DOCUMENT RESUME

ED 329 402 RC 018 015

AUTHOR Jackson, Dale R., Ed.
TITLE Rural Education in Iowa: A Collection of Papers from the Invitational Rural Education Conference (Cedar Falls, IA, April 7-9, 1989) . Monograph Series, Volume I, Number 1.
INSTITUTION North Central Regional Educational Lab., Elmhurst, IL.; University of Northern Iowa, Cedar Falls. Coll. of Education.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE 90
CONTRACT 400-86-0004
NOTE 167p.
PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS Educational Change; *Educational Equity (Finance); Educational Finance; *Efficiency; Elementary Secondary Education; *Rural Education; Rural Schools; *School Community Relationship; School Districts; *School Effectiveness; School Funds; Small Schools; State Government
IDENTIFIERS *Iowa; Small School Districts

ABSTRACT

This volume contains short papers and commentaries from a conference on rural education in Iowa. Prefatory notes compare the characteristics of Iowa rural students and rural schools to those of the North Central states in general, and discuss two rural education issues repeatedly identified at the conference--equity of educational opportunities and efficiency of rural school operations. Overall, conference participants suggest that equity and efficiency issues are best addressed through continued innovation in the areas of funding for rural districts, collaboration among rural educators, and coordinated application of technology to rural education. Section I, the keynote address, discusses "Urban Chauvinism and Rural Values." Other sections discuss: (1) school size and curriculum diversity in Iowa, new state curriculum standards, and improving quality and equity of curriculum delivery through whole-grade sharing, interactive television, and magnet vocational schools; (2) school effectiveness in the rural community setting, inherent advantages of small community schools, the importance of the school to its community, and the ongoing threat of school closings and school district reorganization; (3) the Iowa state funding formula, and equity, quality, and efficiency with respect to rural schools; (4) student needs and how rural education can meet them; (5) ways of redesigning Iowa rural schools--sharing, restructuring, and consolidating; (6) elements of effective staff development in rural schools; and (7) planning and implementing technology applications in rural education in Iowa. (SV)

Rural Education in Iowa

A Collection of Papers

Monograph Series
Volume 1, Number 1

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This publication is based on work sponsored wholly or in part by the Office of Educational Research and Improvement (OERI), Department of Education, under Contract Number 400-86-0004. The content of this publication does not necessarily reflect the views of (OERI), the Department of Education, or any other agency in the U.S. Government.

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$6.00

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Prefatory Notes

An Introduction from a Regional Viewpoint on Rural Education

Lawrence B. Friedman, Ph.D.
North Central Regional Educational Laboratory

This volume is one key outcome of the Invitational Rural Education Conference, April 7-9, 1989, sponsored by the University of Northern Iowa, the Iowa State Department of Education, and the North Central Regional Educational Laboratory. Individually, the papers reflect the authors' knowledge of the rural education enterprise and its diversity in Iowa and their commitment to improving and expanding educational opportunities for all rural students in the state. Collectively, the papers depict the state of rural education in Iowa near the end of the 1980s from a broad range of viewpoints, including those of teachers, administrators, counselors, parents, school board members, legislators, state department and area educational agency staff, professional organizations, and advocacy groups. The wide variety of viewpoints has resulted in a remarkably, and perhaps uniquely, rich composite picture of rural education in one state.

This introduction represents yet another point of view, a regional perspective, on rural education in Iowa. I am the Director of the Rural Education Program at the North Central Regional Educational Laboratory. The Lab, funded primarily out of the United States Education Department, serves a region of seven states: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. The Rural Education Program conducts a broad range of projects to develop and identify promising and successful rural education practices in the region; describe the conditions of rural education across the region; and disseminate information on the practices and conditions to the region. Thus, when I attended the conference and read the papers in this volume, I could not help but compare

what I was learning about rural education in Iowa with what I had learned about rural education in the region. This introduction is the result of the comparison. It briefly characterizes rural students and schools in Iowa and discusses two Iowa rural education issues in Iowa repeatedly identified by the authors in this volume that also are concerns of rural education stakeholders across the region.

Iowa's Rural Students and Schools

In brief, almost a third of Iowa's K-12 students attend the almost 50 percent of the state's schools that are rural schools. Of the nearly all white students population, nearly one in five are eligible for free school lunches. The average rural school enrollment is 279 and almost all enroll 500 or fewer students. Compared to the students and schools of the North Central region as a whole, a substantially higher percentage of Iowa's K-12 student population and schools are rural. The ethnic composition of Iowa's K-12 rural student population is slightly more homogenous than the region's and a slightly higher percentage of the population is eligible for free school lunches than in the region. Iowa's rural schools, on the average, are substantially smaller than the region's. More specifically,[1]

- Almost 151,800 K-12 students attended Iowa's rural schools, approximately 31.5 percent of the state's slightly more than 480,500 students.
  (approximate averages for North Central states: 225,200 rural students, 19.4 percent of 1,158,800 students).
- Iowa's K-12 rural student population was more homogenous (approximately 99 percent white) than the state's total student population (just under 95 percent white).
  (approximate averages for North Central states: rural students — 97 percent white, total students — 81 percent white)
- Almost 18 percent of Iowa's K-12 rural students were eligible for free school lunches.
  (approximate average for the North Central states of Indiana, Iowa, Minnesota, and Wisconsin: 16 percent)
- There were 804 rural schools in Iowa, 49.2 percent of the 1,633 schools in the state.
  (approximate averages for North Central states: 795 rural schools, 29.7 percent of 2680 total schools)
- The median size of Iowa's rural schools was 172 students, compared to 246 for the state, and the average size of a rural school in Iowa was 189 students, compared to 294 for the state.

[1]The data are from the Common Core of Data for the 1988-1989 school year, collected by the National Center for Educational Statistics. This data base defines a *place* as 'rural' if it (a) has a population of less than 2,500 and (b) is defined as rural by U.S. Census.

(approximate averages for North Central states: rural school median size — 239, state median size — 425; rural school average size — 290, state average size — 373)

- Nearly all of Iowa's rural schools (99.3 percent) had enrollments of 500 students or fewer and 88.5 percent of them enrolled 300 or fewer students. At the state level, 89.6 percent of the schools enrolled 500 or fewer students and 63.4 percent enrolled 300 or fewer.
  (approximate averages for North Central states: rural schools — 86.2 percent enrolled 500 or fewer students and 62.2 percent enrolled 300 or fewer; total schools — 68.1 percent enrolled 500 or fewer and 35.5 percent enrolled 300 or fewer)

Given this profile of rural students and schools in Iowa, it is by no means surprising that Iowans have devoted considerable time, effort, and resources to identifying and addressing rural education issues. This volume shows that this is indeed the case and that there are many success stories from which the rural education community of the North Central region can lean.

Rural Education Issues in Iowa and Responses to Them

Almost all, if not all, of the Iowa rural education issues identified in this collection of papers are specific instances of two general rural education issues — equity of educational opportunity for rural students and efficiency of rural school operations. The volume makes clear that the issues are interconnected, as are their roots and their resolutions. The volume also makes clear that the equity and efficiency issues are being addressed at both the state and local levels.

Equity of Educational Opportunities. Many of the volume's papers argue explicitly that Iowa's rural students generally have fewer and/or lower quality educational opportunities than their non-rural counterparts. This argument is implicit in most of the others, whether staff development, finance, technology, or school effectiveness is under discussion. Most often the inequity is described in terms of curricular offerings at the high school level; rural students have fewer courses available to them than students in non-rural schools. Some authors also identify other sources of inequity that exist at the elementary as well as the high school level, such as teachers teaching outside their areas of expertise and lack of staff development and professional development activities through which teachers become more expert. However, authors also indicate that often rural students have certain educational advantages, such as small classes, close student-teacher relations, and rich experiences in extracurricular activities.

In summary, the volume paints a picture of both the positive and problematic aspects of the educational opportunities available to Iowa's rural students. In some respects, the state's rural students have fewer or

lower quality opportunities and in others, they have more or higher quality opportunities. This state of affairs must be taken into account when addressing the equity issue. Care must be taken to insure that a strategy does not create new educational opportunities at the expense of existing ones. For instance, adding high school courses through increasing teaching loads might easily have a negative effect on student-teacher relations and decrease the time teachers can spend on students' extracurricular activities. Also, strategies that define the equity issue too narrowly, say only in terms of inequity in high school curriculum offerings, are likely to ignore other equally important aspects of the equity issue.

Efficiency of Rural School Operations. It is often claimed that rural schools operate less efficiently than non-rural schools; that is, rural schools require more resources than their non-rural counterparts to operate at the same level. However, the discussions of rural school efficiency in this volume strongly suggest that Iowa's rural schools in general operate as efficiently as their non-rural counterparts. The papers suggest that many of the factors contributing to the higher per-pupil costs in rural schools than in non-rural schools are facts of rural life that can be changed only with great difficulty, if at all. For instance, it is pointed out that greater student transportation requirements and lower student-teacher ratios are part and parcel of rural education in Iowa. Thus, higher per-pupil costs that appear to be the result of relative inefficiency are often really the result of operating a school under rural conditions. Resource allocation mechanisms, particularly funding formulas, that do not take such conditions into account penalize rural schools and their students. Most, but not all, of the papers that discuss rural school efficiency, argue that Iowa's rural schools and students have been penalized.

Connections between the Equity and Efficiency Issues. Authors in this volume who address both issues point out that the two issues are interconnected in three critical ways.

- Clearly, more efficient rural schools would be able to allocate more resources to educational opportunities for their students. This volume suggests that a bedrock question is in which respects Iowa's rural schools could be and could not be operated more efficiently, given the conditions in which they operate.
- The small size and remote location typical of Iowa's rural schools are key, if not *the* key factors, in formulating and resolving the equity and efficiency issues. When, if ever, is a rural school too small and/or too remote to provide the educational opportunities for its students comparable to those provided by non-rural schools? When, if ever, is a rural school too small and/or remote to operate at efficiency levels comparable to those of non-rural schools? If there is a point at which a rural school is too small to meet its obligations to its students, what alternatives exist for the students?

- The recent economic dislocations and consequent social and individual hardships in rural Iowa have made the resolutions of both issues more difficult and more urgent. The economic dislocations have left many rural communities and the state less able to increase financial resources for education. The resulting social and individual hardships in many rural communities have loosened school/student, school/parent, and school/community bonds. Under these conditions, the goals of improved educational opportunities for students and more efficient operations become harder for rural schools to reach.

Responses to the Issues. The wide variety of responses to the equity and efficiency issues suggested by the authors in this volume may be categorized under three headings:

- **Revision of existing funding mechanisms.** The authors argue that equity demands increased funding for rural districts in absolute terms *and* in relation to their non-rural counterparts. They suggest a number of ways existing funding mechanisms can be restructured to reflect the conditions under which rural districts operate and therefore allocate funds more equitably.
- **Increased and more varied collaboration.** As is quite clear from this volume, Iowa's rural educators are expert collaborators, whether sharing administrators, courses, or teachers. The authors argue that collaboration among rural districts, the Area Education Agencies, and the Iowa Department of Education have increased the educational opportunities that rural schools provide and the efficiency with which they are provided. They recommend that such collaborations should continue to be encouraged and rewarded.
- **Increased and more coordinated use of technologies.** While cautioning that technology will not solve the equity and efficiency issues, the authors strongly suggest that Iowa's rural education community has only scratched the surface when it comes to technology. They are enthusiastic about the possibilities for increasing instructional, curricular, administrative, and professional development opportunities in rural districts via technology. They stress that statewide coordination is essential for using technology efficiently.

In summary, the volume suggests that the equity and efficiency issues are best addressed through continued innovation in three areas: funding for rural districts, collaboration among rural educators, and the coordinated application of technology to the enterprise of rural education in Iowa. The volume contributes significantly to the basis from which further innovations will spring in Iowa and the North Central region.

A Working Conference on Rural Education

Thomas J. Switzer, Ph.D.
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University of Northern Iowa

The College of Education at the University of Northern Iowa, through its Institute for Educational Leadership, was pleased to host the invitational working conference described in this monograph. We appreciate the financial assistance of the North Central Regional Educational Laboratory in making it possible for us to conduct the conference. Additional support was provided by the Iowa Department of Education, Continuing Education and Special Programs (UNI), and the Graduate College (UNI).

The conference emerged from the continuing commitment of the University of Northern Iowa to the rural schools of the State of Iowa and the nation. Although we are increasingly an urban society, it is pointed out in the monograph that a substantial number of young people continue to be educated in which can be described as rural schools. The issues faced by these schools in providing quality education for young people are just as unique and frequently as troublesome as the issues faced in urban settings.

A working conference format with a diverse set of participants was selected as the vehicle for addressing key issues facing rural education. We selected this format for several reasons. First, we believe in the power of collective wisdom. No one group or set of people possesses sufficient knowledge to solve complex social problems. To deal with the complicated issues facing education today, we need the best knowledge and insights possessed by people from all walks of life. Second, we believe that a rich knowledge base can be found in the world of professional practice. People who practice in the schools; teachers, counselors, administrators, etc., have amassed, through the very act of professional practice, knowledge that needs to be brought to bear on solving problems facing education today. Third, involvement leads to a sense of ownership. The problems facing rural education today require the collective commitment of many parties if they are to be solved. A working conference brings these parties together and directly involves the participants in a search for solutions. Fourth, by having participants prepare position papers in advance of the conference and by carefully recording the richness of the discussions that occurred during the conference, a product of value to the profession, this monograph, can emerge that contributes to the knowledge base in rural education.

The Institute for Educational Leadership in conjunction with members of the Rural Education Committee at UNI and selected faculty in the College of Education, utilized the results of a needs assessment taken from board members, administrators, teachers, counselors and rural community leaders within the State of Iowa to identify the seven key issues facing rural school districts in Iowa that were addressed at the working con-

ference. The needs assessment also provided the names of individuals who were recognized as leaders in rural education and were willing to explore the issues in an indepth and interactive environment. This process generated a group of fifty-five participants who were invited to the campus of the University of Northern Iowa on April 7-9, 1989.

