Communications for the New Century

Dr. M. Moallem
University of North Carolina-Wilmington
Watson School of Education
Specialties Studies
Instructional Technology Program

MIT 522 Technology Change Management

Project Proposal

Submitted May 5, 2003
Gregg Kochakji
Harry Marriner
Paul Ritchie
Table of Contents

Executive Summary .................................................. 3
Introduction ........................................................... 6
Implementation Plan .................................................. 8
Staff Development Plan ............................................. 9
Communication Plan ................................................ 15
Design of Infrastructure ............................................ 16
Technology Support Services ....................................... 16
Budget .................................................................. 17
Appendices ................................................................ 19
  A: Needs/Goals ..................................................... 19
  B: Performance Outcomes ......................................... 20
  C: Implementation Plan ........................................... 21
  D: Communications Plan ......................................... 29
  E: Budget Summary ................................................ 30
Executive summary

Pender County Schools continues to strive to create an educational environment that allows our students and staff to utilize technology to become lifelong learners and effective teachers as demonstrated in the PCS technology plan and overall school strategy. Significant investments have been made in equipment and networking. However, utilization of these resources to produce direct and indirect benefits to our stakeholders has potential for improvement at this early stage. Internet utilization is an area that has a lot of growth possibilities.

Utilization of the Internet for communication purposes is growing rapidly and soon will become the most widely used source of information, if it is not already. People’s reliance on and ability to access the Internet is expanding at a rapid rate. Utilization of these communication tools and having the skills needed to effectively design, develop, and maintain Web-based publications such as Web pages are needed and valuable capabilities.

In applying these social trends to Pender County schools, and high schools in particular, two factors emerge:

- Utilization of the Internet by teachers and administrators for communication and learning purposes is not reaching its full potential due to lack of teacher motivation and skills, along with deficiencies in networking and hardware in some cases.

- Little if any curriculum is devoted to teaching the required skills for students to demonstrate their abilities to design, develop, and maintain Web-based publications.

To these ends, we have proposed a pilot program involving investments in staff development aimed at producing the skills and ability to teach these skills to students, beginning with the graduating seniors in 2004. This program will be implemented at Trask High school due primarily to its recent construction and therefore existing updated
technology infrastructure. We propose a three-phase program for gradual implementation that will demonstrate significant impact on student performance while satisfying many indirect needs of staff, community and students. Clear measures and periodic benchmarks for performance have been included.

This program is designed to involve many school and community participants and/or stakeholders in both the planning and implementation stages. An independent outside expert will be hired for annual evaluations and recommendations. Estimated annual budget considerations for each of the three years is also included.

**Vision**

All teachers and students will have the tools (hardware, software, and training) and motivation necessary to design, develop and maintain web pages.

An educational environment will be created where Web-based publication is a primary method of communicating and sharing information within school and community.

**Mission**

Our mission is to benefit the stakeholders of the Pender County schools within the guidelines and strategic focus of NCDPI. The *Communications for New Century* technology change plan shares the overall visions of both the North Carolina Department of Public Instruction (NCDPI) and Pender County technology plans in that it envisions an environment whereby the predominant method of information sharing within Pender County Schools is based on utilization of Internet-based Web pages. In this environment, all administrators, teachers and students will have the tools (hardware, software, training) and motivation necessary to design develop and maintain active and current web pages.

Stakeholder’s benefits will include:

Community: All parents, students, and other interested parties will have immediate availability to general and course-specific information from individual teachers as well as access to school administrative details and activities.
Teachers: Utilization of individual web pages as a primary communication tool will provide a much more efficient method of communicating with the school community and enhance the learning process via provision of supporting links.

Students: Students will have immediate access to all current course-specific activities and assignments as well as developing their web page development skills.

**Strategic Assumptions:**

1. Pender County Schools concurs with the state that we must have technical support in place.
2. Pender County Schools continues to support the research that finds teacher staff development as the single most important factor affecting the successful use of technology in the classroom.
3. Pender County Schools will continue to seek grant funding to increase opportunities for staff development so that teachers are proficient in the use of technology as a tool for instruction.
4. Pender County Schools continues to concur with NCDPI that “high speed Internet IP connectivity is the backbone on which most educational technology services will be delivered in the next five years,” and that, “without this high-speed access, school systems will fall behind both instructionally and administratively.”
5. Each school will implement a technology-rich program based on that school’s improvement plan and consistent with each area of the Standard Course of Study.
Introduction:

It is the belief of the Communications for the New Century team that all teachers and students should have the tools (hardware, software), skills (training) and motivation necessary to design, develop and maintain web pages to increase the effectiveness of communication within the school and community. Further, we intend to create an educational environment where Web-based publication is not merely an educational adjunct, but a primary method of communicating and sharing information. Under our proposal, benefits in teacher-student-community relations will increase for all parties:

The Community will gain immediate, on-demand access to general and course-specific information from individual teachers, as well as immediate access to school administrative information and school activities.

