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Consortium Project.

The idea for this consortium was formed initially from a group of technical representatives that were assembled to provide for multimedia support at the League for Innovation Conference held in San Diego in 1991. Both media and computer support staff were supplied by the colleges. The team that was formed worked so well together that at the conclusion of the conference, it was decided to continue efforts to bring multimedia into the colleges. An organization called SDICCCA (San Diego Imperial County Community College Association), whose membership is made up of the presidents and chancellor’s of each college and district, was addressed and asked whether this type of effort would be supported. The response was very positive and thus the multimedia consortium idea was launched.

The eight-college consortium membership currently consists of the college president, one multimedia primary contact person" and two or more faculty members. The consortium director assumes the leadership role of all communication between members, calls and chairs monthly meetings, and meets regularly with the SDICCCA organization. The "multimedia primary contact" is a key element of the consortium team. These individuals are creative and innovative and are typically viewed as people who get things done. Most hold faculty teaching positions with some management responsibilities included and almost all hold positions related to computer technology. These primary contacts directly support the efforts of the faculty and communicate needs to their campus community. Until all the colleges connect to the Internet network, the FAX machine serves as our best form of communication.

The strength that has helped this consortium become successful is its use as a tool to get "buy-in" from college presidents who might otherwise not be interested in supporting one or two faculty members working on a "computer project". Additionally the combined multimedia knowledge that has been obtained by the individuals involved in this project has been phenomenal and truly exemplifies the idea that the whole is greater than the sum of its parts.
Justification for Second Year Funding

Eight colleges within the County of San Diego have participated in a 1992-93 FII consortium funded project which has successfully provided multimedia technology and skills to the colleges.

Sixteen faculty members were carefully selected from the colleges to participate in the project. Selection of faculty was based on them having excellent classroom reputations, some basic computer skills, a suitable multimedia project idea, and both the faculty member and the project idea being from a diverse population. Appendix A indicates the demographics of the selected faculty and their project titles.

These faculty members were trained in multimedia concepts through an excellent training program offered by IBM, as an industry partner to the project. The training consisted of three one-day sessions spaced at strategic intervals in the program. The consortium selected the IBM Ultimedia computer system as its standard, and Toolbook as its multimedia development software. All colleges provided equipment and software to its faculty participants as a consortium requirement.

Faculty members were asked to invest twenty hours in a "throw-away" prototype of their project. This prototyping exercise would hone their multimedia development skills, help them become familiar with their computer systems, and provide a basic outline of their project. When these prototypes were completed they were shared and critiqued by experts within the field, as well as by their peers. Armed with suggestions for improvement, the faculty members were sent off to perfect their systems and again assemble near the end of the project for another prototype sharing. The finished products are scheduled to be displayed at a Multimedia Exposition scheduled for August 17, 1993.

This exposition, targeted for an audience of between 500-800 faculty, staff, and administrators, will feature well-known multimedia experts, multimedia vendor displays, college displays, a special break-out session for consortium college presidents and vice presidents, and a training session for forty newly selected faculty members (five from each college).

The 1992-93 project has made arrangements with the San Diego Department of Education Media Consortium, to place copies of the sixteen completed projects in the Media Consortium so they can be checked out by the consortium colleges. This will make available to students the multimedia presentations that have been thus far
developed.

Although the first project has not been completed at the time of this writing, the preliminary outcomes strongly suggest that:

1. Multimedia is a viable instructional tool.

2. Faculty are very capable of producing multimedia products suitable for classroom use.

3. Multimedia development accelerates when a support system is in place.

The concluding project will have established, as a minimum at each campus, a small trained multimedia development team consisting of two instructors and one support individual, a collection of sixteen multimedia consortium projects to utilize, a fully functional multimedia computer system with software, and five newly selected, and partially trained faculty who are interested in trying this new technology. This represents a small population of 64 budding multimedia enthusiasts who want to continue their growth and expertise in the design and implementation of multimedia classroom presentations.

Ideally, each campus should at this time identify more faculty projects to support, purchase more hardware and software for both students and teachers to use, and establish a structure within the campus for continued support of this type of innovative development. For several reasons, this "ideal" isn't possible at this time. First, fiscal constraints will most likely curtail most non-essential equipment purchases, and second, the standards for multimedia aren't firm enough yet for the colleges to see a clear course of direction.