As participants in the working conference spent time together reflecting on issues in rural education, a commitment to a concerted effort to deal with these issues emerged. I hope that this monograph as an outgrowth of that reflection will lead to a better understanding of problems facing rural education today and to the eventual solution of these problems.

Section I
Conference Keynote Address

URBAN CHAUVINISM AND RURAL VALUES

Professor Keigh Hubel
Southwest State University
Marshall, MN

It's really a privilege for a country boy to be here at UNI talking to such a distinguished group. Let me take a few minutes to let you know about my roots. I was born and raised in a small Minnesota community of less than 500 — graduated in 1950 in a class of 16. In my home town I know all of the dogs by first name and they wagged their tails when I greeted them. In third grade, I also knew all of the local heroes and they knew me. For fun we pulled some pranks like anyone with energy and ideas might. I remember once our local church had a sign "If you're tired of sin, come on in." We wrote under that "If you're not, call 367-2493." Big stuff for a "young pup."

Maynard is undergoing economic distress just like most rural areas. For the past few years it seems like the major cash crop has been scrap iron and the major industry jury duty. But we're coming back, we have resolve.

I realized that life in Maynard was different than Waterloo or Des Moines, but when I went to boot camp at Fort Ripley, it came home to me loud and clear. I was making one of those love driven trips home to see Arlene and I had let my mother know but I also wanted Orval and Leona to know so I could see them if possible. I had worked on their farm for four years and they were kin also. I stopped in Kansas and placed a long distance call as follows:

Me: "I would like to place a collect call to anyone who answers at the Orval Peterson residence."

Operator: "What is their number?"
Me: "Two longs and a short."
Operator: "You smart alecs tie up a lot of our time. . . ."
Me: "Please just try to get Maynard Central."
After some effort on her part she did her job and . . . "Maynard Central."
Operator: "I have a collect call for anyone at the Orval Peterson residence from Keigh Hubel."
Gusty: (Maynard Central) "That's two longs and a short, but they're not home. They're at the basketball game and Leona is serving bars later. Where are you Keigh?"
Me: "I'm in Kansas City on my way . . ."
Operator: "You can't — Who's going to pay for this?"
Gusty: "Orval will."
Me: "Well, you let Orval and Leona know I'll be home this weekend."
Gusty: "Sure."

At that point I knew there was a difference between life in the city and life in Maynard.

Life in Maynard was easy for me although I realize now that we were poor. When I was growing up there were no labels of rich or poor. People knew that labels might drive people apart so they didn't use them. Some people had swell things or were referred to as "well to do." Others had "modest means." Well, Thorval Thorkelson, with a family of 11 on a few acres of land, was one such man of modest means. One of his brood was Thorval Jr. who they called Sonny. Sonny was a perky kid, sort of off the wall at times. He was sort of like the crosseyed javelin thrower -- he didn't win a lot, but he kept the crowd alert. As a matter of fact, when he was in eighth grade, he went out for baseball. He was good at most things he did, just unpredictable. During the first inter-squad scrimmage, Sonny made a base hit. On the next pitch he stole second — and on the next pitch he stole third. And on the next pitch he stole second again. Perky and unpredictable.

Arin Erickson is from Maynard also. He is a millionaire who owns shopping centers in the south. He happened to be in Maynard parked at the only stop sign when Sonny rolled up by him on a Moped. You see Sonny's uncle Sigurd had a Moped and Sonny just loved to come to town and ride it. You would see Sonny darting in and out of all the alleys in town. Arin glanced over to see Sonny out his window and I guess Sonny's perky look caused Arin to roll his window down.

Sonny: "What kind of car is that? I never seen one like that."
Arin: "This is a Mercedes Benz."
Sonny: "Where do they make them suckers?"
Arin: "Germany."
Sonny: "Is that leather I smell?"
Arin: "Yes, the interior is made of leather."

At this point Sonny leaned in to look at the dash board.

Sonny: "Will that sucker go 140 miles an hour?"
Arin: "Yes, I guess so."

At that point Arin had one of those Sonny-type-urges and proceeded to accelerate the Mercedes to 100 miles per hour. In the rear view mirror Arin saw this small object gaining ground on him. It soon whooshed by and he thought, "Was that that kid?" Quickly he saw the object coming back and then he recognized Sonny on that Moped as he passed going the other direction. Arin then pulled the car over to the side of the road and got out just as Sonny hit the rear of the car. Arin asked, "Sonny, is there anything I can do for you?" Sonny said, "Yes, you can unhook my suspender from your side view mirror."

Another aspect of rural life styles is the ability to laugh — the resolve to put things in proper perspective. Laughter is the elixir of the soul. It is the hand of God on the shoulder of a troubled world. A person without laughter is like a wagon without springs — you feel every bump in the road. None dare dream of treason. But to rest a bit, to jest a bit, to balance up your reason — it is better to laugh to forget than to forget to laugh. So laugh — let the rural tradition be your license to laugh.

While we're on a roll, I remember Maynard Volunteer Fire Department — the pride of the town (at least those who met to talk about what to do in case of a fire). There was a fire at the Gustafson place and Emma called it in at 10:00 P.M. After she exclaimed, "The house is on fire," the sheriff in the neighboring town who took the call said "How do we get there?" Emma said, "Well, don't you still have that little red truck?" The message was finally conveyed and the boys wheeled out to the Gustafson's. If it hadn't been for them, the house would have gone up in 15-20 minutes. As it was, they kept it going all night. They did brag about saving the chimney as they enjoyed a hearty breakfast at the Maynard Cafe.

And then there's two of my favorite home town people — Ole and Lena. Well, over 25 years ago, Ole said to Lena, "Let's get married." She said, "Not til you save $1,000." They kept dating and she queried, "Are you saving money, Ole?" He replied, "Ya, it's goin' real good." After six months of these exchanges, she said, "Exactly, Ole, how much money have you saved now?" He replied, "Twenty-three dollars and ten cents." She replied, "Well, that's close enough." I guess the moral of that story is that sometimes we have to move the target.

There is also a strange rationale for long range planning in this next story. Ole and Lena were married 25 years last fall. They had what in Maynard is called a "big spread" — coffee, Kool Aid, red jello and hard cookies for the celebration. But Ole didn't show up. People said, "He must be with Thorval — they're such good friends, you know." Thorval finally showed up and said when asked where Ole was, "I ain't seen him, but I'll go look for him." Thorval found him in the shed behind the house, sitting

looking off into space and said, "Ole get in the house. Everyone in town is here and there's that big . . ." But Ole wasn't paying attention to him — he was deep in thought. Finally he said, "You know Thorval, when I was married to Lena for five years I went to the lawyer and asked how many years I would get in jail if I shot her right now. He told me 20 years. To think of it — today I could have been a free man!"

Let's focus on the notion of urban chauvinism for a moment. Are any of you familiar with male-chauvinism and the recent publicity given to attempts by some males — none here — to treat females as second class citizens? This has resulted from ignorance and cultural traditions. To some extent urban chauvinism is much like male chauvinism — based on ignorance and the obvious urban cultural biases. In the FFA magazine, in an article by Bill Stagg, the following was printed:

> When you first meet Rick Maler, you come away impressed. He dresses well, understands the world around him and seems to be following a carefully crafted life plan. He has all the articulation and urbanity of someone born and bred in the city. Only he wasn't.

This message is mainlined into all of those rural youth who faithfully read their FFA journal. They have to feel somewhat deprived or second class in nature.

Rural teachers in a FOXFIRE program were told by big city teachers "You are simple, but interesting." The open, honest, direct approach — the desire to communicate in sincere and friendly ways — is often interesting to city people. It also makes the entire rural community seem like a zoo for city folks. They don't seem to understand rural people at a person-to-person level but in terms of their oddities — the things that make them interesting.

A review of the movie "Country" exclaimed, "The movie was well acted, well written, gripping with its message, but unrealistic because Jessica Lange was too beautiful to be a farm wife." One thing I know for sure is that beauty is more than an external quality and that's one fact rural people live out. It also shows that the reviewer is making judgments based on some isolated stereotyping she has done.

Many of these images come from the likes of Larry, Darrel and Darrel and Pee Wee Herman. The latest is a geek who supposedly has his roots in a rural setting. Inferences also tie the Larry, Darrel and Darrel trio to the farm, especially the A&W Rootbeer ads that show Larry with his friends (farm animals).

Bob Leenerts from Illinois was paired with a roommate who had never been out of Chicago in the freshman dorm at the University of Chicago. For at least a week, the Chicago biased boy eyed Bob with obvious wonder and amazement. Somehow he was looking for Bob to act as he thought he should — his view of a farm boy. One morning he said to Bob, "Do you really have roosters to wake you up in the morning?" Little did Bob's

roommate know that a clock radio that looks like a clucker might be as close as a real clucker as there is on most farms.

Other examples:

"Do you have computers?" — a question to a rural teacher in Iowa.

"Do you have a place to sit?" — a question posed by football fans who were preparing to travel to a rural area to watch a game.

"I couldn't tell he was from the country until someone told me. He seemed almost normal."

"Some of them are real ambitious and get good jobs in the city."

"I knew a good one once. You can't lump them altogether."

"They say a fella moved from the city to the country and raised the I.Q. of both areas."

"Clod," "hick," "sorghum lapper," "hayseed," and "bumpkin" are all names rural people, especially farmers, are called.

Enough of a need. What can we do about this with our young people? How can we build a sense of hope — a positive version of the future of rural America for our young people?

I suggest the following: FOXFIRE, Spirit Week and Rural Knowledge Bowl.

The FOXFIRE project focuses on local people, local history and local culture. One of the roots of many of the problems that rural America is experiencing is the urban bias in popular culture. To see that urban bias in action, one has to look no further than today's educational system. Of course, there are exceptions, but the vast majority of American education today is permeated by an orientation towards things urban, and a conscious or subconscious prejudice against things rural.

Textbooks as well as curriculum designs reflect urban biases. Career education prepares our brightest youths to leave their hometowns for jobs in the cities of the world. They are directing them away from their own communities. Studies show that such biases alienate young people from their heritage. What is often ignored is local history, arts, leisure pursuits, memories, stories, politics, wisdom and collective community experiences. We image the future out of the notions we develop about our past.

Significant research has shown that one of the best ways to promote growth, build community pride and retain young people is to study the local community. To study something is to make it legitimate for young people. By failing to have their own family's experience and way of life reflected in the curriculum, our youth are being told that it is not significant or maybe not even an option for them to follow. Today, teachers across the nation have accepted standardized, urbanized curriculum that largely ignores the rural influence.

Any attempt at growth and development must be built on shared values, lifestyles and hopes for the future, which are anchored in one's own existence. The stability and self-concept of each person is couched in his or her own experience. The future of rural America could look brighter if students in rural schools focus on their own communities and the lives of those who live nearby. But for the most part, schools and their curriculums and textbooks don't provide that opportunity.

Spirit Week is a community or school celebration. This is an old fashioned fun of the type most rural communities know how to accomplish. Hundreds of activities have been developed and I will be happy to send you a list if you wish.

The Rural Knowledge Bowl is also available free to all rural schools. This is academic competition for all students in grades nine through twelve, not just the academically elite. Schools receive a mini-text on a topic pertinent to rural areas. One-half of the test is based upon this text. The other half is devoted to current events — some of which are geared to rural areas. Next year's topic is Entrepreneurship and Business Ownership. Again, participation is free and your students and teachers can win valuable prizes including an all expense paid trip to Washington, D.C.

Now, let's turn to this conference, the University of Northern Iowa, the Institute for Educational Leadership and the people who head up this effort. Let's give Tom, Dale, and Bob a hand. I think it is important to also note that Tom really gave a feeling of love for this effort when he said "The knowledge base exists with you, and that is why we sponsor a working conference where solutions come from the participants." He afforded each one of us a large measure of dignity — which I believe is well deserved. Hats off to UNI and the people here.

While I'm up here I might as well exercise my license to make some recommendations for Iowa. First, I think people in rural education should decide to be rural and act in their own behalf. There are enough differences between the needs of urban and rural schools to now draw a distinction. As Lonnie from West Bend has stated it, "Rural problems are different — attendance, retention, drugs, large classes, parent involvement, alienation are all different for rural and urban schools. They should not be treated with the same policies."

Second, I recommend that PURE and the Rural Schools of Iowa merge to become a potent political force. Rural people are a minority population and need to speak with a unified voice. This new organization can be called the Iowa Rural Education Association if you desire. Names are not important, but rural people need not be fragmented.

Third, I believe that the Regents Universities should respond to rural school needs in Iowa by establishing rural education assistance programs. UNI has a good start and has already made a move in that direction with this conference.

I also believe we need to change the role of the school in the community. Schools need to be focused on community needs. Foremost is a need to survive or grow and develop. This requires that every rural school study local economics, politics, history and culture. A simple refocus of time toward the inclusion of local examples in the curriculum is the first step toward development.

Schools also need to be active partners in economic development. There are enough examples around Iowa and the nation to show that schools can operate local businesses, build greenhouses, run day care centers, build school buildings, develop marketing organizations, and sell computers and television services. Prime-timers also need access to the special services and school programs. It is exciting to visit schools in which prime-timers are wandering the halls with students.

To accomplish all of this, teachers need time to meet and talk with each other during the school day. A whole host of solutions to everyday needs and problems can be met if teachers are afforded time to meet. There are creative ways to accomplish this goal and just as Tom announced earlier in this conference, I too believe that the expertise to solve this problem exists with you.

Just one more idea — we need to get directly to urban people to build some bridges and conduct our own public relations program. Teacher and student exchange are only two ideas. If each rural school adopted one urban school and exchanged news clippings and other news to be posted on a special bulletin board, a major span would be built. We need to reach out to the majority at a person-to-person level.

Well, it's Saturday night and time for me to take a bath and change underwear. Remember the good old days. There are a lot of things we don't want to return to — even the outhouses. In the process of reflecting we need to count our blessings.

It Ain't All Bad

Somewhere the sun will shine
and the moon will peek out from behind a cloud,

Somewhere there's a daisy to pick
and a rose to smell,

Where people are loved and things are used,
Somebody, somewhere will say to you,

Thanks!