Teachers will have a more efficient method of communicating with the school community, and will have the advantage of learning enhancements via Web-based activities, collaborative learning, and online support materials.

Students will have immediate access to current course activities and assignments in addition to the development of web page development skills to increase their effectiveness in communication and as a source for developing and exhibiting writing skills.

The reasons for this proposal are two fold: (1) for its positive impact on student learning and performance, and (2) to comply more completely with North Carolina and Pender County strategic goals.

The impact on student learning will be felt in increased writing skill, knowledge of legal and ethical issues and student development of Web design and presentation skills that will be valuable, we believe essential, skills in the 21st century. Student learning will also benefit from the increased knowledge and competence of teachers. Under this proposal, teachers will develop a new tool of communication with which to keep their students and
the community informed of essential course-related information. Instruction in Web-page
development will open a new conduit for sharing information and work products between
teachers and students and between students themselves, enabling greater collaboration in
the school learning environment. Also, the use of the Web for exhibiting and critiquing
writing skills provides an increased motivation for students to produce, improve and
share their work.

The North Carolina Standard Course of Study, the Pender County Strategic Plan, and the
Pender County Technology Plan all require the use of computer technology to enhance
and extend learning at all grade levels. Implementation of our proposal will meet the
stated desires of educators and students while effecting compliance to external demands
on the schools for student performance, including:

NC Technology Competencies for Educators
The following competencies are directly addressed by our proposal:

12.3 Use computers and other technologies effectively and appropriately to communicate
information on student learning in a variety of formats to colleagues, parents, and others.
12.7 Incorporate the use of media and technology for teaching where appropriate, and use
a variety of media communication tools.
14.3 Demonstrate knowledge through practical application of social, legal, and ethical
issues related to technology.

Pender County Schools Educational Technology Plan 2001 – 2005
Pender County Schools’ strategic plan states that technology provides heightened interest
and motivation. To increase the participation of the community and family in schools,
technology “is the ultimate vehicle for communication with the community and the
family.” Our proposal speaks directly to this plan by increasing both communication
skills for students through the use of technology, as well as increased communication
with the community through technology.
The Basic Education Program for North Carolina's Public Schools states the learner will use a variety of computer technologies to access, analyze, interpret, synthesize, apply, and communicate information. The complex task of writing for the Web requires the development of all of these higher order thinking skills, and the skills are even more applicable when developed in a context of design and presentation to be viewed by the public.

Under the current situation, the learning potential present in publishing for the Web is being underutilized by both students and teachers. There are currently no student-developed Web pages on the Pender County Schools Schoollink Web site. Teacher Web sites are rare, and usually have a very limited purpose such as giving homework assignments. Even though survey results show that teachers are favorable to the idea of using Web publication to enhance learning, teaching and communication, the evidence of the practice is virtually non-existent. The reasons for this gap are: (1) teachers and students lack the technology tools necessary to support the use of Web publishing, and (2) they lack the Web design and development skills needed. The implementation of this proposal will satisfy both of these needs.

Implementation

The implementation of the Communications for the New Century proposal will take place in three phases over a period of three years. By implementing in phases, the proposal allows for evaluation and revision of training as the program progresses. Early emphasis on early adopters will help hone the accuracy of the training for later groups. Budget expenditures will be minimized by spreading the training over three years, rather than attempting to train all teachers immediately. This also reduces the strain on the organization’s time and resources. The three-phase approach also allows time to show results, the success of which will gain support from school and community for continuation of its implementation. Furthermore, phasing in the plan will allow a focus on 2004 graduates. We do not wish to put off the learning of Web-publishing skills, which we think will be essential to students in the future, to future classes. By aiming our initial phase at English IV classes, we can turn out a class of Web-competent students in
the first year. Eventually all graduates will receive web publishing instruction, as English IV teachers will be ready for the class of 2005 while teachers in other areas are trained.

