

SCHOOL AND COMMUNITY PARTNERSHIPS: COLLABORATING THROUGH THE DEVELOPMENT OF INTERACTIVE, MULTIMEDIA LEARNING RESOURCES

**Tammy Dunn
Ian W. Gibson
Heather Bohaty
Gary Merritt
Erick Witherspoon**

ABSTRACT

In conducting an evaluation of a new partnership between a school and an art museum, the research team discovered the value of technology in generating the motivation for collaboration between an educational and a community organisation. Together, these community-based groups had agreed to share their resources and their expertise in the creation of a CD-ROM based 'virtual museum'. This interactive multi-media product was designed to allow those without access to the museum, to visit the 'art treasures' therein. The partnership provided school students with access to community experts, involvement in the development of advanced technologies and experience in team work, task management and problem solving. The school benefited from having the positive potential of community partnerships in achieving educational objectives confirmed at the same time as gaining a valuable resource for future use. As a direct result of this project, the museum recognised increased exposure in the community and received a perpetual resource (the Virtual Museum CD) available for future sale and community education purposes. The predominantly graduate student research team gained a clear understanding of the processes inherent in successful school and community partnerships. The potential for this type of technology based partnership to enhance the lives of all students, including rural and isolated students, is only just beginning to be realised.

INTRODUCTION

In considering the impact of school and community partnerships on rural contexts, this paper considers two themes. The first concerns a school and community partnership and the project for which the partnership was developed. The second considers the evaluation of the partnership conducted by a university based research team and the results of that process. Following a discussion of these themes, an analysis of the literature is presented in order to provide the reader with a useful analysis of partnership variables. This is followed by a short collection of examples describing technology oriented partnerships having a positive impact upon rural communities.

BACKGROUND

This study originated through the field study based, graduate program in Educational Administration at Wichita State University in Kansas. As a key goal of this program cohorts of graduate students are placed in situations where they learn to become members of efficient and functional research teams. Grouped into teams for the purpose of applying appropriate research techniques to their chosen profession, these students learn about leadership by manipulating information relevant to educational administrators and school districts. These teams are the linking pin of the partnership between schools and the university. Chosen research topics address concerns of a particular client/school, or examine a current topic in the field of education.

Copyright Agency Limited (CAL) licensed copy. Further copying and
Communication prohibited except on payment of fee per Copy or Communication
And otherwise in accordance with the licence from CAL to ACER. For more
Information contact CAL on (02) 9394-7600 or info@copyright.com.au

THE PROJECT

The original project giving rise to the first partnership theme discussed in this paper, focused upon an agreement between an elementary school and a city art museum. The central product of this partnership, around which all other benefits would derive, was the development of a virtual museum on a CD-ROM.

DESCRIPTION OF PARTNERSHIP

After taking opportunities to apply for financial assistance designed to support the project, the principal of L'Ouverture Computer Technology Magnet Elementary School (L'Ouverture), subsequently received grants from the Southwestern Bell Community Foundation and the Compaq Corporation. These grants were designed to assist in purchasing the needed equipment for the project. Support from both of these companies made the current partnership with the Wichita Art Museum possible.

In combining the resources of the school and the art museum, elementary school students were to create a CD-ROM that would allow the user to see the permanent collection of the museum in an interactive, three-dimensional format. The first phase of the project would apply this interactive process to one specific component of the museum's permanent collection. The Charles Russell room was selected for this first phase. The room was intended to be viewed from any angle, and information about each of the pieces in the room could be obtained while inside this "virtual museum." A graphic splash page and an interactive game were also included as components of this phase of the project. The principal of the elementary school was convinced that this project would extend the educational opportunities for students at his school and increase access to more sophisticated technologies.

PROJECT GOALS

There were two levels of goals established for this project. The principal of the school was predominantly concerned with catering to the very specific needs of the children attending his technology magnet school. His focus was on the process of developing this CDROM. His enthusiasm stemmed from an analysis of the obvious benefits accruing to the children involved. The product itself, the virtual museum, was a secondary, but necessary, consideration and was predominantly seen as the tool to achieve the learning goals established.