What's your opinion?

Somewhere because of what you do,
Someones eyes will light up with joy,

It ain't all bad.

This Guy

This guy down at the local
tap says workin rural education
don't pay dividends no more

Well I lead some teachers who
are fine as can be
and the folks we serve stretch beyond
where I can see
and yet we know that when the chips
are down
There's something thats bigger growing
around here
It's the spirit of carin'
It's the absence of fear
It's knowin when we go to bed
at night
That its after a day of doing
the right
We made the world that scarcely
knew it
A whole lot better by passin through
it

But this guy down at the local
tap says workin rural education
don't pay dividends no more

Well I got me some kids and
a place to chalk
And the halls of my work are safe
to walk
And we know one another and
not just by name
And we still know of those who
have gone on to fame
And I'm proud to report that not all
who are great have left for the cities
To leave us down trodden and
wallowing in pities

But right here at home there's a greatness
in people
And it's not just for callin
about under the steeple
And I know that my students
do think and do smile
And what we are learning
will last for a while
And when things look bad and
all seem quite gloomy
We raise our spirits together
as all hearts feel roomy

But this guy down at the local
tap says workin rural education
don't pay dividends no more

And I got me a house and
a patch o land
And a happy heart and a willing hand
And a love of the wind & sun & rain
And the birds & the beasts & the growing grain
And my days & my nights is free from care
And the presence of God is everywhere
Renewin my faith in the education creed
In a world gone mad with war and greed

But this guy —

We are here to share, dare and care a little. To help rural schools grow, glow and go — and go we will. Thank you.

Section II
Curriculum Diversity in Rural Iowa: Quality and Equity Issues

Introduction

In the ongoing discussions on rural education in Iowa and nationwide, school size is the key issue since it directly affects program quality. The authors of the papers in this section present issues on the ability of rural schools to provide diversity in curricular offerings in light of inadequate student numbers due to declining enrollments and teacher shortages. When this occurs, the question of quality surfaces and the consequences impacting the curriculum is addressed by one of the authors. Conversely, one of the papers considers in detail the implications of the new state standards for rural schools, and proposes that the standards will lead to less curricular diversity.

Changes in the delivery of the curriculum in rural schools to provide quality and equity are outlined. Such developments as whole-grade sharing, interactive television and magnet vocational schools need to be expanded.

James E. Albrecht, Professor
University of Northern Iowa

One of the obstacles which confront those who speak about rural education is the blurring of focus which often occurs before the conversation has progressed very far or, in some cases, even begun. Typically that problem arises essentially from an inability (or unwillingness) to agree upon *what schools are for*.

"Curriculum" calls us back, however, to things at the center — the educational program and its attendant challenges. That, in turn, reminds us that what schools are for is *providing quality educational experiences for youngsters*. It should also remind us that schools are *not* for keeping towns alive, for bringing business to Main Street, nor for providing ammunition for district comparisons. Clearly they are not pieces of turf to be fought over by contending communities. They are primarily, if not exclusively, for helping students acquire what Alfred North Whitehead calls "the art of the utilization of knowledge." When we allow other considerations to divert us, we lose the focus which should command us.

It is fashionable now in discussions of rural education to assert that size is not really the issue; program quality is. However, after looking carefully at dozens of schools in Iowa communities of varying size, I am convinced that size *is*, in fact, the issue in many small schools. The reason why size has become the issue is simply because inadequate student numbers attenuate the curriculum and curriculum quality in a number of ways, some obvious and some not.

To illustrate, the failure to assemble an adequate number of students, a "critical mass," usually produces certain unpleasant consequences. While space constraints prevent a full discussion of each, the following problems, among others, seem to me to be tied to those consequences:

1. Because multiple sections of course offerings are not feasible, yet the entire range of state-required courses must nevertheless be offered, the academic day becomes fragmented, sometimes producing as many as 9 class periods, each of only 40 minutes duration. Special problems are thus created for areas such as physical education, home economics, art, industrial technology, instrumental music, science laboratory classes, and those middle school courses which emphasize "active learning" approaches.
2. Obviously more classes must be offered than either student enrollments or cost effectiveness can justify. Given the new Iowa Department of Education and (generally misguided) Regent institution admission requirements, schools have little choice but to offer this array of courses, which is, of course, the primary reason for the fragmented day noted earlier.
3. Student numbers in many courses are so small the opportunity for meaningful intellectual discourse and interchange is seriously restricted. Even the most skilled teacher finds it virtually impossible to generate such discourse and interchange in very small classes, par-

ticularly when many of those students are together with one another in class after class. Such small numbers also make it difficult for youngsters (of all ability levels) to gain a realistic sense of how they must proceed to compete and relate with other students and adults in the larger community where they will live their adult lives.

4. Teachers are required to prepare for too many different classes. To compound this problem, teachers are also often assigned to classes in two or three different disciplines, thus ensuring that at least some of their preparations are outside their major area(s) of study. Such teachers may understandably develop what my colleague Adrian Talbot calls a "survivalist" approach, particularly if they also carry coaching or other activity program responsibilities.
5. Many teachers are also assigned instructional responsibility over too wide a grade span. It is terribly difficult to "shift gears" from 12th grade one period, to 7th grade the next, then to 11th grade — or, in some cases, to the elementary grades. Confronted with that reality, it is not difficult to understand why there is often little difference noticeable in the teaching strategies employed from one grade level to the next, though there *must* be, of course, dramatic differences in the teaching approaches employed with children of different age, maturity, and readiness levels.
6. Often teachers are "shared" with another district, a condition nearly always dictated by economic realities. Those teachers are perhaps less affected by certain of the problems previously identified (numbers 4 and 5) than are the teachers employed in only one district. However, they often fall victim to other problems — divided loyalties, contrasting district expectations, the stress of travel, and a lack of clear identification. It's difficult for anyone to generate enthusiastic commitment under those conditions.
7. Because in many of these small schools an academic department consists of only one teacher, the opportunity to share concerns and ideas with *academic* colleagues is at best limited, and in many instances non-existent. The negative consequences of "teacher isolation" are becoming increasingly well known, yet there is often little a small school can do to provide the intellectual, pedagogical, and academic stimulation which is created by rich and comprehensive interaction with academic peers.
8. Many of the same forces which touch teachers — sharing, assuming K-12 responsibilities, the expectation to teach widely and/or coach — also affect *principals*, and sometimes *superintendents*, as well. Simply put, no one can do all those non-administrative chores effectively and, at the same time, provide the sort of instructional and curricular leadership demanded in contemporary society. The overwhelming expectations placed on teachers are also a reality for many administrators, as well, and those demands eventually exact a grim cost in administrative leadership.

9. Finally, the turnover typically found in many small schools often results in the loss of the best and most promising teachers (and administrators) to larger districts, just at a time when these educators are beginning to hone their skills and become truly effective. While there are clearly exceptions to that here and there, the prevailing pattern is all too easy to document. There is really little that can be done by the typical small district to counter that situation, simply because of its budget constraints.

Having identified what I believe to be some of the consequences in "curricular quality and equity" because of the inability of very small schools to generate a critical mass of students, it is important to note that many of these schools, in spite of it all — like the bumblebee — still fly!

That they do is, of course, a tribute to the *caring* and *personalism* that I am convinced small schools provide in much more effective manner than do their larger counterparts. Those characteristics, so easy to recognize in so many small schools, are the reason they work at all. And large schools could learn much from that.

Kevin Brummer, Principal
Lake Community School District

Over the past five years in Iowa, several initiatives have been instigated to address what is perceived to be a lack of quality and equitable curricular opportunities for students in Iowa schools. Some examples of initiatives include: the Iowa Five-Year Plan, the New Minimum Standards for Accreditation of Schools, incentives for sharing and reorganization, and unrestricted open enrollment, along with a movement in revising the state aid formula to "put the money where the students are." It is quite ironic that in a state which has been and still is economically based on agriculture, legislators seem to want to make all rural school districts like their urban counterparts. Thus, we have the issues of curriculum quality and equity in rural Iowa schools:

Quality of the Curriculum in Rural Schools

1. *Diversity in the Curriculum.* The curriculum of the school as defined in the New Minimum Standards for schools is "all pupil experiences that take place under the guidance of the school." The definition implies diversity. Each student has unique needs, and the school has a responsibility to meet individual student needs to the highest degree possible. This means providing opportunities for students who need challenges to succeed in post-secondary education. This means providing appropriate opportunities for students who plan to enter the labor force upon graduation. Also, the needs of students who are in danger of dropping out of school must be addressed, both within the curriculum and through careful guidance. The special education needs of students must be met, not only in response to legal requirements, but in response to a deeper moral obligation.

2. *Quality Teachers.* The quality of an educational experience usually correlates highly with quality teachers. Prior to the passage of Phase I, it was becoming increasingly difficult to attract good beginning teachers to rural areas. Beginning salaries were lower, cultural opportunities were scarce, and housing often was a problem. Phase I has helped remedy the recruitment factor. However, retention of these quality teachers beyond three to five years still may be a problem due to other factors. There are quality teachers in rural schools, but high teacher turnover makes continuity in programs difficult.

3. *Competition.* Another concern inherent in rural schools is the lack of competition in classes. For example, it is likely that in most rural schools there will be one class in chemistry. The number of students in class is small, and some of the students in the class are there to "keep their options open" for college. Thus, a tendency has developed to "water down" the coursework, or teachers will indicate they are "teaching in the middle" of the ability of the class, knowing the better students will learn the material anyway and that less able students will not be overwhelmed. Without challenging the better students, there is a real concern about their ability

to function in college, when they are competing with students of comparable ability.

4. *Special Services.* Area Education Agencies (AEA) help meet certain common needs of school districts, such as the availability of media materials, assistance with special education programs, and curriculum assistance. However, AEA personnel cannot meet all of the special needs of students within a given district. For this reason, school districts have banded together to provide programs, such as special education, for students within a geographical region.

Equity of the C rriculum in Rural Schools

Equity is a multi-faceted term. Iowa has been a national leader in equity issues over the years with: multicultural, nonsexist requirements; human relations class requirements for teachers; special education legislation; support of the prohibitions against discrimination; and elimination of sex bias in vocational education, just to mention a few. The common thread through all of these issues has been a sense that everyone should be treated alike.

In attempting to treat everyone alike, it often is necessary to use unequal means in achieving equity. For example, elimination of sex bias in vocational education programs meant recruiting boys into home economics classes and recruiting girls into industrial arts classes. An even greater sex bias has existed in advanced math and science classes, where girls often have been discouraged from participation. In rural areas, some of this bias may be traced to the limited exposure to varied role models. If equity in the curriculum of rural schools is to be achieved, opportunities must be open to all students.

Summary

Quality and equity issues in the curricula of rural Iowa schools are being addressed. Some indicators of such a movement include:

1. *Minimum Standards.* In approving the New Minimum ' ndards for the Accreditation of Schools, legislators recognized the need . . set of minimum educational opportunities. Legislators also recognize hat to meet the diverse needs of the student population in the state, a variety of curriculum offerings must be available to students. In addition to a basic set of curriculum offerings, schools are to infuse several other concepts into classes throughout the curriculum: higher order thinking skills, communication skills, learning skills, career education concepts, multicultural/nonsexist concepts, instructional technology concepts, and global education concepts. The intent of the standards is to prepare students for the next century, which should be the intent of each curriculum offering in the local school.

2. *Sharing.* One of the most significant movements in education in Iowa has been sharing. Initially, sharing took the form of some students

attending classes in a neighboring school district. Usually these classes were in foreign language, math, science, or art, where low enrollments in small schools made it difficult to offer the respective class. From the sharing of students has developed whole-grade sharing, where two or more school districts develop an agreement to merge students within certain grade spans, such as 6-12 or 7-12. Whole-grade sharing has greatly enhanced the curriculum offerings for students. With sufficient numbers of students, competition in classes is greater, more opportunities for students are available, college and vocational tracks are accessible to meet the varied needs of students, and students are receiving a better preparation for post-secondary careers or education. Special education programs are available, as it is economically feasible to conduct the program as part of the whole-grade sharing program, as opposed to transporting special education students to other districts. Whole-grade sharing in rural areas is a definite response to providing a diverse curriculum, which is of high quality and which meets the varied needs of the students.

3. *Specialists.* Somewhat in response to the standards, rural schools are employing more specialists. This may occur through cooperative agreements among school districts, but boards of education are recognizing that generalists can no longer adequately meet the needs of students. An illustration of the increase in school specialists is the number of shared curriculum directors. There were 65 new curriculum directors in Iowa in 1988-89. Most of these curriculum directors were shared between two or more school districts. This movement alone addresses the heart of the issue, in that the curriculum director should be aware of the need for diversity in the curriculum, while making certain that offerings are of high quality and that the varied needs of students are being met.

Educational leaders in rural Iowa are working to improve the curriculum for students. There are many positive qualities in rural areas, but the goal of improving opportunities for students in the rural schools is a continuous effort of meeting the needs of students. These needs extend beyond the boundaries of the rural community, beyond the boundaries of Iowa, and even beyond the boundaries of the United States. We are educating students to be part of a global community. This can be accomplished only through a diverse curriculum which is of high quality and is available to all students without qualification.

Dave Clinefelter, Superintendent
Lamoni Community School District

In 1853 work began on the Mississippi and Missouri Railroad, the first in the state of Iowa. Several railroads such as the Chicago and Northwestern, the Burlington and Missouri, and the Illinois Central raced to be the first to cross the state. Railroad building was slowed during the Civil War years, but mushroomed in the late 1860's. During the next two decades every county and almost every town in the state was linked via railroad. Until 1940 it was the dominant form of transportation. It was common for small towns to have six or seven trains a day pass through. Electric, interurban trains linked the major cities. Towns with only one line were often forced to pay high prices for freight and passenger service because of the monopoly. Hence the pejorative term "to be railroaded" was coined meaning to imprison on a false charge to be rid of. Major legislative battles over regulation were waged. However, by 1950 railroads were a thing of the past. Today only a few freight lines cross the state and the Amtrak carries passengers across southern Iowa.