The first step in the implementation plan is to make Trask High School technologically ready for the innovation. Fortunately, the school is well equipped with a modern infrastructure capable of supporting the added technology. The school has an adequate number of computers in computer labs and classrooms, along with high-speed T1 communication lines throughout the school. The only additional technology needed will be the installation of a Web server and its attendant configuration software. This will be installed by October 2003.

Given the installation of the Web server, it will be possible to begin training the staff to use Web page design software to build their own Web pages. The training will begin with equipping the teachers to construct pages for their own use, where they can post course outlines, assignments, resources, etc. The next step will train these teachers who have developed competency in building Web pages to teach these skills to students. These skills will include integration of Web pages into class assignments, using the pages as vehicles for improving writing, design and communication skills in their students. Details of the plan for staff development are in the following paragraphs and in Table 1 on page 14.

Staff Development Plan for Communications for the New Century

Vision
The goal of Communications for the New Century is to enable students to learn to create Web pages, which then can become a motivational tool to teach the students to improve and refine their communications skills. By the end of the program, all English teachers will serve as facilitators in the process of the creation of student Web pages, and all teachers will be competent in using their own Web pages to communicate goals and standards with students, parents and the community. The staff development needed to accomplish this vision will be carried out in three phases, according to the following plan.
Staff Development Goals and Objectives

Phase 1
1. By the end of 2003, all English IV teachers (5) will be able to effectively teach web design and development skills.
2. By the end of 2003-2004 school year, 15 other teachers will design, develop and maintain curriculum-related web pages meeting established standards.

Phase 2
1. By the end of 2004, five more English teachers will be able to effectively teach web design and development skills.
2. By the end of 2004-2005 school year, 15 more teachers will design, develop and maintain curriculum-related web pages meeting established standards.

Phase 3
1. By the end of 2005, all English, Foreign Language, Physical and Social Sciences teachers, teaching senior level courses, will be able to effectively teach web design and development skills.
2. By the end of 2005-2006 school year, all teachers will design, develop and maintain curriculum-related web pages meeting established standards.

Phase 4
1. Staff development activities will continue to reinforce the aims of the program and provide maintenance and support for the integration of Web pages into communications education through targeted workshops, just-in-time training sessions and individualized support.

Current Situation
Few teachers currently have Web pages to inform the school and community of events in their classrooms. None at present have the capability of teaching students through Internet-connected Web pages. Rudimentary staff development in Web page authoring has begun as a result of a required web page development training session. Every member of the staff was required to attend a workshop on Web page construction using the Yahoo Geocities Page Builder web-based software. It allows users to develop web
pages in a simple format, easily manageable by those with adequate word processing skills (96% of those surveyed). If they did not attend the workshop, teachers were required to sign a form stating that they possessed the competencies covered in the workshop. The web pages that were developed are housed on Yahoo’s Geocities Web site. Competencies addressed in this workshop, in reference to the web development interface used, include:

- Establishing an index page as well as new pages
- Making links within a Web site and to addresses on the Worldwide Web
- Adding text to web pages
- Adding graphics to Web pages
- Formatting text
- Formatting graphics
- Copying/Pasting to and from Web pages
- Updating/modifying existing Web pages

Continued staff development is required to reinforce the beginning knowledge and to aid teachers in the integration of this knowledge into their teaching and communications.

Staff Development Model

*Communications for the New Century* will employ two staff development models, which will be applied at different phases of the program. The initial phase of staff development for each group of teachers will be done on a Training Model. Training staff will conduct workshops for teachers, starting with English IV teachers, in 2003. As the English IV teachers master attain the competencies and begin to use them independently, a Development/Improvement Model will be employed. Once involved in the process of creating Web pages and teaching students to create Web pages, teachers will identify their own needs for improvement and can rely on staff development personnel to instruct them, set up instruction for them, or provide resources for self-instruction. Areas addressed can be content, design, classroom integration or any other staff development needs that arise.
Cost
Funding for *Communications for the New Century* will come from the school staff development funds and grants. Most of the initial training for each training group (see objectives above) will be conducted as in-service training during the teacher workdays at the beginning of the school year, teacher workdays during the school year, and staff development half days embedded into the school calendar. This will obviate the hiring of substitutes, thus reducing costs. This training will meet the Pender County Schools and Trask High School Improvement Plans, as well as contributing to fulfilling the technology competency requirement teachers must meet each license renewal period. These factors will aid in procuring county and grant funds.

