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ABSTRACT

Four case studies conducted by the Mid-continent Regional Educational Laboratory (McREL) Rural Education Project examined four clusters of rural schools and their efforts to improve schooling by collaborating and sharing resources. The Mid-Missouri Small School Consortium involved five rural school districts in efforts to incorporate microcomputers into school operations and curriculum and was distinctive in its use of the consortium concept to provide teacher in-service training. Contract Vocational Education: The Missouri Model evolved from a study of dropouts in three south central Missouri counties into a community-business-school cooperative program to provide rural students with vocational skills needed in their communities. The South Dakota Small Schools Cluster involved six small school systems, McREL, and South Dakota State University in an effort to assist small schools in maintaining quality education at affordable prices when consolidation was not viable. Project Innovative Curriculum brought together four schools in south central Nebraska to concentrate on cooperative curriculum development, increase exchange of ideas among teachers, and encourage resource sharing. Each case study provides descriptions of schools and communities, problems which prompted the cluster's formation, cluster development and activities, program evaluation, conclusions about successful clusters and suggestions for implementation of the cluster approach. (LFL)

Summary of Case Studies of Exemplary Shared Programs

Rural Education Component
Activity 1.2: Rural Clusters Study

Submitted to
The National Institute of Education

By
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INTRODUCTION

This report summarizes four case studies conducted by the Mid-continent Regional Educational Laboratory as part of its rural education work. The studies look at four unique "clusters" of rural school districts and their efforts to improve schooling by collaborating and sharing resources. Two of the studies focus on clustering activities in rural Missouri, a third looks at clustering in South Dakota, and the last looks at the efforts of several small districts in rural Nebraska. These projects are:

- o The Mid-Missouri Small School Consortium
- o Contract Vocational Education: The Missouri Model
- o The South Dakota Small Schools Cluster
- o Project Innovative Curriculum.

Summaries of case studies of each of these projects are presented in the following pages of this report.

THE MID-MISSOURI SMALL SCHOOL CONSORTIUM

Introduction

This study describes the experiences of five rural school districts in central Missouri in their effort to incorporate microcomputer capabilities into their school systems' operation and curriculum. Like most small rural schools their principal motivation was to enhance their instructional capabilities on a budgetary shoe string. The method they employed--a consortium to share services--is not new, but their use of the consortium concept to provide teacher in-service training and curriculum applications of microcomputers was innovative. The Mid-Missouri Small School Consortium (MMSSC) has been distinctive also for the cooperative support relationships established with the Missouri Department of Elementary and Secondary Education (DESE), the University of Missouri and the Mid-continent Regional Educational Laboratory (McREL).

The Problem

The problem is not one of coaxing rural schools into the computer age; it's how to make use of the computers they've already bought. Whether donated to them by the bank, bought from PTA fund drive earnings, or purchased with "Special Ed." monies, most rural schools have one or more TRS-80's, Commodores, TI's, IBM's, or Apples. But having computers doesn't necessarily bring a school into the computer age. Even in those districts blessed with an innovative administrator, incorporating computers into the curriculum so far tends to fall short of potential.

Because of a steady decline in price, the easiest part of entering the computer age is purchasing one. To some extent computers have become a new educational fad--parents have gotten the message and are anxious to have their children learn "computers". To some extent computers have become a status symbol. While computers in schools are here to stay, we are generally still at the stage where it is the quantity of hardware, more than the utility of it, that conveys progress.

While most schools find it hard to avoid getting caught up in the computer fad, it may well be that when we get beyond the "acquisition of hardware" stage small rural schools may have more at stake than their larger city counterparts. This is possible because computers under the right circumstances have the capability of "extending" the instructional capabilities of already overloaded teachers and/or "extending" the curriculum offerings of schools whose size and budget do not allow for much instructional specialization.

But what are the right circumstances?

Computers are a generic technology--they are not quite like anything experienced before. Other electronic technologies like television, radio, etc. typically have only one use. In contrast computers are being used for hundreds of very different applications and the number of applications can only increase. Their uses can be administrative or instructional; teachers can teach about computers or with them; they are applicable to 1st grade writing or to calculus; students can teach computers or be taught by them. How they will be used in education is slowly evolving although there are literally thousands of "educational" software packages available. But how "educational" some of this software is and how it, the classroom and the teacher will interact is still very much in the experimental stage.

We implied above that smaller, rural schools may be in a better position to take the lead, especially in educational uses of microcomputer technology, than their large school counterparts. We say this because the small school often cannot economically provide as many and varied curriculum opportunities to their students as larger schools. Given this limitation, the small school must either be content to offer their students more limited course offerings or seek alternatives to the traditional teacher--classroom--course in order to expand the curriculum. Microcomputer technology offers one viable curriculum alternative. A microcomputer and a telephone can combine to bring to the smallest community the information, references, and educational resources of a well-stocked library. The promise and potential is that access to pertinent educational materials need no longer be denied because of remote location. Computer technology can be a bridge. It won't guarantee learning but it can contribute to economically overcoming one of the traditional disadvantages of small schools--insufficient numbers of teachers and inadequate educational resources.

We suggest therefore that small schools may have need for different applications of computer technology than large schools--large schools with 500 employees may find a payroll program a valuable addition but a district with 20 employees may find it more trouble than its worth. There is nothing inherently beneficial in performing a task by computer--it depends on the size of the task and the alternatives to performing it.

Computer applications for small schools are still evolving. There are many pertinent software applications but this is still a technical field and small school administrators and teachers generally have their hands full with existing work loads and don't have the time to acquire the technical competence necessary to pick out the "best" systems and fit them into the educational needs of the school.

Context and Need

McREL has for several years been involved in various small school projects in the Plains states. However, despite Missouri's being in the region served by McREL there had been no McREL-involved small

school project in the state. During 1981-82 a McREL representative discussed possibilities for a rural/small schools project initiative with various DESE and UMC personnel. Based on these discussions, it was agreed to hold an exploratory meeting with a representative group of small Missouri schools to hear their problems and to determine if a project could be organized. During the summer of 1982 DESE and UMC personnel cooperated in identifying seven central Missouri small school administrators to attend such a meeting.

The initial meeting was held at the DESE offices in mid-August, 1982. The first part of the day was devoted to the McREL representative meeting with officials of DESE and the seven administrators to explain McREL's purpose and how they had worked with other groups of small schools in the region. Following this orientation the remainder of the day was devoted to discussion of problems unique to the seven small schools. Those in attendance included the seven invited administrators, the McREL representative (Paul Nachtigal), the Director of Curriculum Supervision of DESE (Richard Phillips) and a rural sociologist (Daryl Hobbs) from UMC. These superintendents along with the resource agency representatives have served as the core of MMSSC and its support groups up to the present time.

Although the McREL representative had explained some of the problems of small schools in the region, and some of the approaches being taken to address those problems, the discussion part of the meeting failed to produce any interesting ideas. For the most part discussion centered on some irritating (to small schools) regulations of the DESE and budgetary and teacher hiring problems. Near the end of the day the McREL representative asked if the group would be interested in another meeting to discuss further the possibilities of a project. Since the meeting up to that time had produced few fresh ideas there wasn't much enthusiasm for another meeting. However one of the superintendents volunteered that he might be interested in meeting again if it could be devoted to small computers and their potential for the instructional program of small schools. He stated that their school, like many others he was aware of, had some small computers but weren't making much use of them because few of the teachers or administrators knew much about them. That proved to be a key. Several other superintendents indicated that they had the same problem and interest. Active discussion continued for another 30 minutes and it was agreed to hold another meeting of the same group in October. During the discussion the Director of Curriculum Supervision (Phillips) stated that the DESE was in much the same boat. The UMC representative (Hobbs) volunteered to organize a program on small computers on the UMC campus if the group would be interested in meeting there. It was agreed to meet at UMC on October 20, 1982.

Development of the Consortium

All those in attendance at the August meeting met at UMC on October 20, 1982 to hear presentations by various UMC computer specialists on the state of the art and applications of small

computers. As each presentation was being made it became clear that there was a great deal of interest among the superintendents. The presentations were often interrupted with questions and inquiries about applications. These interruptions often served as an occasion for further discussion among the superintendents about some problems unique to their small schools. One particularly direct question was addressed to the DESE Director of Curriculum Supervision. A superintendent asked, "If it were possible to offer a course by computer in an area the schools didn't have a teacher for, would the DESE likely certify credit for it?" The response was a solid, "Maybe". As the combination of discussion and presentation continued, however, one problem kept surfacing--providing in-service training for teachers and administrators. Being superintendents, they were keenly aware of time limitations of their faculty and their probable lack of enthusiasm for acquiring computer literacy on their own time. They knew also that they had few incentives to offer their faculty. This problem kept popping up throughout the morning. Various ideas were offered in the course of discussion but nothing turned up that seemed to the group to be both effective and feasible.