John Naisbitt, author of Megatrends, has analyzed the decline of railroads. His theory is that railroad executives and operators viewed themselves as being in the railroad business. They failed to realize that they were in the transportation business. Because they were convinced by their myopic vision, they failed to see changes coming and they ended up as failures. They tried to improve their business in the time proven ways: faster trains, better service, newer terminals, but they failed to perceive and adapt to fundamental changes that made their business obsolete. Had they been able to grasp a vision of their business as transportation they might have been prepared to expand into airplanes, automobiles, etc. Their success was largely to blame for their ultimate demise. Because they had such an overwhelming share of the transportation market and became so powerful, they couldn't imagine life without railroads. They believed railroads would last forever.

Iowa's schools are being "railroaded." On one level, they're being gotten rid of on false charges. Small schools are being closed on the charges of inefficiency and inequity. At another level, school officials and leaders are being seduced by the same narrow vision that killed the railroads. Our monopoly is so entrenched and we feel so "right" that we're missing some fundamental changes. The current debate hinges on the issue of equity and equality in the curriculum.

The Large School Case

Proponents of large schools argue that the number of curriculum units taught is the measure of a successful school. It is not equitable for some students to have access to 148 units while others only have access to 38. The ones that only have access to 38 are being shortchanged. The following data compiled by the Iowa Department of Education substantiates that large school districts offer more curriculum units. The logical conclusion is

that smaller school districts ought to become larger so that there will be equity for the students.

Average Curriculum Units Taught by Enrollment Category — 1985-86

0-249	250-399	400-599	600-999	1000-2499	2500-7499	7500+
38.31	43.31	48.96	51.95	64.38	88.01	148.67

The Small School Case

Proponents of small schools emphasize quality over quantity. They feel a basic education is more important than a wide variety of frill courses. Developers of both the ACT and SAT tests have established a link between courses taken and test performance. "ACT research indicates there is a close relationship between academic coursework and performance on the ACT Assessment. On the average, students who have taken additional coursework in English, mathematics, social studies, and natural sciences earn higher standard scores on corresponding ACT tests." (Activity, 1987) ACT officials have identified a core curriculum including four years of English and three years each of mathematics, social studies, and natural sciences. Students who take a core curriculum do significantly better on the college admission tests. Even the smallest schools in Iowa offer 4.83 units of English, 6.18 units of math, 4.43 units of science, and 4.01 units of social studies making this core curriculum possible. Because there are fewer choices in the small school curriculum, one can safely assume that more students in these schools take this core curriculum. Maybe by offering fewer subjects, they actually provide a better basic education for more students?

Although the number of curriculum units offered is a significant factor in determining equity there are other considerations that have a bearing. Environmental factors can wipe out the benefit of more courses. Small schools typically have the advantage of low pupil/teacher ratios, strong parental support, close pupil — teacher relationships, high involvement in extracurricular activities, and less peer group influence; all of which can have a positive influence on classroom performance. As school size increases, you begin to trade off these advantages for increased course offerings.

What is equitable? Some would have us think that equity means equality. If every student in the state has equal opportunity to take the same courses, it will be equitable. Equity and equality are more antonymous than synonymous, however. Equity means justice: giving each student what they need not necessarily giving all students the same courses. The special education system is equitable but it's not equal. True equity would mean providing every student with a mix of courses unique to their particular needs. One could even go a step further and say that true equity means providing those courses in a way that matched the learning style of each student.

In summary, that's how we get back to railroads. If someone asked us, "What business are you in?," most of us would respond that we're in the school business. We run schools, big ones, little ones, and middle sized ones. Because we see ourselves in the business of running schools, we're concerned about improving schools. Therefore, we debate the optimum size of schools. We concern ourselves with efficiency, number of course offerings, and transportation issues. We're like railroaders in 1940 trying to make more efficient railroads.

A broader vision would tell us that we're in the business of education, of helping people learn. That may or may not involve schools. There are major changes looming on the horizon that will effect the way educational programming is delivered. Access to information is increasingly easier. It is possible for an individual to have fingertip access to more information than is stored in a major university library. Distance barriers are being eliminated with a variety of technologies. It is possible to carry on a face-to-face discussion with an individual miles away. We are developing the capability to respond to individual differences in learners. The same information can be transmitted via different mediums so auditory learners can hear it and visual learners can see it. In short, advances in information technology will radically change the way we do business or they will put us out of business.

If equity is really our mission, we will focus on how to deliver the right education, the right courses to each and every individual and in the manner that's right for that particular individual. The largest high school in the country can't deliver on that mission given the present organizational arrangement. The debate over school size misses the point. Let us remember the plight of the Lyons and Iowa Central; the Dubuque and Pacific; the Burlington and Missouri; the Chicago, Iowa and Nebraska; the Atlantic Northern; and the Des Moines and Central Iowa railroads.

Stephen Litts, Superintendent
West Bend Community School District

During the past several legislative sessions in Iowa, school reorganization has been the underlying force behind several "school reform" bills. Although everyone involved seemed to avoid the open discussion and use of the term "reorganization," legislative initiatives have produced recommendations for sweeping New Standards which included the following demands on all school districts:

1. Requires a 200 day calendar.
2. Requires a 5½ hour minimum school day.
3. Requires 180 school days for all students.
4. Will require one of the following:
   a. all day/every day kindergarten
   b. pre school program
   c. pre/post/both school day child care
5. Removes the Supt/Principal combination.
6. Increases Social Studies requirements for most schools.
7. Originally called for a vastly expanded Vocational program. (This is now being studied.)
8. Requires districts to have a program for At-Risk Students.
9. Requires districts to have a Curriculum Development Plan.
10. Requires districts to have a Staff Development Plan.
11. Requires districts to have a Talented and Gifted Program.
12. Requires districts to provide Elementary Guidance services.
13. Requires numerous policies in each district.
14. Requires districts to have media specialists in each library, and a library in every attendance center.
15. Requires districts to teach (not just offer) Health and General Math (one unit each).
16. Requires the curriculum to contain components of "Technology" and "Global" education.
17. Requires districts to offer four years of Foreign Language, through the last two years. This requirement may be waived if no one enrolls.
18. Addresses other curricular requirements in English, Science, Fine Arts, and Math.

Although no educator would argue with the merits of providing a curriculum that offers both breadth and depth, the New Standards places rural schools at a distinct and not coincidental disadvantage; and often the disadvantage transcends the cost of a new program, and rests on the rural district's lack of students needing the required courses. Unlike the present curricular requirements, the New Standards require districts to not only offer, but actually teach these courses. For many rural schools that now consistently produce successful scholars and citizens, there just aren't enough students to fill all of the classes that will be required for districts to

offer and teach. It would seem that many legislators equate quality education with the size of a district's curricular offering.

If we are concerned about the quality of education, of providing the necessary preparation for students entering the 21st century, we need to begin assessing schools as we would ask teachers to assess the needs of students: on an individual basis. Can districts who place thirty students in an Algebra or a foreign language course seriously claim that they are providing a higher quality of education for their students than schools that have only five students in these courses? I would not begin to argue that the larger district is more efficient, but let's not confuse efficiency with quality.

To identify a problem is one thing; to offer a solution is quite another. I would offer one suggestion that would assist rural districts in meeting the New Standards without abandoning the standards completely. The answer lies in recognizing that a teacher is able to teach a small class in a shorter amount of time than a large class.

Presently the Department of Education requires many courses to be taught a minimum of two hundred (200) minutes per week to qualify for a full unit of credit. I would propose that a formula be established that would reflect a weighting for class size. As an illustration, classes with eighteen to twenty-five students would need 200 minutes of instruction per week; classes of twenty-six to thirty-three students would need more time, perhaps 250 minutes; classes of ten to seventeen students would require less time, perhaps 150 minutes.

With the recognition that smaller classes can cover the material faster, rural districts can become more efficient as they provide quality. Schedules would not have to be radically changed. To use general math and algebra as an example: If a teacher had two students who needed general math and four students who needed algebra, they could be in the same classroom at the same time. The teacher would be able to instruct one group while the other group had individual practice. The needs of both groups could be met in the time currently required for just one.

I would concede that this approach should not be used with just any combination. I would question combining of music and history, for instance. In the final analysis, the educational needs of the students must generate the program, not the standards or arbitrary input measurements.

If the originators of these standards were truly concerned about the "quality" of education in the state, it is fair to question why the standards force districts to be more concerned about finding at least one warm body to fill the class, regardless of the educational needs of the student. Department of Education consultants have jokingly told administrators that when all the students need and want Algebra, they should stick their own child in the General Math class so the standards will be met. Is this meeting the educational needs of each student, or is it merely meeting the needs of the district? More to the point, are the New Standards designed to

provide quality education for Iowa's students or is it designed to create fewer and larger school districts?

Having been a student in both a one-room school and a metropolitan system, and having served as an educator in both large and small, rural and urban districts, I believe we need to evaluate schools on an individual basis, much as we ask teachers to evaluate student needs on an individual basis rather than teaching the same material in the same way to all students. The New Standards will make for less diversification in school districts within Iowa. If our goal is to create sameness, the New Standards will be successful, but they will fall far short of creating excellence.

The author recognizes that this paper falls short of providing conclusive evidence that smaller classes might learn at a faster rate than larger classes; yet I hope I've been able to raise a question that will be fully explored in the profession. The Iowa taxpayer, educator, parent and student is being led to believe that we face an either/or situation, and I reject that completely. Indeed, I believe Iowa can have both urban and rural education; both quality and efficient educational delivery systems. Both sectors need to recognize the problems and successes of the other and provide the flexibility necessary to deliver quality schools as well as efficient educational institutions in both urban and rural environments. If we cannot do that here, what chance have we of providing a global perspective to world problems as required by those very standards?

Ronald O'Kones, Superintendent
Corwith-Wesley Community School District

The concept of open enrollment in Iowa is based upon the premise that students should have the opportunity to seek the best education available. It is also based upon the premise that competition between school districts will improve schools in Iowa. Can Iowa rural schools, schools of a thousand students or less, remain competitive by providing quality curriculums that are equal in quantity to urban or large rural districts? The answer is yes, but changes are needed in the traditional methods of curriculum delivery.

Whole-grade sharing of students between districts offer one means of change in delivering curriculum. Many Iowa rural schools are now whole-grade sharing and this has helped these schools provide a larger selection of course offerings for students. It has helped increase the teacher-pupil ratio and thereby lower per pupil cost. But has this sharing brought quality curriculum development and equity with other Iowa districts? With strong administrative leadership and professional staffs, quality curriculums are being provided in many rural districts. However, small Iowa districts cannot offer the same quantity of courses that larger schools can provide. So if equity means the quantity of courses offered, then small districts are at a disadvantage.

While the quality of instructional programs are of utmost importance, the need to increase the quantity of curriculum offerings is also of concern to rural Iowa districts. The sparsity of population and declining enrollments have resulted in limited class offerings. Whole-grade sharing or reorganization can help, but the factors of sparsity and declining enrollments will continue to limit the number of subjects taught.

One way to remain competitive is for rural schools to turn to the use of modern technology. Interactive TV is one such form of technology. Interactive TV would be able to transmit two-way audio and visual signals between two or more locations.

Microwave cable or fiber optics would accomplish the interactive TV objective. If implemented throughout the state of Iowa, class offerings could be transmitted between any two or more locations. In addition to increasing the quantity of subjects offered, the interactive TV could transmit extensive inservice training for teachers, provide enrichment programs for students across the K-12 curriculum and selected college courses for students and adults.

The benefits of live, interactive TV instruction to rural Iowa schools are numerous. The quality and equity of educational opportunities provided for rural students would be comparable to larger districts. Presently rural schools have difficulty providing the resources and staff to offer courses in advanced or specialty areas. Interactive TV can provide these curriculum offerings.

Rural Iowa needs interactive TV of some type, but the state of Iowa must provide the leadership and finances needed to implement the technology. All districts, urban and rural, need to move in the same direction when implementing interactive TV, not in several directions as we are presently

moving. This uncertainty has caused school districts to move cautiously when contemplating the installation of communication systems. To date Iowa has not been a leader in making use of modern communication technology for education.

For vocational offerings in rural schools to be equal in quality and quantity to larger school districts, will require the establishment of magnet vocational schools. Under this concept, rural schools within a geographic region would pool their resources to provide a comprehensive curriculum in areas such as business, vocational agriculture, home economics or industrial arts.

Students would be transported to a central attendance center for classes. Here students would spend half a day taking classes that would provide a full unit of credit within a one semester time frame. Community colleges could, and in fact should, help provide the leadership, instructional materials and staff expertise needed to guarantee that these magnet schools would be of the highest quality and equity when compared to other districts in the state.

Area Education Agencies, through their Educational Services Division, should provide the personnel and resources needed to help all Iowa schools provide quality curriculums that are of equity. It makes sense for AEAs and the schools within each AEA to work as one in the development of curriculum. They should also work together in meeting the state mandated developmental plans for media, at-risk students, human growth and development, multicultural/nonsexist, staff development, technology and other listed mandates.

Those associated with rural school districts in Iowa must provide the vision and leadership necessary to ensure a diverse curriculum that is comparable in quality and equity to larger rural and urban schools in the state of Iowa.

Section III
Effective Rural Schools: What We Know, What We Need to Know

Introduction

What we know is what we want. We want students who are becoming the kind of people we value in our home and global communities. For us, these are persons who respect themselves and are respected by others. They are good citizens and are economically self-sufficient. They have both a sense of heritage and a vision for the future. They set and achieve goals that serve their own well-being as well as the well-being of their various communities. Self-esteem, constructive citizenship, and productivity are the student outcomes that for us indicate effective schools.

Secondly, we want schools that play an active role in building and maintaining effective rural communities across Iowa. Such communities provide local access not only to education but to transportation, recreation, health care, and economic opportunity. For us, effective rural schools contribute to the whole community enterprise, and measures of effectiveness include the esteem expressed for schools by community members, community use of school facilities and/or programs, and the presence of the school leadership in various community affairs.