Support
Selected school staff, both teachers and administrators, were interviewed to garner information on the attitudes of school personnel toward an in-school Web server and its attendant emphasis on Web-based communications instruction. The interviews indicated a generally positive attitude towards the change to a local Web server and a program of Web-based communications education, although some resistance exists from the non-communications related teachers (e.g. math), who would be using Web development for their own teacher Web pages as opposed to teaching Web publishing skills to students. The administration is very supportive if funds can be obtained for hardware and additional teacher training.

Evaluation/Assessment Plan
To evaluate the effectiveness of the teacher training, an Assessment Team will be assembled. This team will create rubrics to assess the products developed by teachers after receiving instruction. Rubrics will also be created to assess student pages in order to measure the effectiveness of classroom instruction in Web page development.
Continuing staff development will be guided by the results of the yearly self-assessment teachers are now required to complete in accordance with the *No Child Left Behind* legislation, as well as by teacher requests to fulfill perceived needs.

All training will be evaluated by participants as to the effectiveness of the presenters, as well as the applicability and transferability of the content relative to the learners’ needs.
<table>
<thead>
<tr>
<th>Goal</th>
<th>Model</th>
<th>Delivery System</th>
<th>Time line</th>
<th>Funding</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Eng IV teachers (5)</td>
<td>Training</td>
<td>Workshop</td>
<td>January, 2004</td>
<td>County staff development funds</td>
<td>Evidence of student Web pages on server.</td>
</tr>
<tr>
<td>1.2 Early adopting classroom teachers (15)</td>
<td>Training</td>
<td>Workshop</td>
<td>June, 2004</td>
<td>County staff development funds</td>
<td>Evidence of teacher Web pages on server.</td>
</tr>
<tr>
<td>2.1 All English teachers not teaching English IV (5)</td>
<td>Training</td>
<td>Workshops</td>
<td>January, 2005</td>
<td>County staff development funds</td>
<td>Evidence of student Web pages on server.</td>
</tr>
<tr>
<td>2.2 Fifteen teachers</td>
<td>Training</td>
<td>Workshops</td>
<td>June, 2005</td>
<td>County staff development funds</td>
<td>Evidence of teacher Web pages on server.</td>
</tr>
<tr>
<td>3.1 All English, Foreign Language, Physical and Social Sciences teachers, teaching senior level courses. (15)</td>
<td>Training</td>
<td>Workshops</td>
<td>January, 2006</td>
<td>County staff development funds</td>
<td>Evidence of student Web pages on server.</td>
</tr>
<tr>
<td>3.2 All remaining untrained teachers (20)</td>
<td>Training</td>
<td>Workshops</td>
<td>June, 2006</td>
<td>County staff development funds</td>
<td>Evidence of teacher Web pages on server.</td>
</tr>
<tr>
<td>4.1 Continuous staff development.</td>
<td>Development/Improvement</td>
<td>Individualized support; Just-in-time training sessions; Annual ½ day teacher sharing sessions.</td>
<td>January, 2004 until need is not present.</td>
<td>Grant for Technology Resource Person’s salary. School staff development funds.</td>
<td>Self-assessments; participant evaluation forms.</td>
</tr>
</tbody>
</table>
Communication Plan

An effective communication plan ensures awareness and acceptance of the *Communications for the New Century* proposal. All stakeholders will receive attention in this plan. School board members, school administrators, county administrators, county technical personnel, parents and the press will be made aware of the new technology proposal in an initial presentation before the Board of Education. These same stakeholders will be kept aware of the progress of the project through semi-annual reports sent via email and/or U.S. mail. At the conclusion of the three-year project, a summative evaluation of the project by an outside evaluator will be presented to the Board of Education.