The 1992-93 project was supported extensively by IBM and therefore used IBM computers and software. This second project is obviously "vendor independent" simply because the consortium wishes to explore and evaluate some of the other vendor tools and options available. As multimedia develops within the industry, and at the colleges, the consortium can serve as a clearing house for new ideas and products and can assist both faculty and colleges in making critical decisions which can effect the direction of future resources. Given then the fiscal constraints, the current status of each of the colleges, and the continued desire to continue multimedia research and development, the consortium feels that these budding multimedia teams need:
1. An active advocate to encourage college presidents to endorse innovative instructional techniques.

2. More instruction on various multimedia topics.

3. A "help desk" support system to assist with their advanced questions.

4. A forum for sharing and celebrating their accomplishments.

5. Support for continued development efforts.

6. A mechanism for advertising and promoting the sixteen multimedia software projects that were developed during the first year.

Within each college, the teams are too small to accomplish the efforts stated above. Without the consortium a few resourceful faculty members would be able to accomplish multimedia development, but most would simply become discouraged and move on to other areas. When the colleges join forces and share resources and information, the task of moving the innovative influences of multimedia can be accomplished. Presidents can be encouraged to allocate funds for equipment and software, teachers feel the organizational strength behind their efforts through the consortium, and gradually this new technology will become established.
The demographics of the community college student is changing dramatically. As stressed in the Board of Governor's Basic Agenda of Priorities, there will be an increased need to meet the needs of students who are older, have English as a second language, need remedial and precollegiate skills, and come from diverse cultural backgrounds.

In times of tight economic budgets, the spirit of faculty can become very discouraged. Projects such as this can redirect the focus toward a faculty members self improvement. At a point of time in the future, when sufficient faculty are trained, and significant multimedia projects exist, a demand for student multimedia workstations will be loud and strong.

Considering the fact that by its very nature most multimedia presentations can be an independent learning experience, it would be a wonderful boon to our educational system today if this technology could be accelerated and sufficient courseware could be available now to assist in offering alternative teaching styles, which would be very successful to these changing student populations, during these tight economic times. However, again with an eye to reality, the faculty must first be trained, and the courseware then developed, tested, and proven, and then the student will begin to develop.

Developing multimedia is time consuming, but it is also an incredibly enjoyable and creative endeavor. It brings into sharp focus the ability to weave critical thinking exercises that might otherwise be ignored in a typical lesson plan. For example, the faculty developer is constantly asking, "What if the student doesn't agree this concept .... perhaps I need to insert an alternative path for him to explore..." This leads to the development of courseware that will actually "hook" the student by catching his curiosity and helping him decide what else he wants to learn.

One of the benefits of multimedia projects is that they are portable and when developed within a standard, can be mailed or transmitted electronically almost anywhere. If properly documented, teachers could begin using these products without the necessity of knowing how the courseware was prepared.
In summary this consortium believes that multimedia software products could become one of the solutions to the Board of Governor's Agenda of Priorities, and that its use indeed has statewide and even nationwide suitability to answering the questions about how to deal with the changing demographics of public education.
This is a proposal for a Fund for Instructional Improvement (FII) consortium grant for $32,190. This proposal addresses the focus of Faculty and Staff Development as specifically identified in the California Code of Regulations, Title 5, Section 56652.

Training and improving the skills of faculty and staff has been the driving force with both the first year project and this one. Multimedia, which marries interactivity, critical thinking, sound, text, and moving images is an innovative approach to the educational process that will prove to be a major educational force in the future.

This systemwide need for faculty/staff development will be accomplished by this project in the following ways:

1. Ten new faculty will receive training, support and a stipend to develop multimedia software to be used in a class they teach.

2. Faculty from all the consortium colleges will be shown the multimedia products already developed by the consortium and may elect to use them in their classes as they apply. These faculty will become "users" of multimedia instead of "developers" of multimedia.

3. Support and assistance (newsletters, monthly meetings, problem resolution, product demonstrations) will be provided by the consortium to all faculty interested in multimedia.

This project also addresses the Board of Governors Basic Agenda Priority to Ensure Educational Quality. Of the ten new multimedia projects selected for development, at least six will address the specific needs of students who are more culturally diverse, older, have English as a Second Language, need basic skills, or pre collegiate training.