What we believe we know — and that we may need evidence to substantiate — is that rural schools are well suited to produce what we want. They can provide a safe, orderly environment in which students and community members can receive individual, personal attention. The position of the papers that follow is that rural schools have something to offer their students that larger systems do not — a more intimate setting in which students can be known and where they can take a more proactive role in social and academic activities that are significant to their growth and development. Children may be better prepared for independent decision-making, leadership, and personal productivity in schools where they are

not the objects of a bureaucracy, albeit a bureaucracy designed to serve them.

There is something else the writers of these papers know. Social and economic trends of loss challenge all of us. In addition to the loss of the traditional family structure, the loss of youth who leave home for jobs elsewhere, and the loss of employment and income security, rural populations are threatened by the impending loss of their sense of identity as small local schools are consolidated into larger, more "cost effective" units.

What we need to know in rural education is how to encounter all these challenges proactively so that we preserve schools that can effectively serve their communities and their students. Given the challenges we face across the state, what changes must rural schools make and what changes must rural schools resist so that we get what we want, students who are becoming good citizens and whole communities that offer citizens a good life?

The authors of the papers in this section are committed to a positive stance. Their intent is to contribute to a constructive meaning for rural education, one that will be useful as we work across Iowa to maintain and support our value for education and a good life.

William Dreier, Professor Emeritus
University of Northern Iowa

In the USA, rural education is the informal and formal learning occurring to infants, children, youth and adults living in the open country, farms, villages, towns, and other places located outside the many Standard Metropolitan Statistical Areas. Informal learning takes place in the home, work place, school, and community. Formal learning takes place in the classes provided by churches and non-public schools and in the local public school districts. By far, the largest number of schools and local school districts include non-urban villages and towns. These rural areas, whose population centers are fewer than 2,500 people, include about one-third of all the children and youth enrolled in public education in the USA, and is where rural education, formal and informal, takes place.

Rural schools can and do effectively serve the rural community. Rural leaders desire to do it better and help those schools and communities who can not or will not improve. The effective rural school nurtures a sense of mission for both its students and community. The mission of the students has been described.

The mission of the community includes at least: 1) agri-business and other industries; 2) means of communication; 3) sources of entertainment for all ages; 4) health services for all ages; 5) the protection of person, home, farm, business, and other property; and 6) a cohesive leadership among community groups. The compassion for the mission (services) of the community enrich the school and is part of the legacy that leads its people towards the solution of immediate and future problems.

Much of the effective schools research has been based on schools in the metropolitan, suburban, or urban community. The conclusions and recommendations from this research, based on schools such as New Trier Township (Illinois) is not appropriate for most rural schools.

Part of the task that is facing rural school districts is not only educating the communities it serves about the effectiveness and quality of its teachers and their students, but also of the condition and needs of their delivery system. The strengths or weaknesses of the rural school lies not only in the strengths or weaknesses of the communities, but also in its ability to prepare the children, youth, and adults for the mission of the services of the local area, and the state, national, and global community.

Clark Goltz, Principal
South Winneshiek Community School District

At-risk students, funding, state standards, substance abuse, talented and gifted programs, technology, curriculum changes, preschool education, latch key programs, poverty, child abuse, declining enrollment, and the family in transition are all major issues placed in the hands of schools. Research conducted in the early seventies revealed that some schools do a better job than others of educating their student population. The question one must address at this conference reflects not only the characteristics of effective schools, but specifically the characteristics of the effective rural schools of Iowa.

What Do We Know? A summary of research on effective schools typically does not address the issue of rural versus urban schooling. Much of the effective schools research reflects studies completed in the urban school setting. The research on effective schools has many methodological weaknesses that need not be discussed here. In spite of such weaknesses, the rural school of Iowa is compelled to meet those standards and criteria that are judged to be effective for all schools.

Recent research has identified numerous elements and characteristics that are associated with effective schools. Some of the more significant findings are: 1) strong, positive leadership skills by the building principal; 2) a high quality instructional staff; 3) an orderly climate; 4) high expectations for student achievement; 5) the continuous monitoring of student progress; 6) effective use of instructional time; and 7) a clear mission where there is concensus on school-wide goals.

The small rural school of Iowa need not be repentant for its size. Research confirms that the characteristics that are inherent in an effective school are supported by the very nature of the rural schools. The "ideal" school or district size has not been disclosed in the research. Those characteristics that are aligned with quality education are attainable in Iowa's rural schools.

The Iowa F.I.N.E. (First In the Nation in Education) Foundation identified fourteen attributes of success for school quality. The criteria for the Iowa school environment included a restatement of portions of the effective schools research alluded to earlier in this paper. Additional qualities listed in those attributes were: 1) rewards and incentives for students, 2) development of good character and values, 3) a well-articulated curriculum, and 4) parent and community support and involvement. As leaders in education for the nation, Iowa educators are aware of those qualities essential for an exemplary school.

What Do We Need to Know? Our unanswered question responds more to the issues brought about by changes outside of the school building-substance abuse, finance, demographic changes, poverty, the family in transition-than from within the school walls. There exists in rural schools a sense of pride and achievement that can be missing in an urban setting. This ownership of the institution called "school" may be the factor which provides the impetus for continued success or imminent failure. The pro-

cess begins with a basic conviction that all Iowa schools, no matter what their demographic characteristics, need to meet basic educational standards. The process continues with the commitment by the rural community to form a consortium for educational progress.

If current research focuses on the urban setting, fund research projects concentrating on the small school. If funding depends on student enrollment, develop opportunities for creative finance and educational experimentation. If statistics demonstrate an increase in rural poverty, generate programs that can meet those needs. If technology is becoming less attainable in the rural setting, implement partnerships between higher education and the rural school. If the rural school is at a disadvantage for obtaining grants and special project funding, initiate workshops that are geared for the small school. If the hiring of qualified teachers is becoming an increasing problem, provide loan incentives for the teacher in the rural setting. If the tide of students is leaving the small community, promote the qualities of the rural school as reservoirs of educational excellence. If the rate of substance abuse in the rural setting is increasing, design those strategies that meet the needs of the rural problem.

We begin this process for change just as we would on an individual school basis. We embark with a sense of mission; an agreement of who we are and what we wish to accomplish. With the navigation instruments in place, the voyage toward the discovery of that "new educational world" will be successful beyond our wildest dreams.

Evelyn Keller, Board Member
Clarion Community School District

There seems to be many changes taking place in education throughout the country. Everyone has taken it upon themselves to achieve excellence in education. The changes are from thoughts of reorganization, setting higher standards and to open enrollment.

What we do know is that education in Iowa must be very good when it can consistently rank number one or two when compared with other school systems throughout the country. Iowa students rank at the top of college entrance exams and ranked first in the American College Testing Program (ACT) and first and second in the Scholastic Aptitude Test (SAT).

There are 433 school districts in Iowa with a total enrollment of 478,463. Des Moines is the largest with 29,992 students and Havelock-Plover being the smallest with 91 students. Many Iowa school districts are experiencing declining enrollments. Total public school enrollment has declined 128,508 students since 1977-78.

Many students have chosen to enter into sharing arrangements rather than to reorganize or dissolute. In 1988, one school, Boone Valley, did choose to dissolve. It was the first school district to successfully do this. By choosing this method, they were able to send their students in the directions that they preferred.

Half of Iowa's school districts have an enrollment of 550 or less. One-fourth of Iowa's school districts have an enrollment of less than 1,000 students. The size of a school district has had much discussion when it comes to restructuring. Only one recorded vote in the Iowa legislature has been taken on the issue of school size. In 1986, a proposal which would have required all school districts to have an enrollment of 300 or more was soundly defeated in the Iowa Senate. At the present time, if that were the case, 90 school districts would have been affected.

It is very probable that the Legislature and the Department of Education will adopt policies and standards which will make it more difficult for some Iowa schools to continue with the current size and structure. It is likely that the legislature will continue to pursue incentives for local school officials and citizens to share or reorganize. It is unlikely that the legislature will directly address the issue of school reorganization.

Some school districts are sharing administrators or combining administrative jobs such as superintendent and principal. It is a way a school district can save $30,000 to $50,000 a year. The negative side to this is that it is hard to find good administrators willing to commit to such a heavy workload. Much can be left undone when an administrator at a school of 3,000 or 300 has the same job responsibilities and requirements. They are having to do twice the work as their counterparts in larger schools. Sometimes, important necessities like curriculum development is left undone because of daily routines such as discipline, communications with parents and board members.

State and federal mandates that have come from both the Department of Education and the Legislature is going to affect all schools. It will

especially affect the small school that may be in financial trouble. New state standards will help to produce quality students but may eliminate some school districts because they will not be able to meet them because of the lack of funds and their ability to provide staffing.

School officials know that the funds available to school districts are a function of enrollment and the cost per pupil under the state school foundation program. School districts which have larger pupil/teacher ratios have more financial resources for each classroom unit than do schools with lower pupil teacher ratios. One way that a school district might add to their budget would be to increase this pupil/teacher ratio.

A comparison of the performance on standardized achievement tests of students from small, usually rural schools, with those from larger, often urban institutions, has not produced definitive results. Several studies have not found any significant differences between those two groups. In research completed in the state of New York, it was found that students from smaller (often rural) schools achieved as well as students from larger schools. Nor, in Alaska did they find that high school size determined the quality of a student's educational experience, or achievement on standardized tests. In one New Mexico study, which looked at factors affecting performance of elected high school students, those attending schools in rural areas performed as well as those in urban locales. Research has indicated that rural students attend college, perform as well as urban students, and may be as likely to stay in school.

What do we need to know about effective rural education? Where will the enrollment decline end? School enrollment figures for 1988-89, show that out of 433 school districts, 76 have increased, 22 have stayed the same and 335 have declined. Only 15% of Iowa school districts have experienced a gain in enrollment over the past five years. Nearly 40% of Iowa school districts have experienced an enrollment decline of greater than 10% over the past five years. There is a projected K-12 enrollment of 458,605 by 1990-91 school year.

What is needed to combat this trend?

1. School boards are going to have to exercise strong leadership to stay on top of their budgets.
2. School districts need to expand the use of modern technology such as telecommunications, computers, robotics, fiber optics, and lasers.
3. Governmental, educational, and civic organizations will need to give priority to dealing with the problems and potentials of rural areas.
4. There will be a need for enhanced cooperative efforts among different groups, both rural and urban for more effective approaches and better utilization of existing resources.
5. More specific and relevant attention needs to be paid to curriculum, structure and financial reforms in and for rural education systems.

I feel the state will continue to close down the rural schools of Iowa. Some of the ways this will be done is through financial restrictions, removing sharing incentives, curriculum, requirements, and other stan-

dards, and certification requirements. Certification requirements for special programs such as TAG, pre-school, computer teachers, and other similar assignments will make it very difficult to have a certified teacher. One of the more critical problems is the perceived shortage of good qualified teachers in some of the critical areas such as math and science. With fewer students, it is going to be extremely difficult to hire a staff to take care of your own school because you would need one teacher to teach so many areas, or you would have to hire people on a part-time basis.

I foresee more sharing in the future. Schools are going to have to share students, teachers, equipment and other similar things such as textbooks. They may need to look to innovative education approaches such as block time or trimester plans. They may need to close facilities and unite their resources.

Two, three or even four schools may have to concede their local wants and unite into a unit consisting of two-to-four elementary schools, one middle school and one high school with shared administration. An emphasis on telecommunications and other electronic communications will be of the utmost importance. They may have to adjust schedules such as early starts and late dismissals to make longer days for employees but equal time for students. The problem of time on buses and the high cost of transportation also become important factors.

Marilyn Koehler, Superintendent
Moulton-Udell Community School District

Rural schools have had enormous efficiency in the past. The school in a rural community was the focal point of social, as well as academic activity, with varying degrees of excellence. Many of our nation's leaders were educated in rural schools. Rural population has declined by twenty-five to thirty percent in the last ten years. That brings us to point number one, a fact that we know: Change in school structures and educational delivery is mandated and imminent.

The faltering economy of the 80s, Japan emerging as the world leader in business and industry, and United States students scoring lowest of industrial nations on math and science tests, are signals to legislatures that education must address the challenges. (The U.S. is the only industrial nation which provides a free appropriate, public education to all children.) Schools and school funding being within state control, structures and educational delivery, will be altered to simulate improvement and attempt in aiding economy and efficiency. Larger, urban, technical, and innovative schools will be funded; smaller, rural, personal, and traditional schools will fight for existence. There will be a massive reshuffling of students across district lines to provide educational choice, larger classes, more specialty in teaching, increased use of technology in education and a new set of criteria for excellence.

First, what we need to know is whether changes in structure or educational delivery will make a difference in providing increased knowledge and level of skills in students. From a recent study of the Iowa Association of School Boards, Strategies for Excellence 1987, it was suggested that:

> The availability of computers and educational software and the technologies to implement "distance learning" programs exist and should be used in Iowa schools." (IASB, p. 40) The report continues with criteria for successful technology utilization — commitment, planning, training, accountability, and expectations for change. Perhaps available, but omitted in the list are examples of research, pilot demonstrations, base-line and improvement ratios, placebo effects, and maintenance and evaluation procedures.

Secondly, we know that rural schools have provided our nation's governmental structures and businesses with its leaders. Rural schools keep close tabs on its students because of the nature of rural communities; rural schools expect high percentages of participation in activities and attendance. Rural educators instill leadership qualities and values in a higher proportion of students by demanding that a full athletic and activity program be maintained with fewer students. Thus, a larger portion of students are given leadership responsibilities to maintain the offices, teams, and structures of organizations.

> Bits and pieces of evidence show that students in rural schools do as well as or even slightly better than urban students on basic literacy and mathematics tests . . . Such data confirm that socioeconomic factors such as parents' income and education are powerful determinants of student achievement everywhere. (Sher, Kappan, 1983).

The traditional leaders in education in the nation are Iowa, Minnesota, North Dakota, and South Dakota — all midwestern rural states. These states have a great percentage of small rural schools.

We don't know what effect meshing two, three, or more communities together will have on leadership development in the future. In 1983, the Iowa legislature provided school districts with the authority to share whole grades with accompanying incentives. When education is driven by pupil/teacher ratios with an attempt to raise the ratio instead of lower it, what will be the outcome? Will leadership development thrive in the larger setting?