However just before lunch, the same superintendent who had suggested the meeting be devoted to small computers wondered out loud, "Would it make sense for the schools to go together and generate a sufficient amount of money to hire a computer specialist on a full-time basis to provide the in-service training on location at each school?" That idea and lunch time coincided. Since there was another presentation scheduled after lunch, nothing more was said about that idea as the meeting broke for lunch. However, when the afternoon session resumed, it was clear that the idea had grown rapidly. Before the afternoon meeting began the superintendents as a group had agreed to form a consortium to implement the idea if a qualified specialist could be found and conditions of employment worked out. The afternoon presentation on classroom computer simulation exercises proceeded, but it was clear that most of the superintendents were preoccupied with thinking about the details of their soon-to-be consortium.

The consortium met again on November 19 at UMC. Also present were Nachtigal, Phillips and Hobbs and an applicant computer specialist. At that meeting it was: (1) reported that all districts had obtained consent from their boards to proceed; (2) agreed to jointly hire the computer specialist; (3) found that the district farthest away from the others had decided not to participate, leaving six of the original schools; but it was agreed that the DESE would become a member, bringing the consortium back up to seven financially participating entities; (4) agreed that one of the schools would serve as the fiscal agent for the consortium and would carry the contract of the specialist; (5) learned that McREL would contribute to the consortium an amount sufficient to cover travel expenses for the specialist and to cover the DESE portion of participation; (6) agreed that the superintendents would serve as a board to meet at regular intervals to review work of the consortium and plan future activities; (7) agreed that each school would be individually responsible for how they made use of the specialist; (8) agreed that the consortium would be named the Mid-Missouri Small Schools Computer Consortium (the name would

later be changed, leaving out the word 'computer', to reflect ideas for the consortium that went beyond computer applications); and (9) that the consortium would become fully operational with the beginning employment of the computer specialist on December 1, 1982.

The Schools and Their Communities

The seven schools represented at the original meeting and who formed the consortium are located in the central Missouri area. The two most prominent towns in central Missouri are Columbia, home of the University of Missouri (62,000 population), and 30 miles to the south Jefferson City, (34,000 population) the state capital. The Missouri DESE is located in Jefferson City. Jefferson City and Columbia are the two major centers of employment in the region as well. Interstate 70 which crosses the state from St. Louis to Kansas City runs through Columbia. Columbia is 125 miles from both Kansas City and St. Louis. Agriculture is prominent throughout the region although the regional economy is generally mixed.

The region is not sparsely populated, although with the exception of Columbia and Jefferson City, it is predominantly rural. Small towns, once dependent primarily on serving the needs of farmers, are located about 8 to 10 miles apart throughout the region. There were once many more small towns but a large number of these have diminished into small villages with hardly any local services. School consolidation of 20 years past was one of the factors which led to the further decline of these small places.

The towns in which the schools are located range in size from 302 to 3,537. Among the communities only Centralia and Fayette have a population in excess of 1,500. The schools are all a result of past consolidations and range from 326 to 1157 in K-12 enrollment. The number of teaching faculty range from a low of 23 in St. Elizabeth to a high of 70 in Centralia. Students per teacher ranged from a low of 10 in Glasgow to a high of 16 in Hallsville and Centralia.

Among the communities Glasgow and St. Elizabeth are best described as farming communities, Centralia is mixed farming and manufacturing community, Hallsville and Ashland are surrounded by farms but depend heavily on commuting to employment in Columbia and Jefferson City. Fayette is similarly a farming community, but is also a county seat town and has a small liberal arts college. According to 1980 census data reported by school districts, per capita income in each of the communities is slightly below the state average.

It has been emphasized earlier that proximity can be a factor in the successful operation of a consortium. That has proven to be the case for MMSSC. Of the seven original schools the one which did not become a consortium member (Macks Creek) was located 60 miles to the south and west of Jefferson City and was at least that far from St. Elizabeth, the next closest consortium member. Aside from St. Elizabeth which is 20 miles south of of Jefferson City the only other school south of Columbia is Ashland which is half way between Columbia

and Jefferson City, 15 miles from each. The remaining four schools are much more concentrated north of Columbia. It is understandable for reason of distance that Macks Creek chose not to participate in the consortium and that St. Elizabeth did not continue beyond the first year. The five schools that continued into the second year were in much closer proximity, their athletic teams often competed, and they had often coordinated activities in the past.

After initial organization of the consortium superintendents agreed that meetings should continue to be held at frequent intervals - at least once every six weeks to monitor the project, to hear programs on computer applications and develop further plans for the consortium. These meetings were most often held at the University of Missouri, both because of access to resources there, and its central location. All meetings were attended by Richard Phillips, Daryl Hobbs, and Tony Sander. Several of the meetings were attended by Paul Nachtigal of McREL.

While the meetings had as their primary purpose to monitor progress of the consortium, discussion often led to consideration of other issues pertinent to the schools. Ideas being tried in one school were shared with others. Information was shared concerning the acquisition of hardware and experience with software. Issues often surfaced which had a bearing on DESE policies and the presence of the Director of Curriculum Supervision allowed for constructive discussion and sometimes resolution of these issues. Of special interest was operation of Instructional Management Systems since these had been mandated by the DESE, and consortium participants was small computers as a technology pertinent to IMS.

After having successfully brought computer literacy to a large proportion of their respective faculties, consortium members began discussions toward more effective implementation of computer technology in the instructional program. The consultant reported that the demands on his time in each school were beginning to increase as individual teachers encountered technical problems or sought assistance in incorporating computers into their classrooms.

At the October, 1983 meeting of the consortium McREL arranged for a visit from Stan Pogrow, a faculty member at the University of Arizona and a nationally known authority on instructional use of microcomputers in the classroom. An emphasis of this presentation/demonstration was on teaching writing/language skills via micro-computers. This presentation contributed to a major supplemental activity of the consortium during 1983-84.

In late October Nachtigal brought to the attention of the consortium a Request for Proposals from Apple Foundation for projects that would emphasize creative use of computers in instructional programs in schools. Successful proposals would be awarded computer hardware and software necessary to implement the proposed idea. With the assistance of Nachtigal, Hobbs, Sander and Phillips, the consortium produced a proposal which was oriented toward "writing across the

curriculum" with an emphasis on word processing technology and accessing external data bases for use in the classroom. The frame of reference for the writing portion of the concept paper was the Bay Area Writing project which had been successfully implemented at the University of Missouri by Dr. Ben Nelms. Dr. Nelms met with the consortium to further develop the idea. The added wrinkle to this program was that instruction to the teachers, and subsequently to students, would be by micro-computers and word processing programs. An additional innovative feature of the proposal was implementation of the project through the consortium, oriented toward enhancing the instructional capabilities of smaller rural schools.

The consortium was informed in March that their proposal had not been successful. A consortium meeting was called following receipt of this information to discuss what to do with the proposed project. After some discussion it was agreed to proceed as planned, using local resources.

As a result of the successful MMSSC experience, two additional clusters are now operating in rural Missouri. As in the case of MMSSC, some assistance in consortium formation, operation, and funding was provided by McREL, UMC, and the DESE.

Evaluation

As part of the evaluation of the consortium, a survey was conducted at the end of the semester-long in-service computer training program with those faculty members and administrators who had participated. Assistance in design of the survey and analysis of the data was provided by various faculty from UMC. Two hundred forty-six teachers and administrative staff in the six schools of the MMSSC (more than 80%) responded to the self-administered questionnaire. Eleven of the 246 respondents were administrators who did not attend the in-service sessions.

Of the five in-service components, "Introduction to Computers" (Section 1) was most popular among participants while programming was least popular. -Eight-five percent of in-service participants responding rated the "Introduction" section as "good", "very good", or "excellent"; only 53% similarly rated the "Programming" section. Very little difference existed among the participants' evaluation of the "Software Evaluation", "Examination of Software", and the "Word processing" sections. They received positive responses from 65%, 63%, and 67% of the participants respectively.