Teachers at Trask High School will be informed of the project goals and vision, as well as the staff development plan, at a staff meeting at the beginning of the school year, wherein a presentation will be made via PowerPoint. Thereafter, monthly emails to staff will keep everyone apprised of the schedule of training. As teachers learn to develop Web sites, their products will be selected as examples for the rest of the staff. Email to staff informing them of interesting staff Web sites to see will be sent as progress warrants. Trained staff will have the opportunity to meet twice yearly to discuss progress and problems and to support each other’s efforts. These meetings will help trainers pinpoint problem areas and unmet needs to better support the staff. Teachers who complete the training and develop exemplary Web pages will receive certificates and awards in a ceremony at the end of the school year. Awareness will be further aided by development of a Web site especially for teachers learning to develop and integrate Web pages into their teaching. This site will contain information on workshops, online resources, frequently asked questions, and will show examples from other school systems of effective use of Web pages for teaching. Details of the Communication Plan are in Appendix D.
Design of Infrastructure
To host teacher and student Web pages, a Gateway 955 Series server will be installed in the data room of Trask High School. This compact server will easily fit in the space along with other equipment. Total cost of purchasing and installing the server will be $4000. The server will be connected to the Internet through T1 lines already in place at the School, using the school system’s Internet service provider. The $20 per year cost of registering the domain name for the server is included in the $4000 total for installation.

Technology Support Services
The Communications for the New Century project provides technological support through hardware, software and training. An initial outlay of $4000 will purchase a server to be placed in Trask High School. This server will host the school Web pages, which will be available via the Internet to all interested parties. Thanks to the foresight of Pender County Schools in equipping the school with modern computer facilities, this will be the only necessary hardware purchase.

Software needs are met at a minimal cost. Software for configuring the server comes packaged with the server. A firewall, to provide security, is already integrated into the Pender County technology infrastructure. The Web pages created by teachers and students can be created using Netscape Composer. Composer is an easy-to-use Web page editing tool that comes packaged with the Netscape Navigator Web browser, available for free via Internet download. Internet access is already in place through the county. Software to send Web pages to the server is available free via Internet download from Ipswitch, producer of WS_FTP LE, an efficient basic ftp (file transfer protocol) program. The only software costs of this project will be registration fees for the unique Internet domain name. This service is available for $20 per year.

Keeping the project going depends on the reliability of the technology. Technical support staff are employed by Pender County Schools to repair and maintain computers. Among these employees is an expert in networks, both LAN and WAN. Since these employees
are already paid for the maintenance needs of the system, no additional costs will be incurred for these services.

For classroom instruction in Web development, presenters that project the computer screen onto a larger surface for class viewing are available to teachers through the school audio-visual department. Maintenance is again the responsibility of county technology department employees.

**Budget**

Because training is the most effective means of improving teacher performance, the *Communications for the New Century* project has been designed to place the bulk of its budget on providing teachers with the skills necessary to develop effective Web sites and to teach these skills to students. After the initial first year purchase of a Web server, the budget for this proposal will be almost exclusively training related. To provide motivation as well as adequate compensation for teachers’ time in training, a stipend of $200 will be paid for each workshop the teacher takes. The cost of the workshop design, development and delivery will cost $100 per teacher. Assessment of the learning in the workshop is also considered, at a cost of $50 per teacher per workshop. This totals to $350 per teacher per workshop total cost. During the first two years of the project, twenty teachers will be trained, for a total training cost of $14,000. In the third year, the remaining teachers, a number of 35 at present staffing levels, will cost $24,500. The total investment of $38,500 over the three years will provide Trask High School with a staff fully competent to fulfill the goal of using Web-based communications as a primary communication tool.

Looking into the future, we have provided budgetary factors for upgrades of computer software to keep pace with advancing technology and for maintenance costs, in amounts of $600 and $1500 respectively over three years.
A qualified external evaluator will conduct evaluation of the program yearly, under agreement with the Watson School of Education Department of Instructional Technology at UNC-Wilmington. The evaluator will be paid $500 per day for a two-day evaluation of the implementation and success of the program. This cost will total $3000 over the three years of the proposal.

*Communications for the New Century* advocates that a full time Technology Facilitator employed at Trask High School oversee this program. Such a position does not currently exist. However, our research of the costs of this program compared the costs of using twenty percent of the time of a full time Technology Facilitator to outsourcing the maintenance, training, support, and assessment necessary. The result was a savings of $22,500 over the three years of the project in addition to having a full time staff person to assist all teachers in the school, not only in Web page development, but all the other needs of integrating computers into the curriculum as well.
## Appendix A: Needs/Goals