THE PROCESS

This project was designed primarily for the educational opportunities available to students inherent in the collaborative process. Some of the learning goals established for the project were to:

- provide children with genuine learning experiences within an outcomes based environment;
- provide opportunities to challenge high achieving students to advance their skills;
- enhance skills in team building, research, problem-solving, and application of higher-order thinking strategies; and
- develop an appreciation of high standards and the quality of work.

THE PRODUCT

While recognizing the significance of the process, both partners expected to benefit from the final product. It was intended that this product would:

- increase the visibility of the educational program of the school district within the community;
- incorporate new technologies into the learning experiences of the school;
- increase the visibility of the museum within the community; and
- augment the effectiveness of museum educational programs for school children.

INTENDED USE OF THE VIRTUAL MUSEUM CD

The final product of this partnership was intended to be used by each partner to satisfy very specific needs. Benefits to the school in the form of advanced technologies and additional academic opportunities were mentioned as key to this project. The museum recognised the potential for increasing cultural awareness and art appreciation through this partnership venture. The CD-ROM would be a product available for sale, and a viable marketing tool for the museum. For some rural communities in Kansas, the virtual museum would represent a vital resource for children and teachers, and for students of art and culture in the community. The museum was particularly aware of its responsibility to these people who were unable to visit the museum regularly. This "virtual museum" would meet this responsibility.

Finally, in addition to allowing very regular "virtual field trips" through the use of the CD at the school and classroom level, the CD would also serve as a model for future multimedia development projects at the school. The initial CD development process would act as a guide and demonstrate the development process for students, teachers, and other potential partners in similar projects. It was envisioned that future multimedia endeavours would be based upon the information and procedures utilised during this project.

THE EVALUATION

The second partnership theme forming the basis of this paper focuses upon the process of evaluating the partnership between the school and the museum. A cohort of graduate students enrolled in the Masters of Educational Administration at Wichita State University, Kansas was responsible for the evaluation. This program of graduate study was itself the product of a partnership between the university and the surrounding school districts. These school districts provided the support necessary to allow internships to be successfully mentored and for on-site field study work to be conducted.

The intent of this particular evaluation study was to describe and refine the partnership existing between the L'Ouverture Computer Technology Magnet Elementary School and the Wichita Art Museum. The study was designed to answer the following questions:

- 1) What was involved in the development of this partnership?
- 2) What problems had been encountered to this stage of the partnership?
- 3) What benefits had resulted from the partnership?
- 4) What improvements could be made to the existing partnership?

As the partnership had only been operational for a few months, and not yet clearly understood by all stakeholders, the opportunity to conduct a formative evaluation of the process of partnership development was considered a viable research activity for this cohort of graduate students. The task of providing an evaluative description of the partnership at such an early stage proved difficult for the study team. The timeline for the partnership indicated a period of two years had been set aside for the entire project. This field study took place early in the first year of the project with the understanding that results would be used as a formative evaluation for the partnership. Intending to provide information that would improve the partnership, the team carefully designed the research to include all stakeholders, and checked the design with the client-school. It was essential to gather information related to the goals of the project. The team focused on data relating to partnership development, partner involvement, impact on student achievement, barriers to partnership, and suggestions to improve the partnership. Data would be reported to the school along with recommendations designed to enhance the partnership experience for all stakeholders.

METHODOLOGY

The study team utilised multiple research methodologies. In a review of the literature, the study team identified issues and information pertinent to successful partnerships between schools, businesses, and community organisations. An analysis of existing documentation regarding the partnership was analysed and assisted in the development of items to be used in the interviews and focus groups. Interviews and focus group discussions were conducted to discover the developmental and operational procedures employed during the partnership. The one shot case study, although intended for formal evaluations of instructional processes (Popham, 1988), was chosen to be most appropriate for the partnership context under investigation given its strong focus upon educational outcomes.

The study team conducted three focus group discussions to gain perceptions from a) students participating in the partnership, b)parents of participating students, and c)parents of non-participating students regarding benefits and successes of the partnership. Six interviews with a variety of people involved in this partnership were also conducted in order to understand the partnership from "the native's point of view" (Glesne and Peshkin 1992, p. 92). Interviews were conducted with the following people: (a) three teachers whose classes were impacted by the project; (b) the principal of the school and primary facilitator of the partnership; and (c) two staff members of the Wichita Art Museum involved in the partnership.