Another measure of success of the in-service training program is the extent to which those involved subsequently used the computer in the classroom. 179 participants (73%) reported that they had already used or had plans to use the computer in the classroom. When the 15 administrators and non-teaching staff are eliminated from the 246 respondents, the rate of past or planned usage rises to 78%.

While all participating districts had some small amount of hardware at the beginning of the in-service training--indeed

utilization of that equipment was their reason for hiring a collective consultant--use of that hardware was very limited in all but one school. The extent of computer usage by district at the end of the 1983-84 school year had increased dramatically across all schools.

Computer hardware likewise has increased greatly since the beginning of the program both in type and quantity, showing a substantial commitment to education computerization. From a combined inventory of 28 Central Processing Units (CPUs) in December of 1982, the seven schools had 97 CPU's by the end of Summer 1984, a period of only one and one-half years. This 350% increase in hardware was accompanied by an increased acquisition of software and peripherals as well.

CONCLUSIONS

From the experience of the MMSSC certain conclusions are drawn about certain factors pertinent to the operation of a consortium of small schools. These conclusions are listed below.

1. PURPOSE -- A consortium may be organized for any purpose where there is a clear advantage to cooperation and/or pooling funds. Some kinds of consortium arrangements, such as athletic conferences, have been a standard method of operation for many years.
   Consortia have also been found to be effective in attracting supplementary funding.

2. SIZE -- Consortia seem to work best with at least 3, but no more than 7-8, member districts.

3. LOCATION -- The geographic proximity of cooperating districts facilitates more frequent meetings and makes it easier to share a service or program.

4. MEMBERSHIP -- Consortia seem to work best if the member schools are of similar size. Schools of approximately the same size in the same region tend to have similar problems which might be effectively addressed by cooperation. Large schools tend to have different methods and resources, even for similar problems.

5. ORGANIZATION -- A consortium does not require any formal organization, in fact they seem to work best when they remain informal.

6. LEADERSHIP -- A consortium does not require a formal leader, but seems to work best when the superintendent represents each member school in the consortium. One superintendent might be "elected" to serve as chair or convener.
   Even if other school personnel are involved in the consortium, the success of consortium activities seems to be enhanced when the superintendent takes an active role and represents his/her school at consortium meetings.

7. FINANCES -- If the consortium involves pooling funds from each

school to hire a specialist, purchase equipment, etc., it seems to work best if one school agrees to serve as fiscal agent, employing district, etc. Under that agreement each district contributes an amount agreed on to the fiscal agent school, which than takes responsibility for paying consortium bills, accounting for funds, etc.

If the consortium involves the hiring of personnel, it seems to work best if one district officially employs the person but with an agreement about how the person's time will be allocated among districts.

8. FREQUENCY OF MEETINGS -- Consortia seem to work best if there are frequent meetings (especially in the formative stage) among the superintendents of the consortium schools. Frequent meetings--providing there is an agenda to deal with--tend to reinforce support for the consortium activity and maintain the cooperative working relationship essential to consortium effectiveness.

   Meetings not only tend to keep the consortium idea on track but also tend to produce new ideas and areas of collaboration.

9. OUTSIDE RESOURCES -- While not essential, experience with several consortia suggests that they tend to be more effective if they take advantage of outside resource persons from colleges, the state department of education, public agencies, etc., to work with the consortium toward accomplishing its objectives. Experience has also shown that such resource persons are often willing to work with a consortium whereas they might be less willing to work with an individual school.

   Developing an on-going relationship with resource persons or organizations seems to also contribute to consortium longevity and improved access to pertinent information, programs, materials, services, etc.

THE SOUTH DAKOTA SMALL SCHOOLS CLUSTER

Introduction

For over 100 years in our country, rural/small school education has been treated as if it were an unwanted stepchild. Politicians and educators have scolded rural communities for failing to organize into tidy units, for failing to standardize according to a preconceived norm, and for failing to consolidate in the interest of efficiency. As our agricultural society gave way to an industrial society, rural people resisted industrial age thinking. Only recently have some educators begun to question the wisdom of forcing rural schools into a model that did not fit.

A majority of these small rural schools have been through at least one round of consolidation, and (except in areas of energy and recreation development or close proximity to urban centers) are continuing to experience declining enrollments. With enrollment declines and budget limitations, the problems of offering a state-approved program becomes more and more difficult. For a growing number of districts, further consolidation (the traditional solution to the problem of small size) is no longer viable. Distance and energy costs are too great to bus students on a daily basis. Alternative models for providing quality education are needed to alleviate the high costs and declining efficiency which result from operating a mass-production model with small number of students.

The South Dakota Small Schools Cluster was established as an attempt to create a model to assist in responding to the problems discussed above and to assist small schools in maintaining quality education at an affordable price.

The cluster strategy grows out of the notion that individual small schools do not have the resources to go it alone. A group of neighboring schools working together allows for the potential of an exchange of ideas, the sharing of resources, more effective use of outside resources, and provision of the moral support necessary for experimentation with alternative organizational and instructional routines.

Setting and Need

South Dakota is one of seven states served by the Mid-continent Regional Educational Laboratory. Of the approximately 2,000 school districts in the 7-state region, nearly 85 per cent enroll fewer than 65 students, and another 25 per cent have enrollments between 65 and 100. Fourteen high schools have 40 or fewer students, and five are under the magic number of 35 necessary to qualify for state aid. The great majority of these schools have been through at least one round of consolidation. Except for those close to more urban areas, most small schools are continuing to experience declining enrollment, or at best,

are experiencing stable enrollments. With low enrollments, increasing costs, and increased state requirements, the problems of offering a state-approved program become more and more difficult. For a large number of districts, the traditional solution of further consolidation is no longer viable. Distance and energy costs are too great to bus students on a daily basis. In addition, small South Dakota communities simply do not want to lose their schools.

Cluster Arrangement

The South Dakota Small Schools Cluster was formed during the Summer of 1981 as a follow-up to a state-wide Rural Education Conference held on the South Dakota State University campus in Brookings in the Fall of 1980. The cluster concept was presented at the conference by McREL's Rural Education Specialist, Paul Nachtigal. Nachtigal and Darrell Jensen, Dean of Education from South Dakota State University, followed up on the conference by visiting some small local school systems and by holding two discussion sessions on the cluster concept with school administrators and board members from interested schools. Key to the formation of the original cluster, and for continuation of the cluster, was the McREL and South Dakota State University commitment to not promote a set-of-answers to the schools involved. Instead, their commitment was to provide access to ideas and technical assistance which would enable the cluster to determine their particular strengths and weaknesses and in a collaborative way design a program useful to the schools involved.

The original cluster consisted of six small school systems assisted by McREL and South Dakota State University personnel. The original intent was to involve the State Agency. For various reasons (and to the detriment of the project and the State Agency) this involvement failed to materialize. The cluster began as a voluntary informal superintendents' group that agreed to come together periodically and examine ways they might cooperate in providing higher quality programs for the young people of their respective school districts. There were no formal agreements, contracts, or specified financial commitments from the districts involved. McREL committed a modest amount of funds to provide outside consultants for the cluster as needs were identified. South Dakota State University provided personnel to assist in coordinating cluster meetings and activities. Central to the cluster concept in South Dakota was the commitment to develop a closer working relationship between interested South Dakota State University personnel and rural schools personnel. It was felt that developing tighter linkages between these two types of institutions had potential payoff for both. The university had assistance to give, as well as added experience to gain about small school education.

The cluster arrangement has remained much the same from its formation in the Summer of 1981 to the writing of this report. The only significant change has been a specific commitment of funds by each district for the 1984-85 shared in-service education program.

Schools/Communities Involved in the Cluster

The six schools who formed the original cluster in 1981 were all basically West of Brookings and within 50 miles of each other. Early meetings and activities of the cluster were held in Oldham, which was a central location within 30 miles of the schools involved. Table I provides data on the size of the schools involved in the original cluster.

Table I

Small Schools Cluster

1984-85 Enrollment and FTE Data

SCHOOL	TOTAL ENROLLMENT	HIGH SCHOOL ENROLLMENT	FTE CLASS ROOM TEACHERS
Oldham	92	38	14.3
Ramona	144	40	15.5
Willow Lake	244	77	19.9
Rutland	143	44	16.5
Iroquois	291	91	22.4
Carthage	30	0	3.0

Four of the six original cluster members remain as members at the writing of this report. Carthage dropped from the cluster when they closed their high school in 1983 as a result of their enrollment falling below 35, making them ineligible for state aid. They maintained their elementary school and contracted their high school students to three neighboring districts. Ramona dropped out of the cluster in the Spring of 1984, due primarily to a new superintendent who was not committed to the cluster coneept.