Third, in a study of rural schools sponsored by the Organization for Economic Cooperation and Development in 1981, Jonathan P. Sher found no convincing evidence for, or against, small rural schools. There were strengths and weaknesses, determined more by the local circumstance than by an application of global principals. The uncertain factor is whether removing local control and community loyalty from the school environment will assist education. Chicago is decentralizing its educational system and training local boards to control the community school. Milwaukee's urban districts have divided into geographic regions for administrative purposes; six regional advisory councils will be formed to be more responsive to communities. (Education Week, February 8, 1989, p. 7)

Urban areas are moving toward personalization of the local schools while Iowa is moving into restructuring activities for centralization and enlarging the geographic area of the district. Will further consolidation of Iowa school districts into units of 600 to 1000 pupils improve education? Will the increase in educational programming and opportunity for students result in anonymity and lack of individual initiative?

Fourth, rural America is poverty stricken as never before. As indicated by Sher's study on rural education:

> Between 1973 and 1986, families headed by persons between the ages of 20 and 24 experienced a 27% drop in median real income . . . Too many young families . . . remain trapped in an economic limbo of unemployment, part-time jobs, and poverty-level wages . . . (Phi Delta Kappan, December 1988, p. 282)

What we need to know is how to extend the educational dollar to meet the overwhelming social and emotional need that we observe and encounter. What services in addition to the state mandated requirements should

be offered to America's poor — child care, latch-key, preschool, substance abuse prevention, at-risk education, job-training, retraining, tutoring, family counseling, help for pregnant teens, etc.? How can our schools serve the multiplicity of needs and still keep its educational focus and integrity?

Finally, but not finally, because the debate will continue across Iowa and the nation; rural schools in sparsely populated areas when measured by course offering, pupil services, teacher/pupil ratio, and administration costs, have been less economical and efficient to operate than larger entities. In the aforementioned study of rural education, Jonathan Sher reported that:

> The available figures show rural school expenses to be disproportionately high . . . In practice, rural schools have been financially able to offer educational programs and services of at least reasonable breadth and quality by inaugurating such measures as: sharing resources with other rural schools, making extensive use of parental assistance and in-kind contributions, hiring generalists at the secondary level, promoting individualized instruction and independent study, and simply doing without sophisticated equipment and expensive facilities. (Kappan, December 1988, p. 83)

Iowa state senator Del Stromer compared the costs of educating 30,000 students in the Des Moines Public Schools with the costs of educating 30,000 students in Iowa's smallest school districts in 1986-87. Excluding transportation costs, he found $14 per student difference, with small schools being more economical.

We may want to ask about the cost compared to what? Do larger schools automatically provide a safe, orderly environment, clear sense of mission, instructional leadership, high expectations, and frequent monitoring of student progress? Smaller schools generally have a positive learning climate, more parent/community involvement, more student participation, frequent awards and recognition, a strong sense of community, and budgeting discretion at the local level for local needs. With increased size, should we consider the social and remedial cost of reclaiming children from problems more prevalent in larger schools: drugs, dropout programs, intensive counseling sessions, or family alienation? For what shall we trade leadership, participation, family ties, and high morals?

We know what has made our schools effective; what we don't know is whether changing the familiar structures and the delivery in rural schools will improve the educational environment, the community/parent involvement, and student participation in leadership-building activities. Will largeness increase the need for student rehabilitation, social programs, diminish academic integrity, and devalue the educational outcome for the sake of economy and efficiency? These are more important questions.

Instead of focusing on the educational delivery and structure, we should first define the educational outcome. What is important and critical for students to know when they are educated in the public schools, be it rural or urban? The flurry of reports on what to teach has stirred debate over curriculum content and methods as stated by Snider:

> Spurred by national and international assessments, which have underscored shortcomings in instruction in many fields, and bolstered by deeply held beliefs about how children learn, subject-area groups have turned out numerous documents criticizing current curricula and calling for sweeping reforms. (Education Week, May 17, 1989)

However, the article concludes that when all is said and done, again more will be said than done. Changes in curricula are difficult to implement for several reasons: teachers are often not qualified to teach some of the more complex material, local administrators are not prone to implement 'radical' reform, and experts can't agree on what needs to be done. Deeper than the question of curriculum, is the question of what we want the student to be when he/she is educated. My premise is that a student should be a fully, functioning adult with certain characteristics. The graduating senior should have self-respect, respect for others, good citizenship, economic self-sufficiency, a sense of history, and an eye toward the future. An effective school of any size builds those by: (1) providing rich experiences to increase understanding, challenges, expectations, and motivation for learning; (2) nurturing student potential in academics, aesthetics, and athletics; and (3) developing leadership through opportunities to formulate and test ideas before persons and groups where praise and criticism are appropriately and compassionately given.

The effective school measures success not by dollars or numbers, but by the achievements and legacy of its graduates who are names and faces remembered with pride, or respected. Let's adopt some rational measures to explore the outcomes by doing more educational research and less educational rhetoric. Let's focus less on mandating changes for the sake of 'doing something about the problems' and spend more time on looking at the outcome which should be achieved. Let's look at the "wellness" of the student population, with more studies such as the one by Benjamin Bloom on Olympic athletes. At some point, though, we do need to 'get on with the show.' Kids are growing up and becoming; the product hinges on both the method and the materials.

What do we know about effective rural schools? They have done the job of educating kids pretty well in the past. What do we need to know? We need to know what changes to make, how to educate the whole child, and what we want that child to become. The future demands more effectiveness and excellence in education, the right questions, and researched answers. Let's focus less on size and more on quality, less on rural vs. urban, and

more on student outcomes and achievements, less on the divisive elements, and more on the progressive factors which enrich children's lives. Ultimately, society and democracy depend on 'doing education right.' In a mobile society, we are educating each other's adults. Not the structure or the size, but the outcome of education becomes very important to all of us.

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Lannie Miller, Board Member
West Bend Community School District

Iowans are vitally interested in providing a quality education program for all its youth. This commitment is expressed through the state's financial support for education. Total operating budgets for K-12 public schools are approaching $1.5 billion. This is a major commitment. As a member of the Iowa Association of School Boards (IASB) Board of Directors, I know that the Association's primary interest is to assure a quality education program for students in our elementary and secondary schools. In this spirit the IASB Board of Directors adopted this mission statement:

> *The Iowa Association of School Boards is an organization of elected school board members dedicated to assisting school boards in achieving their goal of excellence and equity in public education.*

This statement does not focus on whether a school district is large or small, urban or suburban, rural or small town. School boards must make decisions based on what is good for the students of their district. To help accomplish this the IASB Delegate Assembly adopted the following resolution:

> *When projections show a continued decline in public school enrollment together with limited financial resources, the school board and the citizens of a school district should assess the quality and extent of its educational programs and determine whether the school should continue to operate within its present geographical boundaries. School boards are encouraged to initiate discussions with school boards from contiguous school districts.*

Quality education programs are provided students in all size school districts. There is a strong correlation between the number of students in a school district and the number of high school credits offered. Small schools provide a smaller class size, opportunities for students to participate in extracurricular activities and a core of courses which are designed to prepare students for college. There are strengths and opportunities in various size districts. The focus needs to be on how education affects the students.

It is easy to generalize and assume that big is better. It seems to me we need to undertake an objective study of the effects of education on students from various size districts, large and small, to determine student achievement in higher education, occupation, family and social life. Does the size of the district and its education program affect the ability of a person to succeed in college? Which students are better prepared to become employed upon graduation from high school? These questions and others need to be addressed *objectively*.

Public policy in Iowa currently endorses the use of financial incentives for school districts to share education programs, teachers, administrators

and other school personnel, as well as for districts to participate in whole-grade sharing programs. It seems to me we need to know what effects these kinds of shared programs and personnel are having on the students.

IASB supports the current legislation which provides incentives for restructuring Iowa schools through sharing or reorganization. A restructuring survey of Iowa school board members last summer showed that 70 percent of the respondents support these financial incentives. This same survey showed strong support for program/teacher sharing. Somewhat less support was indicated for whole-grade sharing programs.

Telecommunications—distance learning—is becoming established as an educational tool. We need to know how well students learn using this medium. Does it make a difference to have a certificated teacher present in both the sending and receiving classroom? How "interactive" should the telecommunications system be? Two-way video and audio? Class size—is there a "best" number of students for each teacher when using telecommunications? There appears to be great potential in this method of instruction. How do we utilize its best features and minimize its weaknesses? All indications are that the classroom of the future will not look like or be like the traditional classrooms. We need to harness this technology for the good of education—in *all* school districts. One day, we may have students, without classes, learning individually or in small groups at various sites through technology which provides direct interaction with outstanding teachers miles away. We need to know how the use of technology affects learning.

Finally, we need to carefully study the economic impact of a school on a small rural community and what the loss of a school means to the culture and economy of the area. Often we hear that "the loss of our school will mean the death of our town." It seems to me we need to carefully assess the role of the school in economic development in rural Iowa. Jobs and people will be difficult to attract into rural areas unless a quality education system is readily accessible. We need to have good, reliable data regarding the role and the significance of public education as a tool for economic growth and development in rural Iowa.

Somehow, Iowa needs to develop a cohesive and coherent policy in its approach to education. It seems that whenever education issues are before the Iowa General Assembly there is, or at least appears to be, a "hidden agenda" which is often perceived as a "back door" attempt to force small schools to reorganize. This makes the legislative process more difficult and often injects a rural vs. urban division into the debate. The Iowa legislature and the Governor have used the "carrot" approach to encourage the restructuring of Iowa schools. It would be very unfortunate if we laid aside the "carrot" and took up the "club" before we know how effective the incentives have been. Iowans—in rural areas and urban centers—are concerned about quality education for their children. We must work together and develop the data which shows the effects of education—rural and urban—on the quality of life of our children as they grow to adulthood.

Michael Milligan, Principal
Wellsburg Community School District

Rural schools are a fact of life in Iowa. Over 76% of Iowa school districts contain less than 1,000 students, and 91% contain less than 2,000 students. Even if the new state standards and revised finance formula succeed in forcing districts to share or reorganize into larger regional units, most Iowa school districts will remain rural in nature. So, it is imperative for us to identify and study effective schools in a rural setting. Essentially, research of effective schools has been going on for most of this century, beginning with the progressive reformers of the early 1900's and culminating in effective schools research of the last decade, typified by such publications as *A Nation at Risk, A Place Called School,* and Iowa's own *First in the Nation in Education* (F.I.N.E.) report. Additionally, there have been numerous studies attempting to identify the characteristics of effective schools, both elementary and secondary.

Since this is a conference on rural education, we must ask ourselves if there is a difference in the characteristics that identify effective rural schools versus effective urban schools. At first glance, the answer is no. First, effective schools are dependent on the quality of their instructional program, not the size of the school. Second, effective schools feature strong instructional leadership, which may be found in any school setting, regardless of size. Based on effective schools research the following are characteristics identified as common to effective schools:

1. A clear sense of purpose—a mission.
2. A system for monitoring student progress.
3. A core set of standards within a rich curriculum.
4. High expectations—of students, faculty, administration.
5. A commitment to educate each student as completely as possible.
6. A special reason for each student to go to school.
7. A safe, orderly learning environment.
8. A sense of community.
9. Resiliency and a problem-solving attitude.

While these characteristics may be common to effective schools of all sizes, rural schools, because of their smaller size, offer some intangibles not found in larger, urban schools.

Unfortunately, school district size seems to be the focal point of the school debate in Iowa. The Area Education Agencies are charged with building reorganization plans for school districts that have a K-12 enrollment of 300 students or less. Why? Because since the 1950's, the prevailing opinion in the United States and in Iowa has been that bigger is better, more efficient, less costly, higher quality. Clearly, this opinion is questionable and much of the research supporting this view is suspect. As Tom Urban, President and Chairman of Pioneer Hi-Bred International, and Chairperson of the excellence in Education Task Force stated:

Small schools are not poor schools per se. The historical consolidation debate has led us to believe that small equals poor. That debate was about size, however, not about quality. It was a sterile debate and I found it quite divisive. That discussion did not help Iowa's education system and it is my fervent hope that future discussions about Iowa's education will be in terms of quality and not size. Small schools can deliver a unique educational experience. The key to quality education remains the quality of the teacher-pupil relationship. Small schools may have an initial advantage. If teachers are strong they may find a small school atmosphere quite rewarding. We should not assume that teaching in small schools is a deterrent to quality teaching.

Teacher-pupil relationships encompass much more than in-class time spent on instruction. Some of the intrinsic advantages small schools have regarding this concept are lower pupil-teacher ratios, ability to individualize instruction, the long-term satisfaction of watching students' progress, and an opportunity to know students and their families. Teachers also benefit from the small school setting because they have a more immediate impact on curriculum and administrative decisions affecting the school. Small districts do not have layer upon layer of bureaucratic red tape to cut through just to get a simple answer. Additionally, there is a sense of community in smaller districts that no longer exists in larger districts. To a great extent, community activities are centered on the school which naturally leads to a sense of commitment and involvement with the school. Finally, smaller districts have the opportunity for a more direct impact on the marginal, or at-risk student. An article in the "Harvard Educational Review" in 1981 stated that the opportunity that small schools provide for sustained contact among all members is a safeguard against alienation and leads to better discipline. Also, rates of school vandalism and violence are lower in small schools, and students are less likely to drop out of small schools. As Stuart A. Rosenfeld states in a 1987 "Education Week" article: "By providing greater opportunity for participation, small schools particularly influence attributes and skills associated with leadership and entrepreneurship, which are among the emerging goals of economic-development driven education."