PROCEDURE

The study team was required to follow a simple and traditional format for conducting this field research. Part of the process was the development of a formal proposal.

Formal Proposal Development

The study team developed a draft proposal and submitted it to the principal of the school for approval. Following adjustments, this formal proposal was then submitted to the university's institutional review board for endorsement prior to data collection. The proposal outlined the purpose of the study, the subjects to be included in the study and the processes of data collection intended. Approval to commence was granted, and the team distributed letters of consent to purposively selected stakeholders.

DATA COLLECTION

Existing documentation were analysed in this context to gain a more detailed understanding of the recent grant application process, its impact upon the development of the partnership, and to acquire an awareness of the history of collaboration between the school and the museum. A review of the literature and existing documents assisted the team in refining questions for interviews and focus group discussions. Both the focus groups and the interviews centred respondent's attention on various forms of the research questions:

1. What was involved in the development of this partnership?
2. What problems have been encountered?
3. What benefits have resulted?
4. What improvements can be made?

The triangulated data gathered through these processes were subjected to a process of unitisation and categorisation which provided the study team with sufficient data to arrive at conclusions and to make recommendations to the partners of this project.

FINDINGS

The findings of this research were summarised for the stakeholders under the headings of benefits and concerns. This approach was adopted to meet the needs of the stakeholder groups and to provide the information gathered during the evaluation in the most constructive manner.

BENEFITS FROM THIS PARTNERSHIP

The study team reported that all respondent groups believed that student performance in communications, goal setting, research skills, team work, responsibility, communication, technological awareness, deadlines, planning, time management, and leadership skills had improved and were expected to continue to improve as a direct result of participation in this project. These data were accompanied by great enthusiasm for similar partnerships by all respondents.

Further, all parties agreed that the expected benefits for both the Wichita Art Museum and L'Ouverture Computer Technology Magnet, in the form of improved public relations and higher visibility in the community, were likely to result from this partnership. Specific reference to benefits to the school in the form of enhanced student learning and increased accessibility to community expertise and resources were high on the list of perceived positive outcomes from such activities.

Benefits recognised specifically for the Wichita Art Museum related to receiving a salable product that could be used as a tool for teaching about art and the museum. It was also clear that the increased understanding of the capabilities and interests of children would be of benefit to museum personnel as they organised future, museum based, educational activities for children.

CONCERNS

The single, most strongly felt concern expressed by students, parents, teachers and museum staff related to the issue of communication. It has been made clear by many writers that issues of communication are central to partnership success and often cause the greatest difficulty in achieving success (Standards Council of the Teaching Profession, 1995; Andrews & Smith,

1994; Board of Teacher Registration, 1994; Cowan, 1994; Goodlad, 1994; Robinson & Darling-Hammond, 1994; Young, 1994; Watson & Fullan, 1992; Fullan & Steigelbauer, 1991; Fullan, Bennett, & Rolheiser-Bennett, 1990; Gray, 1989). Specifically, issues related to the frequency, timing and clarity of communications were mentioned repeatedly as a major concern in this study. The impact of communication related issues on the implementation of the project, on student selection for participation in the project, on the understanding of project timelines and on student achievement were all seen to require additional clarification. Further, this generally felt concern with communication processes within the partnership also raised the need for increased direction and guidelines for overall project focus. Davies (1996, p. 4) and others (Office of the Secretary of Education, 1995) have reported on similar findings.

A final expression of concern from partners in this project focused on the degree of shared ownership and related areas of their responsibility. The importance of shared ownership to partnership success has been the focus of much activity in the literature (Gibson & King, 1997; Standards Council of the Teaching Profession, 1995; Board of Teacher Registration, 1994; Cowan, 1994; Goodlad, 1994; Robinson & Darling-Hammond, 1994; Fullan, Bennett, & Rolheiser-Bennett, 1990; Gray, 1989). Issues regarding early and comprehensive planning with the involvement of all parties (Board of Teacher Registration, 1997), equitable or agreed upon levels of participation (Gibson & King, 1997), equal membership regardless of levels of participation (Gibson & King, 1997), and clear implementation strategies (Cowan, 1994), have also been frequently addressed in the literature. Respondents in this research study strongly, and frequently suggested a clear need for these issues to be addressed in the future operations of the partnership in this study.