The new schools joined the original four cluster members in the Fall of 1984 after being involved in cluster activities on a limited basis during the 1983-84 school year. The new schools are located East of Brookings, making Brookings a central location to the current cluster. The new school systems are Deubrook (308 total enrollment, 108 high school enrollment, 25.1 FTE teachers) and Elkton (281 total enrollment, 89 high school enrollment, and 25.6 FTE teachers).

The communities involved the the South Dakota Small Schools Cluster are quite similar. The populations of five of the communities range from 209 to 360. The remaining community having a population of only 20, as a result of major fire in 1965 that burned most of the business places which were never rebuilt. Like many small communities in rural America, these communities experienced growth and expansion and

decline in population. The population of these communities tends to be comprised of older people, and the young people are moving away. Few opportunities for employment in towns and almost no opportunities to farm seem to be the major reasons for young people leaving. Continued decline in population seems obvious. The decline of the communities is most evident by their shrinking main streets with numerous vacant and boarded up buildings, creating the illusion that the past and present are living together; for among the run-down buildings one can usually find a post office, repair shop, elevator, machine shop, general store, bank, cafe, beer parlor, and gas station which serve as the gathering places and shopping centers for young and old.

The following quote from Southern Clark County South Dakota History dated several decades ago describes accurately the importance of the school to these communities: "Education. . . is the students and faculty and school board which make up the total. . . a focal point around which the entire community revolves." Comments such as "Our parents are always behind us", and "It's the only show in town", gives further evidence of the pride the people have in their schools and the important part the schools play in the lives of the people of these communities.

Pride and community spirit characterize the people in the various communities. Most people say, "We've got a good school", and "It's a good place to raise a family." But, as they look to the future they see only decline and the gradual disappearing of "family farms" and "small family communities." They are glad to be where they are and are determined to maintain their "way of life" as long as possible. They will fight to retain their school, as they believe loss of the school will hasten the decline of the community, "If the school dies, the community will die." The end seems inevitable; the question is how long will the spirit to survive and the bonds of unity maintain these small communities.

Prominent factors in the success of the individual schools are the school board and the professional personnel.

Case studies of the cluster communities revealed significant consensus among school board members, administrators, teachers, students, and community members concerning the strengths and weaknesses of their schools. Very few people feel students are being short-changed as a result of "smallness." That does not mean that the people are not aware of the weaknesses that do exist, it means that when the strengths and weaknesses are balanced, people believe the strengths overshadow the weaknesses.

Cluster Activities

Since its inception in 1981, the consortium has undertaken a number of cooperative school improvement initiatives. Some of these initiatives are listed below.

1. An annual, shared "in-service day" for staff of participating

schools.

2. Joint planning and use of case studies of cluster communities.

3. Follow-up training for participants of cluster schools.

4. Increased teacher involvement in cluster activities.

5. Implementation of "effective schools" findings in cluster schools.

6. Cluster support of year-long in-service plans.

7. Sharing teachers/specialists in the areas of home economics, art, drivers education, speech therapy, special education, and vocational agriculture.

8. Two cluster schools shared students to enable continuation of a football and a girls' basketball program.

9. Numerous examples of sharing textbooks, teaching materials, technology, software, and transportation.

10. One school system implemented a block schedule to increase course offerings and decrease teacher preparations.

11. Community Education programs have expanded. Adult course offerings include micro-computers, photography, small engines, welding, CPR, parenting, wellness, aerobics, weight control, etc. One community has formed a Community Library Board to govern community use of the library. Another has an artist-in-residence for adults.

12. Making greater use of community resources. Examples include parent helpers organizations, volunteer parent involvement, using guest speakers from the community, senior citizens assisting in elementary classrooms, grandparents day, and using community people to aid in substituting while faculty attend in-service education programs.

13. Greater communication and sharing among teachers in cluster schools. For example, language arts teachers met regularly for a period of time to work on curriculum and share expertise.

14. Shared continuing education classes focusing on micro-computer applications in the classroom.

15. Sharing art consultants to enhance elementary art curriculum.

16. Greater use of strategies by individual teachers to capitalize on small class size such as individualization of instruction and recognition of learning styles in the teaching process.

In addition to the above small school improvement/cooperative activities, the continuing and developing formal and informal dialogue among cluster administrators appears to be a significant outcome of the

cluster activity.

Some of the key formal activities for cluster administrators were the following:

1. Planning and organizing the in-service education activities and the cooperative activities discussed above.

2. Analyzing their leadership styles.

3. Analyzing how they function relative to the research on effective leaders.

4. Discussing some of their "real" problems and seeking advice from their peers on how they could better handle these problems.

5. Developing a closer and on-going relationship with McREL and university personnel.

The cluster concept has also facilitated increased informal day-to-day dialogue among cluster administrators as they work through the problems and challenges of their respective school systems.

It is the perception of this writer that the formal and informal dialogue among cluster administrators, combined with dialogue with McREL and university personnel, has facilitated personal professional growth for cluster administrators and for McREL and university personnel.

Suggestions for Implementation

While the sequence of events and the specific activities leading to the implementation of a small schools cluster is going to differ from one setting to another, the following suggestions appear to be basic to the successful organization and operation of a small schools cluster based on the South Dakota experience:

1. Purpose: The cluster should be organized for a purpose(s) where there is a clear advantage to be gained from cooperation and pooling of human and financial resources. The agenda must focus on common problems if the cluster is to be viewed as successful.

2. Time: The commitment to the cluster should be long-term, a minimum of three years. Forming collaborative arrangements is not unlike a courtship. Time is needed to establish a trust relationship among the participating districts; to being "thinking in a cooperative way"; to evolve a common agenda; and to develop and implement programs that serve the needs of the participating schools. Time is also imperative to develop trust relationships among local school personnel and outside agency personnel.

3. Membership: There should be no fewer than three, but no more than

seven or eight members. It also appears that clusters will work best if the member schools are of similar size since they are more likely to experience common problems which need common solutions.

4. Location: Distances between member schools must be reasonable to allow for frequent meetings and facilitate the sharing of services and/or programs.

5. Support Organizations: Involvement of interested/committed persons from a neighboring institution of higher education and the support of the state education agency are important to the success of the cluster operations. A definite weakness of the South Dakota cluster was the limited involvement of the state agency. Ready access to technical assistance is needed by the cluster (on the cluster's terms) which can be provided by these agencies. Support organizations should focus on organizing, facilitating, assisting and providing information, rather than assuming the posture of "the expert". Support organizations should also become involved in regulations for cluster activities to be carried out effectively.

6. Organization: Efforts should be made to keep organizational structure at a minimum. The survival of the cluster should be based on its usefulness to the participants, not on establishing another formal organization.

7. Leadership: While formal leadership is not needed, someone needs to assume the role of facilitator or convener. An individual from a local institution of higher education can serve this function, if the necessary trust exists between the district personnel and that person. This will allow local school personnel to operate as co-equals without one district seeming to "take charge." It is essential that the superintendents take an active role in the operation of the cluster. Initial and continuing involvement by school board members is also essential.

8. Meetings: Cluster members need to meet frequently, perhaps once a month or at least once every two months. Frequent meetings reinforce the support and importance of cluster activities; keep the consortium idea on track; maintain the cooperative working relationship essential to consortium effectiveness; and allow for the generation of new ideas which can be addressed by the cluster. Cluster meetings should provide opportunities to share successes and problems, learn new skills need to solve problems, plan and evaluate activities, and to develop collegiality.

9. Faculty Involvement: Provision should be made within each participating school for substantial faculty involvement in the cluster activities. Faculty "ownership" is essential if school improvement activities are to be effective.

10. Finances: Member districts must be willing to commit human and usually financial resources to cluster activities. Financial commitments should be kept at a minimum in early consortium activities. If the consortium involves pooling funds from each

school to hire a consultant, buy specialized equipment, etc., it would seem to work best if one school serves as fiscal agent and employing district. Each district contributes an agreed amount to the fiscal agent school which would then take responsibility for paying consortium bills, accounting for funds, etc.

Summary

Our country has long been associated with largeness, expansiveness, and unlimited resources. This mindset seemingly places anything small into the category of inferior or unimportant. However, reservations about this attitude have received serious attention recently and the positive attributes of smallness are being considered.

