.)
- What peripherals or software are needed to meet curricular objectives?

| Expenses for Pilot Program Absorbed through MSN's 2000 Bond | | | |
|---|--|--------|-----------|
| 35 | Palm m130 for Staff | 189.00 | 6,615.00 |
| 35 | Palm m130 for Students | 189.00 | 6,615.00 |
| 40 | Keyboards | 74.90 | 2,996.00 |
| 6 | Palms (Special Offer) | 0.00 | 0.00 |
| 10 | Actisys 100M IR Print Adapter | 68.00 | 680.00 |
| 2 | Igo Pitch for Palm Presentation Device | 210.99 | 421.98 |
| 8 | Palm Cameras | 100.00 | 800.00 |
| 10 | Hot Sync Cables | 11.00 | 110.00 |
| 4 | 10-Slot Charging Cradle | 360.95 | 1,443.80 |
| 10 | 16 MB SD Expansion Cards | 23.00 | 230.00 |
| 5 | 32 MB SD Expansion Cards | 30.50 | 152.50 |
| Total | | | 20,064.28 |

Additional Expenses Required to Fund Pilot Program:

1. Professional Development for staff
2. Professional Development for Principal and Tech. Coordinator
 - a. Go-Know Workshop July 28-30 at WMU - \$499 per person
3. Technical support including training of technical staff
4. Solutions for synchronization, data management, storage, Internet and network access which may include any of the following:
 - a. A class set of wireless network cards and wireless access point
 - b. Infrared Access Point
 - c. PAAM - Palm OS Artifact and Assessment Manager
5. Science data probe interface (similar to Pasco probes for laptops)
6. Grant Street Management Software - PDA Manage (to manage shared handhelds, restrict beaming, and manage document distribution) and PDA Deploy
7. Case for storage and transportation of classroom handhelds
8. Printing software - Print Boy
9. Documents to Go Software - supplied with Palm m130 handhelds
10. PowerOne Personal Calculator Software supplied with Palm m130 handhelds
11. Palm desktop software - supplied with Palm m130 handhelds

Link to District Core Values, District Goals, K-12 Curriculum Goals

We believe that the Palm pilot proposal is perfectly timed to support the district goal of increased technology integration in instruction as specified by Dr. Wunderlich at the Middle School Administrators meeting of May 5.

Many of the ISTE (International Society for Technology in Education) standards as well as the L'Anse Creuse Technology Standards can be achieved through the implementation of this proposal.

We believe that the research and planning that has gone into this proposal can establish for the district a technological alternative that shows great promise.