In summary, at this stage of the partnership between the school and the museum, all participants have indicated, by their reactions, that this activity has proven to be a positive and productive learning experience. Further, each partner has indicated continued support for the original intent of the partnership.

RECOMMENDATIONS

The study team recommended that the school incorporate processes that would enhance and extend the strengths of each partner; create additional opportunities to share project ownership with the Wichita Art Museum staff and with teachers; continue to emphasize technology in the pursuit of educational and partnership goals; implement effective communication procedures to increase frequency, clarity, and spread of information across all participants; and initiate partnership goals designed to enhance the educational experiences related to partnership involvement.

Recommendations were included to encourage the school to continue the effective processes already in place, and to suggest new procedures that would reinforce current practice. The study team also recommended that a greater emphasis be placed on publicising student achievement and mastery of new technology.

These partnership recommendations were carefully calibrated to address each partner's strengths and needs. The formulating of new procedures to enhance communications and provide opportunities for shared ownership of the project were designed to strengthen this partnership, and pave the way for the advent of new partnerships between the school and other community organisations.

THE LITERATURE ON PARTNERSHIPS

During the process of this research study, an understanding of the process of developing successful partnerships was clearly developed in the minds of the study team conducting this evaluation. What proved to be most clarifying for these 'administrators in training' was the very real connection between the practice of partnership development that was the focus of their field study, and the literature which enabled them to relate theory to the improvement of practice. There was no doubt in their minds that much could be learnt from the literature on partnerships by those new to the concept, by those wishing to begin a new partnership, or by those who were interested in evaluating existing partnerships. To that end, the following review outlines the features of partnerships drawn from current writings on the topic. It considers the diversity of definitions of partnerships, outlines the common features of successful partnerships and discusses a variety of barriers to partnership success.

DEFINITIONS OF PARTNERSHIPS

A scan of the current literature on partnerships produced a diversity of useful definitions. For example, partnerships could be an activity to achieve a professional outcome; a formal legal agreement; a loose association; or a joint venture. What appears to be a common thread among these definitions, is that successful partnerships create a climate for innovation and change.

KEY FEATURES OF PARTNERSHIPS

While many varieties of successful partnerships exist, they each tend to share a common core of characteristics appearing to be crucial to success. In an analysis of data gathered from 25 educational organizations involved in partnerships, the Board of Teacher Registration (1997) in Queensland, Australia, identified the following key components to successful partnerships:

- agreed aims;
- early and comprehensive planning with the involvement of all parties;
- continued involvement and participation of all partners;
- close and open communication;
- commitment by all partners;
- expertise within the partnership;
- collegial and collaborative relationships;
- benefits to all partners;
- professionalism;
- relevance;
- community support; and
- openness to evaluation and feedback. (p. 2)

A full analysis of the role of partnerships in education was conducted by Gibson and King (1997) in preparation for a national workshop on the topic. Involving teachers, administrators, community members and tertiary educators, this workshop produced a list of key features believed to contribute to successful partnerships. These key features included:

- agreed common goals and shared values;
- empowerment of all partners to achieve a successful outcome;
- recognized benefits for all partners;
- free flowing and open communication;

- a readiness to negotiate and collaborate;
- equitable or agreed levels of participation;
- trust;
- commitment;
- flexible roles according to need;
- recognition that each partner must be prepared to devote time, keep promises and demonstrate sensitivity;
- equal membership regardless of contribution;
- time for the partnership to develop through a variety of recognized stages of maturation; and
- acceptance that the partnership would evolve over time.

In their conclusions, Gibson and King (1997) made it clear that the promotion of a true partnership was dependent upon partners sharing ownership and responsibility. Similarly, Gray (1989) asserted that it was crucial for all members of a partnership to conceptualize the benefits for all involved parties (p. 11). It was further recognized that in allowing partnerships to be flexible, to grow, or to change, the likelihood of successful outcomes was increased, even if priorities changed throughout the life of the partnership (Gibson & King, 1997).

Similar findings were reported in a study conducted by the Office of the Secretary of Education of the United States (1995). Partnership elements described in this report included; partnership evaluations, effective communication, shared benefits for all members of the partnership, and awareness and proper documentation of the partnership protocol. Other common features of current educational partnerships included a shared focus on technology and the inclusion of hands on learning strategies (p. 3).