What is Contract Vocational Education

Contract Vocational Education is a program in which local businesspersons contract with the school and the family to provide the student with specific occupational training at the business site based on predetermined, competency-based, and individualized performance criteria. The businessperson is compensated as an instructor rather than the student being paid as a trainee. The contracting businesspersons provide individual students with skills marketable within--as well as outside--the community at a reasonable cost to the district with academic credit being awarded the student upon successful completion of the program.

CVE began as one of four components of a Rural Student Employability Project, first funded by the Department of Labor through a subcontractor--Youthwork, Inc.--in 1979. More than 500 proposals were submitted to Youthwork as creative and innovative efforts to deal with rising youth unemployment. The Salem-Steelville-Potosi consortium was one of forty-seven projects to be funded across the United States.

Funding for the Rural Student Employability Project--since its original affiliation with Department of Labor--has come from the CETA Youth Employment and Training Program (YETP), first directly administered through the Missouri Department of Manpower Planning and more recently through the Manpower Training Section of the Department of Elementary and Secondary Education. As of October 1, 1983 funding is being provided by the Job Training Partnership Act, through the local Private Industry Council.

CVE involves school personnel in seeking out local businesspersons to participate in an occupational training contract between the businessperson, the student, his/her family, and the school. The occupational aspirations of students are carefully matched with the appropriate local businessperson (with the assistance of the Community Occupational and Training Counselor (COTC) employed by each school) and a competency-based contract is negotiated in which the occupation is broken down into any number of skill components. Each skill component is linked with one or more performance objective, and level of proficiency required in it for entry-level employment. Unlike traditional COE or work experience programs, CVE students do NOT become employees of the businessperson, but rather the relationship is explicitly one of training, with the businessperson/instructor compensated at an agreed rate for his/her time, skill and equipment. The student receives academic credit toward graduation for the training, but is not paid. An additional important distinction from existing COE and work experience programs is that the contract includes a specification of level of proficiency to be attained by the student. The contracts do not specify teaching method--that is left to the discretion of the instructor. The focus, therefore, is on the acquisition of skills rather than the fulfillment of a specific number of training hours. Students are scheduled as their academic classes permit, with three hours per day being the usual length of time allotted to CVE.

In order to comply with a "State Plan for Vocational Education" the Missouri Department of Elementary and Secondary Education has recently required that a classroom component be added, which all students simultaneously enrolled in CVE are required to attend. The class meets two periods per week during the regularly scheduled training time.

Upon completion of the training contract each student, having reached an acceptable level of proficiency in the occupation in which trained, receives a "Certificate of Skill Proficiency" which rates the student on each skill component of the occupation. This allows students to show prospective employers exactly what skill he/she possesses with what level of proficiency. And with the signature of a a local businessperson in hand as verification of skill attainment, it is believed that students upon graduation are in a somewhat better position for realizing their occupational goals.

As the average cost per contract has continually decreased since the program began, it is clear that community involvement is not predicated on the amount of compensation paid. However, it is believed that the instructor-student relationship is better understood and carried out by both parties when there is some amount of compensation paid the instructor. Indeed the community-based instructor then clearly understands the differing roles of employer and teacher and responds accordingly.

Unique Aspects Of Contract Vocational Education

Some of the unique aspects of the CVE approach are listed below.

- While in school and undergoing training, students do not become employees of the business, but remain in the student role.
- Students are not paid as trainees.
- Competency-based contracts are negotiated among the student, the school, the businessperson/instructor, and the parent. These contracts delineate the specific skills to be learned and the level of proficiency required in each for entry-level employment.
- Performance objectives are individualized to match the occupational aspirations of the student.
- Forerunning and simultaneous career counseling is provided to targeted Juniors and Seniors, utilizing a specially designed competency-based career counseling curriculum.
- One unit of credit is award the student upon successful completion of the contract.

- Training site supervision is provided by a school counselor who, along with the instructor, assesses the students' progress via the "Skill Competency Assessment Form" at each site visit.

- Employability skills are measured at the second and again at the last Training Site Supervisory Visit through the "General Employability Skills Evaluation Sheet". Employability skills on which a student ranks low in the first measure serve as the focus for career counseling during CVE enrollment.

- Upon successful completion of the contract the student is awarded a "Certificate of Skill Proficiency" which, when signed by the community businessperson/instructor, serves as proof to prospective employers of which skills the student has acquired and with what level of proficiency.

Advantages of Contract Vocational Education

Some of CVE's advantages are listed below.

- It does not depend on any capital outlay by the school nor the hiring of additional teachers.

- Because it is one-on-one training, it does not necessitate the training of a large number of students in any one occupation in order to justify the equipment or training costs and there does not oversaturate the local job market in any one skill area.

- It overcomes the problems of limited access to traditional vocational training programs, such as the limited number of "slots" available to non-host districts in the Area Vocational School. (While this is less of a problem given decreased AVS enrollment, increased tuition costs offset any gains in enrollment which could be made.)

- It allows the participating districts to provide occupational training to a larger percentage of those students with no plans for post-secondary education but who wish vocational preparation and training.

- Its competency-based contracts do not depend on a fixed numbers of hours of exposure to an occupation but rather contract completion is tied to skill attainment. The contracts are negotiated on the basis of semester entry/open exit.

- It is community based occupational training in cooperation with the private sector.

- o It allows for greater freedom in the scope and nature of training received.
- o It can address itself to the specific and variable occupational needs of the community.
- o It insures the community a role in the provision of education and thereby greatly facilitates both community-school interaction and mutual support.

Follow-Up Study

A longitudinal follow-up study has been and will continue to be carried out with past CVE and/or intensive counseling participants. Findings from the most recent follow-up show that of the 220 of 239 participants having already graduated, only 18 are currently unemployed. Of those 18, 11 are unmarried females living with their family, 1 is a married female, and 6 are unmarried males.

Unemployment rates for the three counties at the time that the last follow-up was conducted (August, 1983) were 8.6%, 11.4%, and 24.7% respectively for Crawford, Dent and Washington counties. Washington county had the highest unemployment rate in the state. Considering that the age-specific unemployment rates for 16-19 year olds in the three counties in the 1980 Census were nearly three times that of the general population, one could estimate that the unemployment rate for graduates of the CVE program is roughly one-sixth that of their age peers.

A Step By Step Approach

While the sequence of events leading up to the ultimate implementation of a Contract Vocational Education program in other school districts may vary somewhat, the following is a suggested framework for initiating discussion, securing community cooperation, accessing financial resources and implementing CVE:

1. Someone must take the initiative.
2. Need must be established; community's ability to meet that need must be assessed.
3. A consortium of school districts should be considered.
4. The community must be involved.
5. A program leader must emerge.
6. Career counseling program should be established.
7. Funding should be secured.
8. Consortium should hire project director.
9. Aspirations of students should be matched with training capabilities of local businesspeople.
10. A competency-based training contract should be negotiated.
11. Training site supervision should be planned.
12. Job development efforts should be considered.

It is virtually impossible to provide a "cookbook" approach to implementing a program such as Contract Vocational Education. School districts vary, student needs vary, and communities may vary in their enthusiasm for and ability to train under such a program. What has been attempted here is to provide a methodology by which any district can implement "its own" program, designed to fit local needs and circumstances. What has been offered here as advice is based on the four years' experience of the Salem-Steelville-Potosi Consortium in the design and implementation of CVE. We hope that other districts may see its value and share in the benefit to students derived from unified community effort to provide the rural non-college-bound with much more that just a high school diploma.

PROJECT INNOVATIVE CURRICULUM

The school administrators and teaching staff from Giltner, Harvard, Kenesaw, and Trumbull districts, as well as the consultants from Kearney State College, Nebraska Department of Education and Mid-Continent Regional Educational Laboratory, should be commended for their dedication and spirit of unity. This report by no means marks the completion of Project Innovative Curriculum for it is only the beginning. It is hoped by all who are involved that PIC will continue to be as successful as it has been to this date. Project Innovative Curriculum is a cooperative program involving four rural schools in south central Nebraska of approximately the same size, background and geographical area. The major goal of the project is to develop useable curriculum guides.

BACKGROUND

In most rural communities, the school is the center of activity. It provides the area people a place to go for sporting events, musical programs, plays, dances and community education courses. More importantly, it gives the community a sense of meaning, something to point to and say, "That's our school and we're proud of it."