<table>
<thead>
<tr>
<th>Needs</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students need to possess skills to effectively communicate via web pages</td>
<td>By end of the 2005-2006 school year, 80% of students in all English classes will score a level 3 or 4 on teacher-developed rubrics assessing web design and development skills.</td>
</tr>
<tr>
<td>Teachers need to possess web design and development skills to effectively communicate via web pages</td>
<td>By end of the 2005-2006 school year, 100% of teachers will possess the skills to design, develop and maintain web pages.</td>
</tr>
<tr>
<td>Teachers need to possess the skills necessary to incorporate web page design and development into their teaching practices</td>
<td>By end of 2005, 100% of English IV, Foreign language, Physical and Social Sciences teachers will be able to facilitate student demonstration of learning through web design and development.</td>
</tr>
<tr>
<td>Trask High School needs the hardware to host student and faculty web pages via a web based server</td>
<td>By end of September 2003, Trask High School will have web-based server for housing web pages on-site.</td>
</tr>
<tr>
<td>Trask High School needs the software to design, develop and maintain student and faculty web pages via a web based server</td>
<td>By August of 2003, Trask High school will have the necessary software installed on specified computers for web page development as needed, and will provide staff training and support.</td>
</tr>
</tbody>
</table>
**Appendix B: Performance Outcomes**

<table>
<thead>
<tr>
<th>Current Conditions</th>
<th>Desired Conditions</th>
<th>Data on Which They Are Based</th>
</tr>
</thead>
</table>
| Students lack web design and development skills to effectively communicate via web pages | Upon graduation, students possess the skills to effectively communicate via web pages. | • Observations  
• Course Syllabi  
• Assessment of Work Samples using rubric |
| Teachers lack web design and development skills to effectively communicate via web pages | Teachers possess the skills to effectively communicate via web pages | • Number of teachers publishing web pages providing general and course-specific information  
• Technology Skills Survey |
| Teachers lack the skills to incorporate web page design and development into their teaching practices | Teachers possess the skills to incorporate web page design and development into their teaching practices | • Peer/classroom Observation  
• Technology Skills Survey  
• Number of student and/or organizational web pages created by students for teacher assignments |
| Trask High School lacks the hardware needed to host student and faculty web pages via a web based server | Trask High school possess the ability to host student and faculty web pages via a web based server | • Technology inventory  
• Observation  
• Server installed and functional |
| Trask High School lacks the software needed to design, develop and maintain student and faculty web pages via a web based server | Trask High School possess the software needed to design, develop and maintain student and faculty web pages via a web based server | • Technology inventory  
• Observation  
• Survey of users for availability and usability of software |
# Appendix C: Implementation Plan

## PHASE I (Fall 2003 - Spring 2004)

<table>
<thead>
<tr>
<th>Goals</th>
<th>Benchmarks</th>
<th>Indicators</th>
<th>Activities/Strategies</th>
<th>Timeline</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve student communication skills</td>
<td>All students will score at level 3 or 4 on teacher-developed rubrics assessing Web design and development skills.</td>
<td>Students in English IV will demonstrate communication skills by creating Web pages that teachers judge to show a high quality of communication skills.</td>
<td>Integrate Web design and development into curriculum involving Web page construction for educational activities and/or assignments.</td>
<td>By end of the 2003-2004 school year</td>
<td>Student scores on evaluations of communications skills exhibited in Web pages.</td>
</tr>
<tr>
<td>All English IV teachers will be able to effectively facilitate student learning of Web design and development skills.</td>
<td>Teachers will integrate Web-based publishing into their curriculum.</td>
<td>Staff development for 5 English IV teachers on how to integrate the design, development and maintenance of Web pages into their teaching curriculum.</td>
<td>By end of 2003</td>
<td>Number of assignments incorporating Web pages for communication. Peer/classroom observations</td>
<td></td>
</tr>
<tr>
<td>Professional Development</td>
<td>Fifteen teachers will design, develop and maintain Web pages meeting established standards</td>
<td>Teachers will integrate Web-based publishing into student/community communication</td>
<td>Three different staff development workshops for 15 classroom teachers on how to design, develop and maintain Web pages. Providing ongoing support services for all trained users.</td>
<td>By end of the 2003-2004 school year</td>
<td>Teachers publishing Web page(s) providing general and course specific information that meet administrator-developed checklist/rubric.</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>All English IV teachers will be able to effectively facilitate student learning of Web design and development skills.</td>
<td>Teachers will integrate Web-based publishing into their curriculum.</td>
<td>Staff development for 5 English IV teachers on how to integrate the design, development and maintenance of Web pages into their teaching curriculum.</td>
<td>By end of 2003</td>
<td>Number of student and/or organizational Web pages created by students for teacher-mandated assignments. Peer/classroom observations</td>
</tr>
<tr>
<td>Technology</td>
<td>Trask High School will have Web based server for housing Web pages on-site</td>
<td>School will have technology infrastructure in place to support on-site Web pages</td>
<td>Installation of Web server.</td>
<td>By end of September 2003</td>
<td>Server is up and running correctly</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>--------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td>Necessary software installed on specified computers for Web page development as needed.</td>
<td>Necessary CPU’s will have software installed to support Web page design, development and maintenance.</td>
<td>Installation of Web page design, development and maintenance software.</td>
<td>By August of 2003</td>
<td>All noted CPU’s have necessary software installed, configured and running.</td>
</tr>
</tbody>
</table>
### Phase II (Fall 2004-Spring 2005)