Other writers have claimed that the process of ensuring success for community and school partnerships required continual evaluation and refinement. Davies (1996) suggested one way of refining the partnership process was through documentation, open communication and analysis (p. 4). In his view, it was imperative to recognize and document the contributions and perceptions of each partner. He claimed that this process of recognizing the perceptions of all team members was an important factor in supporting the partnership communication process (p. 4).

Profiting from partnerships required clear and precise communication. Written documentation assisted in communicating goals and objectives for members of a partnership. The literature is replete with examples of similar findings. In a review of related literature on partnerships conducted by the Board of Teacher Registration (1997), a consensus was established regarding the need for:

- careful planning (Andrews & Smith, 1994; Cowan, 1994; Darling-Hammond, Gendler & Wise, 1990; Furlong, Whitty, Whiting, Miles, Barton & Barrett, 1996; Goodlad, 1994; Office of Her Majesty's Chief Inspector of Schools, 1995; Standards Council of the Teaching Profession, 1995; Young, 1994);
- collaboration and effective communication (Andrews & Smith, 1994; Board of Teacher Registration, 1994; Cowan, 1994; Fullan, Bennett, & Rolheiser-Bennett, 1990; Gray, 1989, in Fullan & Steigelbauer, 1991; Robinson & Darling-Hammond, 1994; Goodlad, 1994; Standards Council of the Teaching Profession, 1995; Young, 1994; Watson & Fullan, 1992);
- adequate resourcing (Darling-Hammond et, 1990; Goodlad, 1988, cited in Fullan & Steigelbauer, 1991; Office of Her Majesty's Chief Inspector of Schools, 1995);

- recognition and respect for each partner (Cowan, 1994; Standards Council of the Teaching Profession, 1995);
- shared goals (Board of Teacher Registration, 1994; Cowan, 1994; Fullan, Bennett, & Rolheiser-Bennett, 1990; Goodlad, 1994; Standards Council of the Teaching Profession, 1995; Van de Water, 1989, in Robinson & Darling-Hammond, 1994);
- leadership and commitment (Cowan, 1994; Fullan & Steigelbauer, 1991; Goodlad, 1994; Standards Council of the Teaching Profession, 1995; Van de Water, 1989, in Robinson & Darling-Hammond, 1994);
- top level endorsement and support (Board of Teacher Registration, 1994; Goodlad, 1988, in Fullan & Steigelbauer, 1991); and
- formalized agreements (Cowan, 1994; Standards Council of the Teaching Profession, 1995).

Additional aspects, identified in this search of the literature as contributing to the success of partnerships, included: consideration of the culture of each organization involved in the partnership (Darling-Hammond et al, 1990; Gross, 1988, in Fleet & Patterson, 1996; Watson & Fullan, 1992); opportunities for all partners to acquire new skills (Standards Council of the Teaching Profession, 1995); development of trust and respect between partners (Cowan, 1994; Watson & Fullan, 1992); allowance for both change and permanence in partnership (Watson & Fullan, 1992); ethical operation of partners (Standards Council of the Teaching Profession, 1995); and sufficient selflessness on the part of each member to assure satisfaction of the needs of all members (Goodlad, 1988, in Fullan & Steigelbauer 1991) (P.4).

BARRIERS TO SUCCESSFUL PARTNERSHIPS

Gibson and King (1997) reported upon factors seen to agitate against partnership success. The barriers to success derived from their work included:

- poor communication and little sharing of values and intentions;
- existence of the one expert syndrome;
- the partnership initiator being the expert while others became recipients;
- lack of time;
- over-commitment to other projects;
- insufficient funding to achieve partnership goals;
- institutional jealousies;
- demographic imbalances; and
- poor management and support of communications technologies.

In their analysis of the survey results from 25 organizational responses, and an associated review of the literature, The Board of Teacher Registration (1997), generated the following list of barriers to successful partnerships:

- vague purpose;
- poor planning;
- ineffective communication;
- lack of commitment, negativity;
- inadequate resources;
- poor understanding of the implementation process;
- relationship difficulties; and
- criticism by other players in the field.

Each of these authors has supported the notion that shared goals and interests would overcome these barriers.