If large size does not guarantee quality, and if we want to hold on to those advantages intrinsic in small schools, is there a "right" or optimum size for school districts? Recent research in this area presents us with several premises to examine. Rosenfeld states that first, the industry-based scientific management principles based on division of labor, which led school administrators toward consolidation and specialization are becoming obsolete. Successful businesses are now beginning to reorganize into smaller units and shed layers of supervision to improve productivity. Second, the notion that more curricular choice for students automatically provides a better education is coming under increasing scrutiny. Education researchers are now finding that the range of options needed for a

strong, basic education is not as wide as once was believed. Educators and economists alike are finally able to focus attention on the effect of the size of education setting on learning. More precisely, once high schools are large enough to provide a sufficiently diverse curriculum at reasonable costs, how does their size affect student behavior and what they learn? The answer appears to be that once a school exceeds a certain size, its students become distanced from the school as a unit, less involved, and less motivated.

Roger Barker and Paul Gump, in their book *Big School, Small School,* state that the best school is one that is "sufficiently small that all of its students are needed for its enterprises. A school should be small enough that students are not redundant."

Based on research and past experience, I would suggest that a district of 1200-1500 students, K-12, is optimum. Districts of this size are still small enough to reflect the traditional values of rural schools, yet big enough to offer appropriate educational experiences to all its students, i.e., the students are not redundant. Regretfully, for many small rural schools in Iowa, meeting state standards becomes a numbers game: districts of the size I am suggesting do not have that problem. High schools in the smaller, rural districts will be the hardest hit by the new state standards. A district of 1500 students will most likely have a high school of 400-500 students; large enough to schedule several sections of core classes, while allowing students the opportunity to schedule in the more advanced or less popular singleton classes. A district of this size also eliminates the problem of a teacher moving between the elementary and secondary levels—a nightmare for most principals. Obviously, our large urban schools far exceed my suggested optimum, especially in the high schools. Since everyone cannot live in a rural area and receive the benefits provided by small schools, the next best thing is to create smaller units within these large urban high schools, or as Ernest Boyer calls them, "schools-within-a-school," to establish a more cohesive, more supportive social setting for all students. Educationally, there is little reason for a high school to exceed 500 students. As the Norwegian Parliament concluded in 1978, when it set the maximum high school enrollment at 450, bigger schools would no longer be educating individuals, they would merely be processing them through the institution.

I have discussed several factors that characterize effective schools and more specifically, effective rural schools also, the issue of size versus quality has been addressed. What remains is to focus on how to foster and maintain effective rural schools well into the future. Initially, we must continue to research and identify those characteristics that give rural schools their unique advantage over large urban schools. Identifying and/or maintaining an effective school is nebulous because the dynamics of a district can rapidly change. If this is true, then we must view effective schools much as we do individual students; as being on a continuum where there is always room for progress—or regression, depending on many

factors in a particular school's environment. There are several things that we, as rural educators, need to know: (1) how to best share with neighboring districts, (2) how to incorporate technology into the curriculum, (3) how the revised finance formula will affect our ability to deliver quality education, and (4) how to use innovative scheduling to integrate the new state standards into our present course offerings. Some of these issues will be discussed in other papers at this conference so I will focus on what I believe to be the most crucial issue—curriculum development.

Curriculum development lies at the heart of the school and is the engine that drives the entire instructional program. Curriculum development does not just happen; it is a well-organized and planned process that is continuous in scope. Effective schools know where they are on the curriculum continuum and where they are heading, i.e., they are proacting rather than reacting. An effective curriculum development process helps teachers to become more professional in their attitude towards instruction, and more knowledgeable about their teaching area. Combining resources and sharing curriculum development with other districts gives teachers the opportunity to interact with their peers in a collegial manner, conceivably the best method of improving teacher effectiveness. Borrowing from John Goodlad, there are five basic issues that need addressing in the area of future curriculum development:

1. Whether all students within a state should experience a common curriculum;
2. Whether they should experience a common whole, or merely a core of the whole, common to all;
3. Whether there should be some common ending point where it is unnecessary or undesirable to continue this core;
4. What offerings or experiences should constitute the common curriculum; and
5. What characteristics of learners, schools, or society pose difficulties or obstacles to the common pursuit of a core curriculum.

There is more that could be written about effective rural schools, and what we need to know to maintain them. The ongoing process of curriculum development exposes teachers and administrators to new concepts and challenges them to keep their curriculums modern and viable. Most importantly, we must remember why we keep pushing for improved, more effective schools—so that our children receive the highest quality education possible—that is the bottom line.

James Pasut, Superintendent
Guttenberg Community School District

Rural education in Iowa has qualities that make it unique. In the early years after Iowa became a state in 1846, the parents were fully responsible for the education of their children but gradually the state took over this responsibility. In taking over this responsibility, the administrators and teachers were given the power of "loco parentis," (i.e., we stand in the place of the parent). As a result of this power, the schools have inherited vast responsibilities in many educational areas, some wanted and some unwanted. We now offer many services that the home should be responsible for in providing for various social, emotional, and economic needs of the child. Once the school offers a service, it is difficult to eliminate the service, without considering the needs of the student and the demands of the school patrons in our community.

Schools have been influenced by the rapidly changing social and economic upheavals in our society during the 1960's, 1970's, and into the 1980's, and this has created the demand for additional services to be offered in both academic and extra-curricular activities. It can be readily noted that students have changing values, mores, moral standards, personal attitudes, and life styles which are not always similar to what most adults believe to be right or moral by adult standards. A new phrase coined "situation ethics" applies to what students want to do right at this very moment for their own self-centered gains and not what is best for all persons concerned in an overall school situation or personal situation.

Several present forces in American society foster personal freedoms and independence. Three of these forces are noted here. One is the rather substantial effort made by secondary schools and colleges to encourage large numbers of students to think independently, (i.e., do your own thing) and to develop intellectual freedom, (i.e., freedom of thought, expression, action) in their personal and societal life styles.

Another force concerns material affluence, which provides resources enabling many persons to pursue individual interest to a considerable extent. Some of these interests are constructive and others are destructive to the personality and growth pattern of young children and teenagers. For example, a number of young high school graduates have the impression or notion that minimum academic achievement or effort to secure a high school diploma is acceptable for graduation and for entry into the job market. Today, many of the graduating secondary students will have to be re-trained in the 1990's in their present position or for new career choices to become employable. The day has passed when the average high school graduate can readily secure acceptable employment upon graduation from high school and, must look forward to some type of technical or academic training before securing employment.

The third force is our judicial structure, which has at times supported and extended the areas of personal freedom that are accorded constitutional rights and protection for the student. An example being some recent court cases taking power away from educational institutions and granting

the power to the student, especially in regard to "due process" cases of student rights.

Rural schools of Iowa are at the crossroads of survival and are being bombarded with new ideas, theories innovations, reforms, and various educational changes from various political and state educational leaders. All of these educational reforms are to improve the quality of education in Iowa and to consolidate smaller districts into larger districts under the pretense that bigger is better. One can cite studies which support both small and large schools in providing quality education to the student body. All schools, both large and small, have the unique opportunity to offer strong academic and extra-curricular programs.

Rural Schools of Iowa, Inc., have identified by enrollment about 336 schools of the 435 schools in Iowa that have less than 1,000 student enrollment. Students in schools of this enrollment size have the unique opportunity to participate in extra-curricular activities. Brimm and Hanson cite some of the strong points of a small to medium school system when they express these statements:[1]

1. The individual teacher can have more input into, and more influence on, the total school program.
2. The professional staff has an opportunity to develop the respect of the community, and can exert a broader influence on the total educational experiences provided by the community.
3. More students can participate in the total range of school activities.
4. A higher percentage of the patrons of the school can be involved in school activities. Parent involvement leads to better community support.
5 Teachers can know both parents and students better, and can cooperate more closely on student problems.

These thoughts and ideas certainly affirm the basic principle that it is highly important that students and teachers have interaction in extra-curricular activities.

We need to know that effective rural education has three qualities that need to be equally ranked as emphasized by Jonathan Sher, president of the Rural Education and Development, Inc., in an article cited in School and College Product News, August, 1988. Sher stated the following qualities:[2]

> One is the human dimension; kinds of relationships among all people involved when operating on a small human scale. The second is the opportunity to be connected to the rural community and take advantage of that. These can both be very powerful educational assets. Third, is the amazing diversity of rural schools. This also means there are some rural schools that are really not good at all. But

they are not all out of a cookie cutter. There's enormous strength in the diversity of rural education.

The social and economic development of rural areas are heavily dependent upon the survival of the school system. The school system in the small town is the focal point of many social and economic activities for the students and the local citizens. The political and educational experts in the rural areas of the United States are supposedly addressing the deficiencies of American schooling but who seemingly overlook the inadequacy of the large urban schools which have dropout rates of students in the 50% bracket. Many of the educational reforms advocated by political and educational experts are being instituted under the buzz words of "what is good for the kids, or for the sake of quality education," but are nothing more than a disguise to implement new standards that can't be funded financially by the local school system unless property taxes are increased. This in effect, will force re-structuring or re-organization upon the small school systems and be another death blow to the economic development of rural communities in the United States.

References

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Steve Westerberg, Principal
Wapello Community School District

What do we know about effective rural schools? The litmus test for determining effective rural schools is the same test used to identify those larger urban schools that are best at maximizing student learning. Whether a student hails from a less populous region or lives in the heart of the largest city, effective schools research has shown the factors of good schools are all the same.

Schools that possess teachers having high expectations of student learning, that implement mastery learning techniques, that conduct classrooms that are warm, convivial and safe places to be, and that challenge students of all ability levels are effective schools. Schools having building administrators that are highly visible, that spend the greatest proportion of their time on supervising and improving instruction and curriculum, and that establish reward systems for students and staff are effective. Schools having a clear, concise mission statement, long and short range goals in which everyone feels they have had input in developing, and everyone from students to school board have an understanding of unified purpose are also effective schools. None of these factors has a relationship to the number of students or where they live. The difference between effective rural and urban schools is that the good things done by rural schools involve fewer people.

However, the demographics of rural schools can provide for some opportunities to accomplish effective schools research that the larger schools cannot. Everyone recognizes one potential advantage of a smaller school is increased individual attention for students. The key to this factor is whether the small school takes advantage of this opportunity. Those schools that have instructors that teach six students in the same manner that they instruct 30, are missing one of the greatest potentials of small schools. Effective rural schools take advantage of small student/teacher ratios to improve student learning. Ineffective rural schools do not.

Small schools, whether urban or rural, also have the opportunity to address the individual social needs of students. Large urban schools often have 300-400 students per guidance counselor. Counselors in smaller districts can focus efforts to a smaller clientele. Teachers and support staff have better opportunities to really get to know the students. Changes in student behavior, disposition, and attitudes are easier to detect when students are not just a face in the crowd. Small schools having staff members who are highly people-oriented and who have a great concern for students, will be more effective. Schools with less concerned staff members are less effective.

Lack of competition created by small numbers is often cited as a major argument against small schools. To a degree this may be true; however, if small schools maximize the opportunities that their smallness offers, this concern for competition can be nullified and possibly reversed. As stated previously, small schools have the opportunity to employ substantial individualized help both academically and socially. If this assistance and

guidance is given so that students are taught to constructively compete for self improvement, the much desired competitive spirit will exist. Given the right motivation, intense positive competition can exist between just two people. Popular sports such as wrestling and boxing have thrived using just two competitors — no one is advocating dissolving these sports for lack of competition. The competitive spirit is developed, enhanced and nurtured in man. The key lies with whether the school and community will teach the spirit, not whether there are enough people to compete.

Larger schools will provide the circle of students who are very competitive — this environment is good. However, many students are not competitive in nature. They don't strive for the good grades or possess the love of learning. Large schools make it easier for such students to find peers with the same attitudes. They feel accepted as they are, not feeling the pressure to conform by competing with the so called "grinds." These students aren't being talked about, government programs aren't being developed to assist these students, and the future of the local school isn't being threatened because these students aren't performing to their potential. The only group of noncompetitive students that has grabbed the conscious of the public are those who aren't even in the ball game. They've been labeled at-risk. There's a tremendous number of our students who are neither competitive nor at-risk. Small schools have the greatest opportunity to help these students. The effective small schools do and the ineffective ones do not.

Effective schools have strong community and parental support. Parents play an active role in the education of their children. One would find it difficult to make a strong argument that the level of parental support is contingent on the size of the school. Parents support schools that have good teachers and administrators, that elect strong board members that have the common purpose to maximize learning for all, that have good athletic teams, and clean restrooms — not because of the number of students enrolled. Enrollment becomes an issue when a parent feels that one or more factors they perceive good schools should have are missing. We are ingrained with the idea that bigger is better. Some parents in large schools also become disgruntled with their local school, however, enrollment isn't used as an excuse. In these situations, the real reasons must suffice, whether it's poor athletic teams or dirty bathrooms, no one argues that the enrollment is too large.

Many of the problems facing small schools is created by an identity crises. Anytime the public has decided that there's a problem, human nature insists that reasons and solutions are found. Education has caught the attention of everyone. Comparisons with foreign education show us falling from the top, we are unilaterally disarming ourselves. This may be true, and some of the fallout from this demise has landed on small schools. Many people have joined the bandwagon and taken up the cause against small schools. When everyone says you're ineffective, you become ineffective. Since the quality of the staff is a major difference between effective

and ineffective schools, the demoralizing results of anti-small schools publicity has created a self-fulfilling prophesy — a Pygmalian Effect.

What do we know about effective rural schools? Well, they exhibit the same characteristics of effective urban schools. Granted, smaller rural schools are less cost effective, however, the true test is whether they are educationally effective. What do we need to know? That enrollment is not the determinate of effective schools. Ineffective schools exist in many urban centers. Instead the future of small rural schools should be in the hands of the school itself. Those taking advantage of their size to increase individual assistance, implement effective schools research, develop strong parental support, and promote positive competition are worth fighting to save. Those schools, irregardless of enrollment, who fail to do these things should be dissolved.

Section IV
Financing Rural Education in Iowa

Introduction

The papers in this section address the issues of equity, quality and efficiency with respect to rural schools in Iowa. One author asserts that finance formulas should include a sparsity index, and provides clarity to the terms of equity for both students and taxpayers. A number of proposals are made in other papers for a new state funding formula to include: (1) incentives to move toward 170-180 cost efficient units; (2) equal dollars for educational programming; and (3) the recognition of local factors such as sparsity, geography, and topography. In addition, a proposal is made to determine those programs which should be funded by strictly local revenues.