<table>
<thead>
<tr>
<th>Goals</th>
<th>Benchmarks</th>
<th>Indicators</th>
<th>Activities/Strategies</th>
<th>Timeline</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve student communication</td>
<td>All students in English classes will score a level 3 or 4 on teacher-developed rubrics assessing Web design and development.</td>
<td>Students in all English classes will demonstrate communication skills in the form of Web pages that teachers judge to be of high quality.</td>
<td>Integrate Web design and development into the curriculum involving Web page construction for educational activities and/or assignments.</td>
<td>By end of the 2004-2005 school year</td>
<td>Student scores on evaluations of communications skills exhibited in Web pages.</td>
</tr>
<tr>
<td>Professional Development</td>
<td>All English teachers will be competent in teaching Web design and development skills to students after attending Web-publishing workshop(s).</td>
<td>Teachers will integrate Web-based publishing assignments into their curriculum.</td>
<td>Staff development workshops for 5 English teachers on how to integrate the design, development and maintenance of Web pages into their teaching curriculum.</td>
<td>By end of the 2004</td>
<td>Number of Lesson Plans that incorporate Web publishing skills into lessons/assignments. Peer/classroom observations</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Fifteen teachers not trained in the Phase 1 will design develop and maintain course related Web pages meeting administrator-designated criteria.</td>
<td>Teachers will integrate Web-based publishing into student / community communication</td>
<td>Staff development workshops for 15 classroom teachers on how to design, develop and maintain Web pages.</td>
<td>By end of the 2004-2005 school year</td>
<td>Number of teachers publishing Web page(s) providing general and course-specific information that meets administrator-developed checklist/rubric.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Trask High School will support and maintain a Web-based server for housing Web pages on-site and will meet student and staff requirements for software and support.</td>
<td>Trask High School will have Web-based server up and running 95% of the time.</td>
<td>Maintenance and support for Web based server and staff/students as needed.</td>
<td>2004-2005 School Year</td>
<td>Percent meeting / exceeding staff and student requirements for server and approved software utilization. (Survey based assessment)</td>
<td></td>
</tr>
</tbody>
</table>
### PHASE III (Fall 2005-Spring 2006)

<table>
<thead>
<tr>
<th>Goals</th>
<th>Benchmarks</th>
<th>Indicators</th>
<th>Activities/Strategies</th>
<th>Timeline</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve student communication skills</td>
<td>All students in grade 12 English, Foreign Language, Social and Physical Sciences classes will score a level 3 or 4 on teacher-developed rubrics assessing Web design and development.</td>
<td>Students in all grade 12 English, Foreign Language, Social and Physical Sciences classes will demonstrate skill in developing Web pages that teachers judge to be of high quality.</td>
<td>All grade 12 English, Foreign Language, Social and Physical Sciences classes will integrate Web design and development into their curricula involving Web page construction for educational activities and/or assignments.</td>
<td>By end of the 2005-2006 school year</td>
<td>Student scores on communication skills evaluations and on evaluations of Web page construction skills.</td>
</tr>
<tr>
<td>Professional Development</td>
<td>All English, Foreign Language, Physical and Social Sciences teachers will be able to facilitate student learning through Web design and development.</td>
<td>All English, Foreign Language, Physical and Social Sciences teachers will integrate Web-based publishing into their curricula.</td>
<td>Staff development workshops for 20 teachers not previously trained on how to integrate the design, develop and maintenance of Web pages into their teaching curriculum.</td>
<td>By end of 2005,</td>
<td>Number of student and/or organizational Web pages created by students for teacher-mandated assignments. Peer/classroom observations.</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>All teachers will design develop and maintain Web pages meeting administrator-designated criteria.</td>
<td>Teachers will integrate Web-based publishing into student / community communication.</td>
<td>Staff development for 15 classroom teachers not previously trained how to design, develop and maintain Web pages</td>
<td>By end of the 2005-2006 school year</td>
<td>Number of teachers publishing Web pages providing general and course-specific information that meets administrator-developed checklist/rubric.</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Trask High school will support and maintain Web based server forhousing</td>
<td>Trask High School will have Web based server up and running 95% of time</td>
<td>Maintenance and support for Web based server and staff/students as needed</td>
<td>2005-2006 School Year</td>
<td>Number Meeting / exceeding staff and student requirements for server and approved</td>
</tr>
</tbody>
</table>
Web pages on-site and will meet student and staff requirements for software and support.