A small school isn't just a place, it's a lifestyle. There are many positive characteristics of small schools:

1. The mutual respect and close relationships between professional educators, parents and students in the community.
2. The slower pace and less pressured environment.
3. The spirit of cooperation.
4. The opportunities for leadership development.
5. The opportunities for more students to participate in school activities. (Besides being students, they can also be athletes, musicians, artists and public speakers.)

Being small means that a curriculum may be less specialized than in a large school (although technology may wipe out this difference). It also means that education is more personalized. Flexibility enables schools to make the most of the strengths of individual teachers, classes are smaller, and a less obtrusive bureaucracy puts instruction rather than management in center stage. (Nachtigal)

Nachtigal also believes the most important reality of rural America is that "planning done FOR rural people...denies them the will and capacity to undertake action on their own behalf." (ED 197-903--Creative Ideas for Small Schools, Anne C. Lewis, et al., p.11.)

This statement is the guiding force of Project Innovative Curriculum. It is imperative that the teaching staff of the four schools create their own curriculum guides so they will use them in the future.

The four PIC schools, like many others, are faced with some common and persistent problems such as declining enrollments, over reliance on property tax revenue, urban orientation of state departments and legislature, high teacher turnover and difficulty in recruiting, limited curriculum offerings, and lack of political clout of rural areas.

For decades educators and the general public assumed that what was right for the large school was also rights for the small rural school. In Schooling in Isolated Communities (1978) Tom Gelton states that as long as rural schools emulate an urban model of education, rely on curriculum materials written for urban children, and seek to hire the same kind of teachers as urban schools, they probably will be second rate... Rural schools curricula are not taken to be inferior, as long as they take advantage of the rich resources of the rural community and relate directly to the experience of rural children. (Vesklka, Johnny, The Delivery of Educational Services: The Small School District Problem 8, February, 80., p. 14)

Another concern of many small schools is that so much emphasis is directed in the curriculum of small rural schools toward preparing their students to leave their local communities that few graduates have learned the value of returning to their local communities to help them grow and develop. (Veselka, p. 15)

Project Innovative Curriculum will hopefully address some of these problems and solve them. Impetus will be on providing a more comprehensive yet clear cut curriculum guide, interjected with innovative ideas to offer courses that provide a stronger sense of rural identification for the students yet preparing students for the future.

The Setting

Once described as a part of the Great American Desert, Nebraska now has approximately 93% of its total land area in farms and ranches. Agriculture is the heartbeat and the growth of Nebraska has been closely related to trends in farming. The four Schools involved in PIC are located in the south central part of Nebraska. This area has been called the "Garden Spot of Nebraska" because of its rich and fertile soil and its plentiful supply of water. The spaciousness and unlimited fields of corn and wheat give the area its unique character.

In fact, one participating school is situated between a John Deere farm implement dealer and an open field. The superintendent can look out of his south window and gaze across for miles and see nothing but cornfields. This sense of openness of the landscape has helped shape the inhabitants of this area.

Even in times of hardship the majority of people in this area seem to remain optomistic and determined to improve their lives. They are friendly and down to earth people who have not broken faith with the simple and honest values of rural America. The family, church, and school are still the most important institutions in the community.

The four towns in this area are unique because they were founded, not in response to economic or social needs, but in anticipation of such needs - especially during the railroad boom of the 1870's when the four communities were settled. Known as Alphabetical Towns, these communities were developed by officials of the Burlington Railroad (however, today most train service has been discontinued in this area). These communities soon became agriculturally oriented and today agriculture is still the most important "force" in the area.

The current farm economy as of the spring of 1985 has a significant effect upon this area. Land values have dropped over 50% in the past three years. National statistics show 13.7% of the farmers will not survive 1985. Nebraska and Iowa are known to be confronting a larger percentage of farm failures than other farm states. This has a significant effect on rural schools' financial operations. The potential of property taxes remaining unpaid is facing rural school districts. The prospects for the agricultural economy improving remains dim and effects each school's financial plans. Education on a statewide level therefore, faces reduced funding because of the depressed farm economy.

The value of this program can be justified because of the adversity faced by schools. Finding new ways to provide better education on a planned economical and cooperative basis will help to meet the concerns of a pressured educational system.

The Need

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"The future of Nebraska and the future of the country are entirely linked to the future of education." Governor Robert Kerrey, June 11, 1983.

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The need for a program like PIC was clearly evident in the mind of Frank Shaughnessy, Trumbull Superintendent and "Father of PIC." He realized his school needed outside help and idea assistance in order to develop an effective and meaningful curriculum plan.

In a December 1984 Newsletter, William Gannon, Superintendent of Schools at Kenesaw, a member school of PIC states this about the project:

> In a larger school setting there are usually more than two people in a curriculum area to provide multiple ideas. In the smaller school the number of staff members is probably two or less in the curriculum areas. By combining the four schools we are able to draw from the expertise, knowledge and sharing of ideas from four or more members in each curriculum area.

Another reason for the need of a program like PIC is the current state of economy in Nebraska. Schools are also faced with declining enrollments which puts a further burden on the financial operation. The need for an economic and more efficient way of developing a sound curriculum makes Project Innovative Curriculum a very worthwhile pursuit.

The need for Project Innovative Curriculum also arose because of pressure from recent national reports such as:

1) The April 1983 National Commission on Excellence in Education's "A Nation at Risk" spoke of the now widely quoted "rising tide of mediocrity" in our nation.

2) The Carnegie Council of Policy Studies in Higher Education recently reports that "because of deficits in our public school system, about one-third of our youth are ill educated, ill employed, and ill equipped to make their way in American society." (Megatrends, p. 25.)

3) The insightful best seller, Megatrends states that we are experiencing the greatest change in our society in 150 years. We are in transition from an industrial society to an informational one. Today's students need to be taught skills that will help them cope with and contribute to such a society. These national reports led the way to increased concerns about education in Nebraska.

Statewide pressure also exists, making the need for a program such as PIC very clear. In the summer of 1983, Nebraska Governor Robert Kerrey commissioned a task force to study the status of primary and secondary public education in Nebraska and make recommendations for improvements. The task force on Excellence in Education found that Nebraska's schools are sound, but not without room for improvement.

Created from this study was Legislative Bill 994 known as the Education Enhancement Bill. Portions of this bill are based on the findings of Senator Thomas Vickers (Chairman of the Education Committee) and other committee members. All portions of the bill reflect extensive coordination with the Education Committee, The Nebraska State Education Association, The Nebraska Association of School Boards, The Nebraska Council for School Administrators, The Nebraska PTA, the Nebraska Department of Education, and numerous other educational institutions and leaders.

Governor Kerrey is convinced that education is central to Nebraska's continued growth and well-being as a state and LB 994 is designed to launch a state partnership with local districts to put Nebraska schools at the top of the nation by 1990. It provides for improvement in the following major areas:

State role and mission
Curriculum and learning time
Teacher preparation, development and dismissal
Teacher recruitment and retention
Innovation and use of technology

Most importantly LB 994 requires every school in Nebraska to have a written curriculum plan that meets accreditation standards for the 1985-86 school year.

Through Project Innovative Curriculum the schools are developing curriculum guidelines to bring each school's curriculum into compliance with rules and regulations set by LB 994.

"In developing the guides, teachers will look at recommendations from various national reports on education and developments in educational technology," stated Trumbull Superintendent Frank Shaughnessey.

There are high expectations that Project Innovative Curriculum will create a broader curriculum, increase the exchange of fresh, innovative ideas among fellow teachers, and eventually encourage other sharing experiences.

Historical Background and Educational Study Of The Four Project Innovative Curriculum Schools

The four Project Innovative Curriculum Schools and their communities have several characteristics in common:

COMMUNITIES

1) They rely on agriculture for their mainstay.
2) Legal, medical and large commercial services must be obtained in larger neighboring cities.
3) The homes are generally older and well kept.
4) The most important businesses in the towns are the Bank, the grocery stores and the Coop.

SCHOOLS

1) All 4 schools have a low pupil/teacher ratio.
2) They have very few discipline problems and see little or no conflict between home and school (i.e. common values and views).
3) All enjoy community support and active involvement in school activities.
4) They have an informal and open communication line between administrators, teachers, parents, students and school board members.

5) All have a strong and caring teaching staff.
6) They are all state accredited.
7) They have an excellent college prep program.
8) All have a very low student drop out rate.
9) Students in all 4 schools have an opportunity to participate in extra curricular activities and many students also enjoy opportunities for leadership.
10) All 4 Project Innovative Schools are served by ESU #9 in Hastings.