SUMMARY

It has become clear from this analysis of the literature that those involved in school settings are increasingly required to develop the skill, knowledge and ability to participate in a variety of partnerships between schools, communities, and other professional bodies (Gibson & King, 1997). While the success of each partnership is contingent upon specific factors and specific individuals within each context, this discussion suggested a collection of variables that appear to be present in one form or another when partnerships were successful. Those variables included collaboration; commitment; effective and ongoing planning, management and evaluation; effective communication; recognition of shared educational goals; and continued active participation. The literature is clear in its advice. If a successful partnership is desired, it is the inclusion of these factors in the planning and operation of the partnership that will lead to its success.

EXAMPLES OF TECHNOLOGY BASED PARTNERSHIPS BENEFITING RURAL COMMUNITIES

There are many examples of successful technology related partnerships in the literature. The focus of those reported below are varied in nature and in context in order to describe the creative approaches taken in the design of these collaborative ventures. They also serve to illustrate the tremendous flexibility of collaborative ventures designed for mutual benefit. In each of these examples, the thinking of the partners remained closely aligned to those points described above as necessary to ensure partnership success within a specific educational context.

In 1998, Mahon and Thalathoti described a partnership with a focus on the educational use of videoconferencing. In partnership with the Royal Children's Hospital, Melbourne, IBM Australia Ltd., and the Distance Education Centre, Victoria, the Australian Centre for Computer Enhanced Learning, (ACCEL), developed a pilot project using multimedia video conferencing to link hospitalized and homebound children with their schools of origin. The technology involved audio / video graphics and text and operated over telephone lines. This partnership enabled students to remain in close contact with their school whilst learning new and creative technological skills. It was the intention of the project to provide the best possible avenue of opportunity for regular, live, visual contact between hospitalised and homebound students and their schools of origin

The aims of the project were to enhance learning opportunities and to provide immediate direct contact with the school of origin, with other students and with designated school sites. The focus of these aims was both the academic and social enhance of self esteem and self confidence. Additional goals were the development of skills in on-line communication with other children, and the provision of the opportunity to gain a degree of control and normalisation over a part of their lives that was beyond their influence through the process of continuing their education.

Another partnership (Ahmad & Zurovchak, 1998), reported upon the unique combination of distance education methodologies used in the field of higher education in order to alleviate critical deficiencies in human resources and curricular content in Malaysia. The organisations involved in this venture include The Midwest Universities Consortium for International Activities (MUCIA) Global Education Group Inc., and the American Degree Program at a Malaysian University. The intent of this partnership activity was to create a global education network by combining the talents of existing organisations.

A similar partnership from the higher education sector, described the purpose of the Migrant Education consortium for Higher Achievement MECHA as developing, implementing, and evaluating a comprehensive model for promoting greater continuity of instruction for migrant students as they served in different school districts. The goal of assisting migrant teachers to achieve high academic standards through innovative uses of technology to enhance teaching and learning was the centrepoint of this activity. This project served as a model for collaboration between government, school districts, universities and industry partners (LeBlanc, 1998).

Ward, (1997) reported on a partnership between a university and a number of schools where the product of such collaboration was the mutual support of teacher growth and development. The TEAM project employed Appalachian State University faculty and graduate students to support teachers in a seven county partnership as they integrate computer technology into their daily classroom activities. The project provided hands on workshops for teachers from 85 schools. Further, internet connectivity, free access to email on the university mainframe computer to the 2500 teachers in the partnership, model teaching, and the regular support of graduate students in computer technology, were integral components of this project.

A final example details the success of the Harlem Environmental Access Project (HEAP) (Bowman, 1996). This collaborative project was designed to place high-speed telecommunications between schools, libraries, Columbia University and the Environmental Defense Fund. The schools were to create content for the Internet and utilize the resources of the collaborating organizations. HEAP was supported by the National Information Infrastructure and was designed to support their goals and mission.