Software utilization.
(Survey based assessment)
# Appendix D: Communications Plan

<table>
<thead>
<tr>
<th>Group</th>
<th>Purpose</th>
<th>Frequency</th>
<th>Vehicle</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders</td>
<td>Generate awareness and support</td>
<td>One time</td>
<td>Initial presentation</td>
<td>Project Manager or Tech Facilitator</td>
</tr>
<tr>
<td></td>
<td>Keep up to speed on progress and results</td>
<td>Semi annual</td>
<td>Email or snail mail (parents)</td>
<td>Tech Facilitator</td>
</tr>
<tr>
<td></td>
<td>3-yr project summative evaluation</td>
<td>One time</td>
<td>Report presented</td>
<td>Tech Facilitator</td>
</tr>
<tr>
<td>Active participants-</td>
<td>Generate awareness and support</td>
<td>One time</td>
<td>Initial meeting</td>
<td>Project Manager, Technology Facilitator</td>
</tr>
<tr>
<td></td>
<td>Activity schedules</td>
<td>Monthly</td>
<td>Emails</td>
<td>Tech Facilitator</td>
</tr>
<tr>
<td></td>
<td>Web page development support info</td>
<td>As available</td>
<td>Email Web sites</td>
<td>Tech Facilitator</td>
</tr>
<tr>
<td></td>
<td>Post training discussions</td>
<td>Twice year</td>
<td>Meeting</td>
<td>Tech Facilitator, Principal</td>
</tr>
<tr>
<td></td>
<td>Recognition of training completion</td>
<td>1/yr</td>
<td>Certificate and award ceremony</td>
<td>Tech Facilitator</td>
</tr>
<tr>
<td></td>
<td>Access to support Web site</td>
<td>Ongoing</td>
<td>Web site</td>
<td>Tech Facilitator, Contributors</td>
</tr>
<tr>
<td>Non active</td>
<td>Generate awareness and support</td>
<td>One time</td>
<td>Memo from principal</td>
<td>School Principal</td>
</tr>
<tr>
<td>participants</td>
<td>Show successes</td>
<td>As available</td>
<td>Email Student/teacher work examples (sites)</td>
<td>Tech Facilitator</td>
</tr>
</tbody>
</table>

Stakeholders group: School administrators, parents, county administrators, county technology personnel, Board of Education.

Active participants: Trained teachers, Trask High School administration

Non- active participants: Teachers not yet trained, Trask High School administration.
Appendix E: Budget Summary

Budget Assumptions

Hardware- $4000
Teacher Workshop Compensation- $200/day
Workshop costs (prep, food, materials)-$500/day
Independent Evaluation- $500 day
Software upgrades-$200/yr
Server/network maintenance- $400/yr
10% of full time Technology Facilitator- $4000

Proposed Budget

<table>
<thead>
<tr>
<th></th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003-04</td>
<td>2004-05</td>
<td>2005-06</td>
</tr>
<tr>
<td>Hardware</td>
<td>$4000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Development</td>
<td>$13,500 (20 teach)</td>
<td>$13,500 (20 teach)</td>
<td>$22,500 (35 teach)</td>
</tr>
<tr>
<td>Software upgrades</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
</tr>
<tr>
<td>Network/server</td>
<td>$500</td>
<td>$500</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>$1000</td>
<td>$1000</td>
<td>$1000</td>
</tr>
<tr>
<td>Evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% Technology</td>
<td>$4000</td>
<td>$4200</td>
<td>$4400</td>
</tr>
<tr>
<td>Facilitator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>$23,200</td>
<td>$19,400</td>
<td>$28,600</td>
</tr>
</tbody>
</table>