Because of its interactivity, its tendency toward increasing critical thinking, its attractive sound, text, and moving image medium, and its independent learning style capabilities, well-done multimedia programs will greatly enhance the quality of education for all students, but especially for those populations mentioned above who, at their own pace, may need to repeat processes and explore deeper in order to master a topic. If the adage that people retain about 20 percent of what they hear, 40 percent of what they see and hear, and 75 percent of what they see, hear, and do is correct, then multimedia delivered instructions should lead to better retention of material than traditionally delivered instruction.
Because multimedia is the joining of a computer system with the intelligence of a classroom instructor's wealth of subject information, the classroom instructor must be trained to use this new technology as an improved tool for presenting and receiving classroom information. Multimedia as an instructional delivery tool will enhance the efforts of the best instructors and provide extended learning experiences for the student.
Most college faculty members and their leaders are not even aware of what multimedia can do for them. Many are unsure of even the definition of the word. The consortium will continue to bring to the general faculty the results of its faculty developers. Staff development seminars, televised demonstrations, monthly newsletters, and the special interest group meetings, will help raise the level of awareness of this technology.

There are very limited places within San Diego county where instructors can learn multimedia techniques. It currently takes brave and resourceful individuals who work in isolation to learn new methods of instruction. Within San Diego County, the consortium is the only support group for assisting faculty who wish to launch into multimedia. This project will provide a "network" of trained individuals who will be able to support each other, develop standards, and promote ideas.

Although all the colleges within San Diego County now have at least one multimedia computer system, obviously this is not sufficient to meet the needs of both faculty and students. Each college has committed to the purchase of at least one additional station. Some colleges may use this additional computer system as a station to be taken into the classroom for group multimedia demonstrations, others may dedicate it to faculty development, and still others may place the system in an open lab for student access to the consortium supplied software that was developed in the first project. That choice will be made by each college because the needs are different at each campus.

The courseware developed by the consortium project in 1992-93 will sit on a shelf unless it is shown and demonstrated to faculty members from the disciplines to which it applies. Each consortium college will be responsible for sharing and promoting the already produced software to potential instructors at each college.

The statewide problem of special training needs for select groups of individuals is costly, long-term problem. The multimedia consortium contends that using multimedia technology to support the special and individual needs of these special populations will be both economical to the system and provide excellence in its results. Unfortunately there are no instant answers, but multimedia, supported properly now, will bring solutions to the
future. Obviously a consortium view of this problem can bring attention to it by developing instructors.
Several populations will be served by this project. First ten newly trained faculty members will experience first class multimedia support in their efforts to develop new multimedia courseware for a class they teach. This support will come from both the consortium and from the existing campus teams.

Second, both new and experienced multimedia enthusiasts will receive on-going support to their questions, as well as informative information about new multimedia products and directions. This audience is expected to draw from the 64 individuals involved in the 1992-93 project, as well as general audiences who become involved in staff development functions and televised demonstrations.

The multimedia teams that have been developed at each campus will continue to gain expertise in the field and will further efforts to innovate within their own college.

Students will ultimately benefit from the skills gained by their faculty and support staff. Given that 16 completed 1992-93 multimedia projects will be cataloged at the San Diego County Department of Education Media Consortium, and that all the colleges in the multimedia consortium belong to the Media Consortium, it is possible that several hundred students will benefit from the consortium effort as colleges begin the check out the consortium software. Every effort will be made to get the developed courseware into the hands of the students.

The short-term impact is the continued progress toward multimedia implementation. The long-term commitment will be multimedia that fully addresses statewide needs.
Objectives

a. Task 1: Calendar Consortium Multimedia Development and Demonstration Activities.

b. Completion Date: 10/15/93

c. Evaluation or Bench Mark Standard Ten selected development projects and seven demonstration projects will be selected and a calendar of consortium activities will be prepared and distributed to all consortium colleges.

a. Task 2: Provide multimedia support for consortium colleges.

b. Completion Date: Continuous throughout project to 5/1/94

c. Evaluation or Bench Mark Standard Hold seven Multimedia User Group Meetings. Provide peer support as well as expert support to new and experienced faculty who are developing multimedia projects. Prepare seven multimedia consortium newsletters. At least two colleges will communicate via the Internet network and will access and post multimedia conversation.

a. Task 3: Present seven significant multimedia product demonstrations.

b. Completion date: Continuous through 5/1/94

c. Evaluation or Bench Mark Standard Evaluate and demonstrate seven new multimedia products. Record these demonstrations for educational TV.

a. Task 4: Provide support to ten new multimedia development projects.

b. Completion Date: 6/30/94

c. Evaluation or Bench Mark Standard Equipment and software will be obtained by the colleges. Projects will be developed, evaluated, and implemented. Six of the projects will focus on the Board of Governor's Basic Agenda priorities.

a. Task 5: Promote the multimedia projects developed by the 1992-93 Multimedia Consortium.

b. Completion Date: 6/30/94
c. Evaluation or Bench Mark Standard

Courseware will be shown to instructors at each campus to which the subject area applies. Courseware will be made available to students as appropriate. Evaluation forms will be gathered on software used.
The consortium colleges will participate in continued year-long staff development activities which will provide faculty and multimedia teams with continued growth and expertise. The adopted multimedia consortium calendar of activities will be generated and distributed. Excellence will be the standard at all activities to promote a high level of respect for the consortium. Seven major new multimedia products will be purchased, reviewed, demonstrated, and televised over educational television.