THE POTENTIAL OF PARTNERSHIPS IN TECHNOLOGY FOR RURAL SCHOOLS

There is no doubting the potential for great benefit to rural communities resulting from partnerships similar to those described above. Neither is there any doubt regarding the greater difficulties of establishing successful community based partnerships in many small rural or isolated areas in Australia. Notwithstanding this difficulty however, Bowie (1994) characterises rural schools and communities in Australia as already displaying unique and often sophisticated examples of such desired partnerships. "In rural Australia... the links between schools and communities are particularly important and the interdependence is likely to be greater than in metropolitan areas" (P169). Another report (Commonwealth Schools Commission, 1987) describes situations where communities often "contribute greatly to the work of the local school in order to improve the quality of schooling (P. 22). In recognising the existing and often unique partnership qualities of rural communities, this paper has attempted to extend beyond the normal in community school relationships by detailing a more formal, mutually supportive project where the capabilities of new technologies have provided the impetus for extending student achievement.

REFERENCES

Ahmad, N. and Zurovchak, J.F. (1998) Creating a global Education Network Partnership: The Mucia Global / ITM model Proceedings of ED-MEDIA 98 & ED-TELECOM 98, World Conference on Educational Multimedia and Hypermedia & World Conference on Educational Telecommunications, Frieburg, Germany, June 19-22 Pp. 98 - 104

Andrews, S. V. and Smith, P. G. (1994). MULTIPLE LEVELS OF COLLABORATION IN PROFESSIONAL DEVELOPMENT SCHOOLS: A CONTINUUM OF PROFESSIONAL

DEVELOPMENT. Paper presented at the annual meeting of the American Association of Colleges of Further Education (AACTE), Chicago. (ERIC document ED374082).

Board of Teacher Registration (1994). LEARNING TO TEACH: REPORT OF THE WORKING PARTY ON THE PRACTICUM IN PRESERVICE TEACHER EDUCATION. Board of Teacher Registration: Toowong, Brisbane.

Board of Teacher Registration (1997). PARTNERSHIPS IN TEACHER EDUCATION: A REPORT OF THE WORKING PARTY ON PARTNERSHIPS IN TEACHER EDUCATION. Board of Teacher Registration: Toowong, Brisbane.

Bowie, B. (1994) the impact of current policy trends in education on rural communities and their small schools. In D. McSwan and M. McShane (Eds.) ISSUES AFFECTING RURAL COMMUNITIES, Rural Education Research and Development Centre, James Cook University, Townsville, Qld. Australia. (p 169-174).

Bowman, J., (1996) The Harlem Environmental Access Project: A Partnership with Columbia University, The Environmental Defense Fund, and the Public Schools of Harlem, New York, Proceedings of ED-MEDIA 96 & ED-TELECOM 96, World Conference on Educational Multimedia and Hypermedia & World Conference on Educational Telecommunications, Boston, Mass., USA; June 17-22, Pp. 219-221

Commonwealth Schools Commission. (1987) SCHOOLING IN RURAL AUSTRALIA, Commonwealth Schools Commission, Government Printing Service, Canberra. P22.

Cowan, L. A. (1994). A MODEL FOR DEVELOPING BUSINESS EDUCATION PARTNERSHIPS FOR TECH PREP PROGRAMS. Master of Education Field Project, Western Washington University. (ERIC document 376317).

Darling-Hammond, L.; Gendler, T.; and Wise, A. E. (1990). THE TEACHING INTERNSHIP: PRACTICAL PREPARATION FOR A LICENSED PROFESSION. Rand Corporation: California.

Davies, D., (1996). PARTNERSHIPS FOR STUDENT SUCCESS: WHAT WE HAVE LEARNED ABOUT POLICIES TO INCREASE STUDENT ACHIEVEMENT THROUGH SCHOOL PARTNERSHIPS WITH FAMILIES AND COMMUNITIES. Office of Educational Research and Improvement (ED), 4-8.

Fleet, A. and Patterson, C. (1996). FOCUS ON CHILDREN AND FAMILIES: RELATIONSHIPS IN A SCHOOL UNIVERSITY PARTNERSHIP. A CASE STUDY OF SYSTEMIC CHANGE. Paper presented at the Weaving Webs conference, Melbourne, July.

Fullan, M. G.; Bennett, B.; and Rolheiser-Bennett, C. (1990). Linking classroom and school improvement. EDUCATIONAL LEADERSHIP, May, 13-19.

Fullan, M. and Steigelbauer, S. (1991). THE NEW MEANING OF EDUCATIONAL CHANGE. Teachers College Press: New York.