Cluster Operation

Arrangements were made by McREL to initiate the cooperative school curriculum effort involving the schools of Doniphan, Giltner, Harvard, Kenesaw, and Trumbull.

In a letter to Frank Shaughnessy, Paul Nachtigal said this about the future direction:

> I gathered that the districts were not interested in "just doing the same old thing" in curriculum development. Rather the schools hope to develop programs that are (1) uniquely suited for small rural schools and (2) forward looking in that they address the need of students that will spend most of their lives in the 21st century.

At the first gathering on March 26, 1984 in Hastings, Shirley McCune, a McREL staff member and formerly of the Naisbitt Study Group who published Megatrends, provided the futuristic context. (Feb. 20, 1984. Letter, Paul Nachtigal.)

McCune made the comment that Nebraskans must restructure their educational system if students are to keep pace with the nation's rapidly evolving informational society. "It's a paradox," Dr. McCune said. "We do two things in education, try to preserve the past and prepare kids for living 20 years from the time we're teaching them." She went on to say that "students need to be well versed in areas such as telecommunication, robotics, solar exploration, laser technology, and biogenetics-to face the challenge of the coming years." "We need to teach students to innovate, to think, cause and effect thinking won't cut it anymore," she said.

Dr. Gerald Bailey, Kansas State University Professor and Curriculum Specialist, established the structure basis for cooperative curriculum development. Dr. Bailey had worked with a number of Kansas small schools in developing curriculum guides. This was the first time Dr. Bailey's model would be implemented in a multi-school setting. The curriculum model entitled BAILIT USD 2001 Sample Curriculum Guide was developed by Dr. Bailey and Dr. J. Harvey Littrell, also from Kansas State University.

Dr. Bailey stated his three goals for the project:

1) to develop K-12 curriculum materials suited for individual schools represented in the cooperative rural curriculum project.
2) to train selected teachers and administrators for curriculum roless.
3) to involve K-12 faculty in curriculum material production.

Project Innovative Curriculum concentrates on the eight steps of curriculum development contained in Bailey's model. These steps include:

1) Identification of School Goals
2) Creation of Subject Goals
3) Creation of Scope and Sequence Charts
4) Identification of Competencies
5) Creation of Curriculum Guides
6) Identification of Instructional Objectives
7) Curriculum Evaluation
8) Curriculum Revision

A steering committee was created to provide a leadership role in making decisions about the project and assisting other teachers in their own school districts in developing curriculum materials.

The steering committee included representatives from each school district: (1) school superintendent, (2) building-level administrator, (3) two elementary teachers, and (4) two secondary teachers. An alternative was selected for both the elementary and secondary teacher in case of unexpected absence.

Dr. Bailey listed several issues for the steering committee members to consider:
1) Extensive curriculum work sessions will be conducted between the large group training sessions. This will require the leadership of the steering committee members from the respective schools.
2) All schools may not progress at the same rate of production. This variation must be taken into consideration in the planning.
3) This model of curriculum training emphasizes the total involvement of the K-12 staff. There are both strengths and weaknesses in this approach.
4) No summer sessions have been planned. Previous experiences from the trainer reveals there is a high potential for complications with summer exercises.
5) Training sessions should be allocated for 1/2 day limits or longer. These sessions should not be placed at the end of the working school day.
6) Additional issues such as school cooperation, futuristic issues, curriculum relevance, and textbook selection will need to be considered during the construction of curriculum guides.
7) Schedule release time for the total K-12 school staff will need to be considered for the follow-up sessions conducted by the respective steering committees. This has been called the "pull out" program by the administrators whereby substitutes are needed for teachers when subject area group sessions are being conducted.

Mid-Continent Regional Educational Laboratory in Denver has provided technical assistance and funding for the project. The Center for Rural Education and Small Schools at Kearney State College, Kearney, Nebraska, and the Nebraska Department of Education have also shown support by providing curriculum consultants.

A summary of cluster activities through Fall '85 follows.

TIME LINE

January 8, 1984	Project Innovative Curriculum Planning Conference Meeting
March 26, 1984 Hastings, Nebraska	General Orientation Meeting Dr. Shirley McCune and Dr. Gerald Bailey - Guest Speakers
May 15, 1984 Doniphan, Nebraska	Steering Committee Training Session Overview of Bailey's Eight Step Curriculum Model School Goals and Project Goals Created
September 18, 1984 Doniphan, Nebraska	Administrator's Planning Meeting School and Project Goals How to Create and Creation of Subject Goals
October 15, 1984 Lincoln, Nebraska	Consultant's Orientation Meeting Dr. McCune's Overview of Future Trends in Education. Overview of Bailey's Eight Step Curriculum Model. Presentation by Dr. Daryl Hobbs, Professor of Rural Sociology at the University of Missouri, "Rural Education in America" Overview of Subject Goals Steering Committee Meeting on Scope and Sequence
October 23, 1984 Trumbull, Nebraska	Administrative Planning Meeting--Plans for Subject Goals Workshop
November 8, 1984 Giltner, Nebraska	Subject Goals Workshop, "1st Working Session" Dr. Bailey, Guest Speaker, Steering Committee Meeting Review
January 8, 1985 Grand Island, NE	Administrators Planning Meeting Review of Subject Goals Workshop Preparation for Scope and Sequence Workshop
February 6, 1985 Harvard, Nebraska	Scope and Sequence Workshop Dr. Bailey, Guest Speaker, Steering Committee Meeting Review
March & April 1985 Hastings, Nebraska	Subject Area Group Meetings Complete Sequence Development.

FUTURE PLANNED EVENTS
Begin Fall 1985

Curriculum Guide Creation
Competencies
Instructional Objectives
Curriculum Evaluation
Curriculum Revision
Steering Committee Training
Follow-up Training

Strengths, Concerns, and Recommendations

The following strengths, concerns and recommendations relative to Project Innovative Curriculum are listed below.

STRENGTHS:

Useability of Curriculum Guide

1) Teachers are doing most of work on creating the curriculum guides.This will make the guides more practical and useable.

Open dialogue

2) The open dialogue between teachers and the exchange of ideas create new and interesting learning concepts.

Increased interaction

3) The increased interaction between the 4 schools created more confidence, pride and vitality in the administrative and teaching staffs.

Working together

4) The opportunity for Administrators and teachers to work side by side provides a chance for them to get to know each other better and improve working relationships.

Excellent consultants

5) Excellent participation and cooperation from consultants resulted in more open and applicable information.

Administrative leadership and guidance

6) The Administrators have helped and provided active leadership in establishing the educational parameters of the project.

Community support and pride

7) The 4 communities are proud and more supportive of their schools.

Flexibility

8) Project Innovative Curriculum allows enough flexibility for the individual schools to "tailor" certain areas in the curriculum guides for their own use.

More time spent actually working

9) More time has been devoted to actual working time rather than spending too much time on defining terms and concepts.

Future cooperative plans

10) Plans for future cooperative ideas are being firmly established.

MAJOR CONCERNS:

Pullout program

1) Some of the administrators were concerned with the "pull out" program. Substitute teachers are needed for the "pull out" process in order to continue school. The major concerns are finding substitute teachers, keeping down the costs for the substitutes, and taking away quality learning time from the students.

Negative attitudes

2) Another area of concern was negative attitudes by teachers because of unwillingness to change and accept new ideas.

Continued cooperation

3) Concerns were voiced about maintaining the high level of cooperation that now exists between the 4 schools.

Useability of curriculum guide

4) Outside sources questioned the useability of the curriculum guides if they became too large - "The thicker they are - the less they will be used."

Leadership maintenance

5) Responsible, continuous, and democratic leadership is crucial for PIC to remain successful.

Staying on task vs. completing it correctly

6) A few concerns have been voiced about getting too far behind on future work projects, while other concerns were voiced about trying to get it done too fast and not paying enough attention to certain details.

RECOMMENDATIONS:

According to Dr. Reginald Nolin and Dr. Charles Sloan certain conditions must exist to have a successful sharing program:

1) The participants must be committed to making the project work.
2) Open and continuous communications need to take place between the schools.
3) Leadership must be provided from each school district.
4) Planning must precede any form of action in cooperation. (Nolin & Sloan "A Unique model for Small School Survival",pp.8-9

Some other suggestions for a successful cooperative program:

1) Curriculum guides should be small enough to promote useage yet large enough to provide a comprehensive coverage. Some Administrators are planning to have one comprehensive curriculum guide in their office or library for the benefit of the school board, for new teachers and future administrative evaluations. The shortened and specific subject area curriculum guide will be used by the teacher in his/her own classroom.