The consortium will call for proposals, review, select, and support ten new faculty multimedia development projects. The selection criteria used for selecting the project will be the same as for the original 1992-93 grant, with the exception that the person must not have been a participant in the first project, and at least six of the projects must meet criteria specified by the Board of Governor's Basic Agenda priorities. A stipend will be paid to the instructor when the project is completed.

The consortium will prepare a monthly newsletter (at least seven issues) outlining local multimedia news and events and highlighting completed projects and faculty innovators.

Projects that were developed by the 1992-93 Multimedia Consortium project will be demonstrated and made available to each campus instructor who teaches in a related subject area. Where possible, given the equipment constraints, software will be made available to students from those subject areas.

Communication will move toward the use of the Internet network of which many of the colleges are attempting to join. This will greatly facilitate software dissemination and support for multimedia questions.

College presidents have committed to purchase at least one additional multimedia computer system and overhead projection device necessary for continued growth of multimedia on their campus. Their letters of support are found in Appendix B.
The short-term impact on the population will be the immediate presence of a strengthened "campus multimedia team", who have a network of other teams throughout the county. This team approach will enhance multimedia presentations, provide a support system which will raise the level or standard of each product, and will provide new learning resources to students.

Additionally, more faculty will be exposed to multimedia through the exposure to developed software, the informative newsletter, the televised product demonstrations, and the special interest group meetings.

The long-term impact of this proposal will be the expected growth in multimedia presentations which will have a direct impact on the quality of education at every level and in every discipline. Multimedia will become a standard method of instruction within a few years. As multimedia expands, retention and instructional quality will improve.

In general terms the funding of this consortium project will enable the development of instructional multimedia at a level that would not be possible at the individual college level. Specifically, the following direct benefits are expected:

1. The level of multimedia expertise at the community college level will increase throughout the San Diego County.

2. Each college, will be equipped with the minimum set of development tools to continue in a program of their own.

3. Each faculty member attending the users group meetings, viewing the educational TV presentations, or reading the monthly newsletter will be educated and motivated to invest in this method of instruction.

4. A spirit of cooperative innovation will exist between the colleges.

5. Faculty members will have a network of other faculty members in the county who are developing with the same multimedia tools they are using.
6. A larger pool of multimedia software will be available to the consortium colleges. Much of it will meet the Board of Governors Basic Agenda of priorities.

7. Multimedia software developed by the first project will be more fully evaluated and used by the consortium colleges.
Evaluation will be a fundamental component of every phase of this project (see Appendix C). The seven new multimedia presentations being developed will be evaluated by asking members of the consortium to complete an evaluation form at beta sharing sessions. Faculty and others attending the special interest group meetings will complete an evaluation at each one. Multimedia software will go through an exhaustive evaluation format and those evaluations will be available to any consortium partner. Completed projects will be used and evaluated by students prior to their release.

The data gathered from these valuative measures will indicate the effectiveness of the methods and outcomes of the project. The overall project evaluation will come if a decision is made by SDICCCA (San Diego Imperial County Community College Association) to recommend the continued support of the county-wide multimedia consortium with an even more committed position taken by various vendors and the colleges. At that time, efforts can be started to measure the impact of the developed multimedia presentations on student achievement and learning (which is after all our ultimate goal).
In addition to those requested items listed in the RFP, the created multimedia projects, will be demonstrated and disseminated to each consortium college. Copies of the projects will be placed at the San Diego County Department of Education Media Consortium for check-out by the consortium colleges. Completed demonstrations will be aired on Educational TV, Channel 23. Additionally they will be submitted to the Internet network Multimedia holdings, sent to WISC Ware for review and possible inclusion in that program. Developers may present their product at the League for Innovation or Educom Conferences. Summaries of this consortium project will be made available to any college who requests it, and will be summarized in educational journals (Leadership Extracts, Journal for Higher Education, T.H.E. Journal.)
[No information provided in this document for this section.]