Furlong, J.; Whitty, G.; Whiting, C.; Miles, S.; Barton, L.; and Barrett E. (1996). Re-defining partnership: Revolution or reform in initial teacher education? JOURNAL OF EDUCATION FOR TEACHING, 22(1), 39-55.

Gibson, I.W. & King, S. (1997). PARTNERSHIPS, TECHNOLOGY AND TEACHING: CELEBRATING THE LINK BETWEEN UNIVERSITIES AND RURAL COMMUNITIES. Conference Proceedings of the Annual Conference of the Society for the Provision of Education in Rural Australia in Adelaide. USQ Press, Toowoomba.

Glesne, C., and Peshkin, A. (1992). BECOMING QUALITATIVE RESEARCHERS: AN INTRODUCTION. New York: Longman Publishing Group.

Goodlad, J. I. (1994). Partnerships and partner schools, in EDUCATIONAL RENEWAL: BETTER TEACHERS, BETTER SCHOOLS. Jossey-Bass Publishers: San Francisco.

Gray, B. (1989). COLLABORATING: FINDING COMMON GROUND FOR MULLETPARTY PROBLEMS. San Francisco: Jossey-Bass.

LeBlanc, P. (1998) Advanced Technologies, Achievement, and Migrant Students Proceedings of ED-MEDIA 98 & ED-TELECOM 98, World Conference on Educational Multimedia and Hypermedia & World Conference on Educational Telecommunications, Friburg, Germany, June 19-22 Pp. 837-840

Mahon, L. and Thalathoti, V.V. (1997) Here's Looking At You: Video conferencing, computers and illness. Antonella's story. Proceedings of ED-MEDIA 97 & ED-TELECOM 97, World Conference on Educational Multimedia and Hypermedia & World Conference on Educational Telecommunications, Calgary, Canada, June 14-19 Pp. 820-827

Office of Her Majesty's Chief Inspector of Schools. (1995). PARTNERSHIP: SCHOOL AND HIGHER EDUCATION IN PARTNERSHIP IN SECONDARY INITIAL TEACHER TRAINING. A report from the Office of Her Majesty's Chief Inspector of Schools. Ofsted, Office for Standards in Education: London.

Office of the Secretary of Education. (1995). AN INVITATION TO YOUR COMMUNITY: BUILDING COMMUNITY PARTNERSHIPS FOR LEARNING. Department of Education, 3-10.

Pea, Roy D. (1993). The Collaborative visualization project. TECHNOLOGY IN EDUCATION, 1-4.

Popham, W.J. (1988). EDUCATIONAL EVALUATION (2nd ed.) New Jersey: Prentice Hall.

Robinson, S. P. and Darling-Hammond, L. (1994). Change for collaboration and collaboration for change: Transforming teaching through school university partnerships, in Professional Development Schools. SCHOOLS FOR DEVELOPING A PROFESSION, ed. L Darling-Hammond. Teachers College Press: New York.

Standards Council of the Teaching Profession. (1995). PARTNERSHIPS IN TEACHER EDUCATION: AN INFORMATION PAPER FOR SCHOOLS AND UNIVERSITIES. Standards Council of the Teaching Profession: Melbourne.

Ward, M. (1997), The TEAM Project: A university – public school collaborative Proceedings of ED-MEDIA 97 & ED-TELECOM 97, World Conference on Educational Multimedia and

Hypermedia & World Conference on Educational Telecommunications, Calgary, Canada, June 14-19 Pp. 820-827 Pp. 1948-1949

Watson, N. and Fullan, M. G. (1992). Beyond school district - university partnerships, in TEACHER DEVELOPMENT AND EDUCATIONAL CHANGE, eds. M. Fullan and A. Hargreaves. Falmer Press: Toronto.

Young, W. (1994). SCHOOL EXPERIENCE: A COLLABORATIVE PARTNERSHIP. Centre for Education, Southern Cross University.

Note: This article has been based upon a paper delivered in October, 1998 at the 14th National Conference of the Society for the Provision of Education in Rural Australia, Alice Springs, NT, Australia

AUSTRALIAN RURAL EDUCATION AWARD

Proudly sponsored by:



**The Society for the Provision of
Education in Rural Australia Inc.**



**& The Australian
Cotton Foundation Ltd.**