2) Steering Committee members need to take an active role in guiding and motivating the other project members.

3) Develop lessons that relate to both rural and urban environments.

4) Offer courses that provide a stronger sense of rural identification.

5) Use community members and other resources to strengthen student learning.

6) Emphasize the options available to students both within the community and outside the community.

7) Permit and-encourage colleges to place Early Field Experience students and regular student teachers in the PIC schools. This promotes better relations with future teacher prospects.

8) Develop resource notebooks for teachers such as lists of recommended textbooks, films, magazine articles, TV programs, field trip locations, guest speakers and little known places to obtain educational materials.

9) Cooperatively come up with imaginative and efficient use of funds.

10) Create ways to increase future sharing programs between the four schools.

Some possibilities for further sharing are:

instructional materials
teachers
support personnel (nurse, librarians, janitors,
bus drivers)
classes
inservicing
counseling services
instructional TV
testing
federal programs
equipment
administrative ideas
office machine & audio visual equipment repair
bus driver training
drivers education
printing
library material
nutritional education (recipe exchange)
computers/data processing
transportation
special education
financial management

"Shared Services for Rural & Small Schools", Rural Education Digest, ERIC/CRESS 1984.

The Future of PIC

Today, Nebraska school districts are undergoing many changes due to the national emphasis on excellence in education, statewide pressure to broaden curriculum offerings, and local problems of declining enrollments. Nebraska is at a point where many of its smaller rural schools must change and be willing to cooperate with neighboring schools in order to survive.

Project Innovative Curriculum is a well planned and workable alternative to the current needs of these four schools. In the past, the four schools belonging to Project Innovative Curriculum have known each other through the athletic and music competition but now these same schools are teaming up for academic cooperation. This positive academic cooperation can continue to grow and be as strong as rivalries have been on their football fields.

The Setting

If Missouri can be thought of as a microcosm of the U.S. with its delta cotton farming in the Bootheel, its dairies and pecans of the southwest, its Ozark Hills, its corn and wheat of the north, its wood products and charcoal industry, and its two major metropolitan areas looking east (St. Louis) and west (Kansas City)--then it should come as no surprise that the state encompasses an area reminiscent of Appalachia as well. In the southeast central portion of the state, some 60-120 miles from St. Louis, lies an area of three continouous counties, Washington, Crawford and Dent, back country Indian trails, lead mines, tiff mills and poverty.

Small but growing county seat towns offer a significant contrast to the open countryside. While economically marginal, the communities have attracted an increasing population. Sharing in the more widespread reverse migration of the last few years from urban to rural, the stream of migration out of the communities, which was so evident in the past, has greatly subsided, save the temporary exodus by many of its young to colleges and universities. But often isolated socially and culturally, as well as geographically, from the communities in which their schools are located, the out-county students comprise between 80-90% of the student bodies.

While divergent in many respects, the three-county area shares some very basic problems, such as extremely high dropout rates in the secondary schools, an isolated "out-county" population, and a growing alienation from school. When the consortium of the three schools first formed in 1974 with the assistance of the Office of Rural Development at the University of Missouri, they did so with the intention of researching their "dropout problem". That personal interview study, of 270 randomly selected young people who have dropped out over the previous ten years and still reside in the three-county area served as the basis for several subsequent programmatic efforts by the schools. The first program was aimed at meeting the immediate educational, occupational and vocational needs of those who had already dropped out and later the program was redirected toward increasing the holding power of the school through attempting to increase the relevancy of schooling to its target population.

Much was learned from the original dropout study, which still serves as the impetous for continued efforts directed toward the limited apsiration student with no plans for post-secondary education. By broadening the target population beyond "those in most imminent danger of dropping out", it is believed that the category of "immin[illegible] dropout" could be greatly reduced through appropriate programmatic efforts and where still existent, be limited to those few making an informed, rational decision to quit school.

But perhaps the most illustrative lesson learned from the dropout study was about just who the dropout was. The conventional wisdom, supported by the administrators' schooling and selective perceptions, led them to characterize the "typical" dropout prior to the study as an

academically poor student, most often male, who was a discipline problem, and who came from a broken home with parents who did not care about education [illegible] some form of public assistance. What was in fact learned from the research study was that half of those who dropped out were male, half female; the grades of those dropouts in the random sample followed a normal curve; 77% live in intact nuclear families with both natural parents present. Of the 22% who families received some for of government income while in high school, only half (11% of the total) received any form of public assistance. Sixty-nine percent (69%) had never been suspended or expelled from school prior to dropping out, a practice then routinely used in cases of pregnancy or failure to observe dress and hair codes. Only 7% of the parents supported the student's decision to leave school.

The answer to the seemingly great disparity between the picture of the dropout painted by the administrators and counselors and that which was found in the research study, was explained very easily by another important finding--64% of those who dropped out of school talked to no one about it prior to leaving. In other words, the dropouts with whom the administrators and counselors came into contact WERE those who were flunking out of school or who were indeed discipline problems. Those they didn't see--the majority--were those who failed to come back after Christmas, who didn't return to school in the fall, or who just failed to show up one day and were not heard from again--the silent majority.

Using Washington County as a case in point, one can quickly achieve an understanding of some of the area's more basic economic problems. Its median household income at $11,421 is $4160 less than that for the state as a whole while its median family income at $13,465 similarly falls $5319 short of the state equivalent. It ran 106th among the state's 114 counties in per capita personal income at $5083. Twenty-five (25) percent of total personal income results from transfer payments, (e.g., public assistance, social security, retirement, etc.), more than ten percentage points above that of Missouri as a whole. Nearly two-thirds of those employed work outside the county, compared to to 10% for all counties as an aggregate. Surpassing even inner city St. Louis, unemployment in Washington County has been the highest of any Missouri county rising to over 30 % during some months of 1982. Likewise its high school and junior high dropout rate surpassed all other counties in the state, trailing only St. Louis City.

What the statistics show are evident; what is not so evident are the cultural characteristics which play a part in the way in which education is viewed, how it is supported on the local level and the degree to which there is or is not adamant parental support for the educational system. Washington County is comprised of a centrally located county seat town of 2500 people with more than a dozen little outlying communities with populations of from 10 to 400 people each. Most of the communities at one time had their own school, however one or two high schools currently serve the county's young. The Potosi high school districts, serving the greater majority of the county, includes all but a small area in the southeastern corner. With some 160 square miles in its own district, Potosi receives approximately

300 secondary students from outlying elementary districts. More than 95% of its 875 secondary students are bussed (some as long as 3 hours each day in spite of a very efficient transportation system), therefore the incentive to graduate from high school lessens. In responseto the personal incovenience disencentive, unemployment rates of the last several years, the low percentage of graduates going on to college, and the perceived irrelevance of "education" on the part of many students, spurred an effort in 1979 to meet the vocational training needs of a large, previously unserved segment of the student body.

The Need

After three years' experience in working intensively with the limited aspiration student both in and out of school, and again reflecting upon the findings of the dropout study, it became obvious that while vocational training was sought by an increasingly large percentage of the student body, there existed a number of major impediments to expanded vocational programs in smaller rural schools:

(1) Rural Missouri has benefited from the Area Vocational Schools located around the state. However, benefits are often offset by problems of access. Until the recent decline in AVS enrollment, most non-host districts were limited both in the number of students they could send and the skill areas in which the students were trained. As AVS enrollments decline with the precipitous increase in tuition fees, sending districts are forced to either further limit the number of students sent or reallocate money in an already austere budget. Furthermore, there are between 35 and 40 rural high school districts in Missouri which have no active affiliation with an AVS.

(2) Many rural districts simply cannot afford in-school vocational training programs. Vocational training is expensive both in terms of capital outlay (equipment, facilities, etc.) and in the competition for certificated teaching personnel.

(3) Yet another problem for rural communities is that, with few exceptions if students are trained in sufficient numbers in any particular skill in order to make it economically feasible to offer such training, an oversupply of that skill in terms of the local labor market is quickly produced. Graduates of such courses are then either confronted with not using their acquired skill or of moving to a larger labor market. As increasing numbers of rural young adults are rejecting migration as a solution, their compromise is to commute longer distances to larger labor markets, a less acceptable choice as energy costs continue to rise.

The unique opportunity to relate the diverse but micro labor markets of many rural areas to the students whose vocational training needs are not being met in traditional ways has lent itself to the successful development of Contract Vocational Education.