Financial data is presented which illustrates the proportionally higher costs of educating students in districts of less than 1,000 students. However, one author reminds the reader that only 8 of the 435 districts in Iowa are larger than 7,500 students, while nationally small districts are in the 6,000-10,000 range of student enrollment. The term "small" then takes on a different frame of reference when comparing Iowa schools to those in other states.

Horace Daggett
State Representative
Kent, Iowa

This paper will focus on the funding dynamics of schools with an average daily attendance under 1,000 students. There are 329 school districts in Iowa under 1,000 students, with 104 school districts above 1,000 students. In general, this will include county seat towns and counties with less than 10,000 population and all other rural school districts.

Current data shows the combined budgets for school districts under 1,000 totals $582,964,066, while the total combined budgets for schools over 1,000 is $1,163,076,866. Seventy-six percent of Iowa's school districts (329) spend 33 percent of the total amount of money spent on K-12 education serving 153,245 students. Twenty-four percent of the school districts (104) spend 67 percent of the total funds available for K-12 education serving 324,957 students.

The average income tax paid per pupil in districts under 1,000 students is $1,343, with the average income tax paid per pupil in districts over 1,000 is $1,905. The average property tax paid per student by schools under 1,000 is $1,555, whereas the average property tax paid for those 1,000 is $1,266. State aid received is $1,797 for those under 1,000, and $1,942 for those over 1,000.

These figures are presented to describe the property tax burden for rural districts. Rural districts have higher assessed tax valuations and pay more property tax per student with a lower average income level. All data is from the Iowa Department of Education and Legislative Fiscal Bureau.

Inefficiencies

To understand the financial needs of rural schools, it is important to understand some of their special problems. Some inefficiencies in rural Iowa schools are the result of sparsity of students, higher administration costs, energy, and transportation costs, plus lower per pupil/teacher ratios, especially at the secondary level.

The cost of administration for those schools under 1,000 students averages 10.7% of the total budget in comparison to 8.8% for those above 1,000 students.

Energy costs in schools under 1,000 students total $138 per student, while costs per student for schools above 1,000 averages $100.

The largest disparity in expenditures is transportation. Schools under 1,000 average $171 per student, with schools over 1,000 averaging $82.

In addition to those inefficiencies, the low per pupil/teacher ratio, particularly at the secondary level, adds another dimension to the financial problems Iowa's rural school districts currently face.

It is necessary to provide additional funding for rural schools in Iowa in order to ensure an equitable educational opportunity for all students.

Current School Aid Formula

To help address these inefficiencies under the present school aid formula (which by legislative action is to sunset July, 1990), the State of Iowa has allowed the count of phantom students (given for additional headcount and guaranteed budget growth), shared programs, and an enrichment tax levy of up to 10% of the district's cost per student. This phantom student count helps schools of all sizes, but gives substantial help to small districts in rural areas who have lost student population.

The state has established sharing programs for administrators, classes, teachers, or whole-grade sharing. Sixty-four percent of the schools under 1,000 students participate in sharing programs while only 35% above 1,000 students participate in sharing programs.

We have also made provision for additional programs through the enrichment levy. There are 62 school districts which levy up to 10% of the state cost per pupil, with only one of those (Ames) being an urban district. Money raised through this enrichment levy is used for instructional programs.

Even with these additional options to help provide educational programs, it should be pointed out that for this present school year schools under 400 students averaged 45 course units, schools with 401-1,000 students averaged 52+ course units, and schools over 1,000 averaged 99 course units. This statistic alone points out the need for more equitable funding for our rural schools.

Anytime this subject is addressed, the issue of forced reorganization of schools comes to the forefront. It should be pointed out even with reorganization we would still have many small districts. For example, I represent Adams, Taylor, Ringgold and Decatur Counties. Adams and Ringgold Counties each have slightly over 5,000 people per county, and each has less than 1,000 children of K-12 school age. Presently, Adams County has two districts. In this current school year, Prescott has 144 students and Corning has 640 students, together totaling 784 students. If we combined the two schools into a single school in the county with an enrollment of 784 students, we would still have a rural school with very high transportation costs and the other inefficiencies of size which I have already mentioned, along with low per pupil/teacher ratio at the secondary level.

Financing Rural Education

It will take more money per student than the state median cost to provide equitable education in rural Iowa. My first option, and most practical way to help meet the increased funding need of Iowa's rural schools, is to have a sparsity factor of 3.5 students per square mile. A 10% of the regular program district cost per pupil growth factor should be given to all school districts with a student population under the 3.5 students per square mile. By making an adjustment to both the district cost per pupil

and the state cost per pupil, thus approximately 82% of this increased funding would be funded by state aid.

The second option to adequately fund rural schools would be to establish an instructional support fund which would allow a district to increase its district cost by up to 10%. The state would equalize the access to this fund through a percentage equalization formula by which the average state percentage contribution would be set at 25%. Allowable use of this fund would include current enrichment and educational improvement programs.

My third option would be for the State of Iowa to continue its current enrichment tax levy policy with the mix of property tax and income surtax allowing schools to levy up to 10% of the controlled budget to raise the additional dollars needed to meet new standards and other needed instructional programs.

Option four would leave transportation costs in the formula, but allow additional growth for high transportation cost districts. For those school districts whose total transportation cost per pupil is over 3% of their total controlled budget, they would be allowed additional growth, with the state funding 82% of the additional transportation cost and the local school district meeting the other 18% of the cost. By making an adjustment to both the district cost per pupil and the state cost per pupil, approximately 82% of this increased funding would be funded by state aid.

Conclusion

It has been noted that the average income of rural Iowa is below that of urban areas, so once you look at the factors causing low income, it is not unreasonable to ask for additional school aid to help fund rural education opportunity from the student driven foundation formula. You need additional factors for equitable funding.

I feel the state, by its constitutional requirements, must provide equitable education programs for all the school age citizens of Iowa. Recent court rulings have mandated that schools shall be funded in such a way so as to provide equitable education opportunity.

Juanita McIntosh, President
Dunkerton Community School Board

As we look to the 1990's the needs and problems of funding education in rural Iowa and urban Iowa are very much alike. The financing of education should be kept as simple as possible; especially in rural schools where the Superintendent is inundated with forms and paper work.

Each student should be equally funded, no matter the size of the school district. Actual enrollment numbers should be used to determine each school district's regular program budget. State aid should be the same amount per pupil no matter in which district the student resides. The same amount of property tax, not necessarily the same percentage, should be allowed to each pupil no matter how rich or how poor their district of residence may be. Any student moving from one district to another would be an equal exchange financially. This will be a greater concern with "open enrollment."

Per pupil funding should be adequate so that special funding for special groups would not be necessary. Districts just like individuals, spend up to their income. The individual districts would meet the challenges of the special needs of their students. Special funding for shared programs, if well designed, should be financially advantageous to both districts as well as being educationally a positive factor. Phase I, II, and III should not be included in the school funding. It has been our experience with Phase III, that funds used to pay teachers for projects and education would be assumed as a personal expense by the motivated teacher if Phase III funding were not available. No special funding for vocational education, telecommunications or electronics would be included in the school funding. Improved vocational education, electronics, and new technologies would be encouraged through special legislation. The implementation of new technologies may encourage some innovative approaches to education.

A growth factor should be built into the funding formula. There should be a balance between state aid and property taxes. The sum of these two items should be the same throughout the entire state.

"At-risk" students are another suggested special funded group. Instead of increased funding, possibly a better way to address "at-risk" students is to take a real look at the reasons our present curriculum, from pre-school through graduation, is not meeting the needs of "at-risk" students. Local schools should be encouraged to develop their own unique programs to meet the needs of special students in the local school and put a real emphasis and incentives to "mainstream" wherever possible. Separate or designated groups should be avoided wherever possible.

Transportation costs should be removed from the school funding formula. No constructive education takes place on a bus. Metropolitan schools should be encouraged to cooperate with their metropolitan bus service for their mutual advantage. If separate financing for the cost of transportation is not possible, a formula carefully constructed within the

school funding formula to accurately reflect transportation costs should be included.

The present incentives for districts to reorganize or dissolve should be discontinued. State funded monetary incentives for early retirement should be discontinued.

Pre-school programs should not be specially funded. If the local district determines a need for a pre-school program, it could be funded on the same basis as kindergarten.

The additional costs incurred by the implementation of the new state mandated standards should be included in a new funding formula.

In summary, to formulate a perfect plan for financing rural education in Iowa may be impossible, but a plan that is simple to implement and equitable to every student and tax payer in Iowa is essential.

Dean Meier, Superintendent
Osage Community School District

The financing of rural education, as well as all public education, needs to center around two principles. One, equity for the students, and two, equity for the taxpayers.

For the purpose of this paper, equity for the student shall be defined to mean providing a level of support so each student has an equal opportunity to learn and to succeed according to their abilities. This definition contrasts with the definition of equality which shall mean providing an equal number of dollars for each child. With equality, the focus is on equal inputs. With equity, the focus is on equal opportunities (outcomes).

Equity for the taxpayer should center around a taxation system that subjects equal people to equal burdens. In other words, people living in different districts, but with similar incomes and property, should pay essentially the same rate of taxes for the support of government services, in this case, education. Although not directly a topic of this paper, one might well stretch the equity argument to imply a taxation system should be progressive as well.

The student attending a rural school deserves the same educational opportunities as any other student. It is the responsibility of the State of Iowa through a state financial system to make those opportunities possible. Generally, we do not argue the need to deviate from equal funding per student when we speak of handicapped students. We recognize that extra financial resources must be made available if the handicapped student is to have the same opportunities for success (according to their abilities) as the non-handicapped student. Low enrollment rural districts, with the built-in inefficiencies inherent in such a district, have higher per pupil costs than larger districts. Consequently, we must also make extra financial resources available to the low enrollment rural district if the students in those districts are to have the same educational opportunities, and more important, the same opportunities for success, as students from more urban districts.

In a recent study comparing the cost of education in various size schools in Iowa, the cost of providing equal opportunities for students was compared by looking at the instructional, administrative, support, and transportation cost components of those districts (Meier, 1986.) This study identified a "market basket of educational services" and calculated the cost of delivering those services in schools of various sizes across Iowa. The purpose of the market basket in comparing the cost of various size schools was to assure that the cost of a wide curriculum in one school was not compared to a narrow curriculum in another. In other words, efforts were made to compare apples to apples.

This study found that the cost of providing educational services in the smallest quartile of Iowa schools (enrollment less than 375) was 18 percent above the state average. If a school district finds itself saddled with costs that are 18% above average, yet burdened by a state finance formula

that provides essentially equal dollars per pupil, then it will be able to provide less services to its students than a more efficient size school.

Approximately 108 districts in Iowa have an enrollment of less than 375 and these districts educate approximately 26,500 of Iowa's students (5.5 percent of Iowa's 489,000 students). Because the smallest quartile of Iowa districts educate so few pupils, the cost of increasing the controlled budget of those schools by 18 percent would increase the cost of education in Iowa by less than 1 percent. Yet that is the increase these schools would need if they are to expand the opportunities they provide their students to a level roughly equivalent to that provided the average student in Iowa. No student in Iowa should have less available to them!

It is, therefore, the position proposed in this paper that the State financial formulas should include a sparsity index to increase the controlled budgets of schools that operate in a geographic area of sparse population. The inefficiencies inherent in such a school should not limit the educational opportunities of its students. This is not to suggest that all small school districts should be bailed out financially. The continued reorganization of school districts should be a priority of the State. Not all areas of the state, however, are conducive to reorganization, especially not into the size of units that are financially efficient. It is in these situations that opportunities for students should not be limited by the lack of efficiencies made possible by higher enrollments. Nor should todays students be penalized until more reorganization or sharing takes effect.

The State of Iowa must recognize that: (1) small school districts are inherently inefficient (due mainly to class size and transportation) and (2) that all small schools cannot be eliminated. Iowa should, therefore, develop funding laws recognizing these facts and thus provide for an increase in funds to districts that are inefficient due to their size. If the State wishes to provide equal educational opportunities for all students in the state, regardless of the district in which the students reside, then an approximate 1 percent increase may be an acceptable price to pay to help reach that goal. The alternative solution of eliminating small, inefficient schools may well prove to be far less acceptable to the people of Iowa. To do nothing continues the present inequities in educational opportunities due to the inherent inefficiency of some Iowa districts.

The financial responsibility for providing equitable support for all the students in Iowa should fall on all the taxpayers of Iowa. No taxpayer, as a consequence of where they live, should face a significantly greater tax burden for education than taxpayers of equal income and property in other districts of the state. (The obvious exceptions are local levies the taxpayers vote upon themselves.) Consequently, it is again proposed, that a sparsity factor be included in the computation of each districts controlled budget, so the 1 percent increase in cost referred to above is spread among all the taxpayers of the state.

When the State financial formula is changed to include a sparsity factor, Iowa can claim to have a State financial formula that attempts to provide

equitable opportunities for students, and equitable tax burdens for the taxpayer. Rural education in Iowa can best be served when these goals are realized.

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Keith Sasseen, Superintendent
Keota/Sigourney Community School District

It would appear Iowans are caught in the dilemma of weighing alternatives to finance their schools. Many conflicts need resolution as decisions are being made as to what to finance as well as how to finance the rural schools. Changing demographics since the highlife of the late 1970's are quickly being brought into public focus because of the repeal of the current school funding formula of the 1987, 72nd General Assembly. The effect of this action through H.F. 499 was to 'sunset' the present Foundation program June 30, 1991 and to cause the enactment of a new program of school finance in the 1989 Legislative session. Hence, the year directing the educational delivery systems for Iowa youth is at hand.

First, a determination as to what to finance. While the answer to this question seems so obvious to many rural Iowans, it is extremely vexing and evasive to others. It is impossible to have cost efficiencies, or total program equity, in small districts. Yet, no one has been able, or willing, to define 'small.' It is at this point the writer will state a factual reality that will reoccur throughout any discussion regarding school finance; that is no amount of money or effort will overcome a fifteen to one pupil-teacher ratio when compared to a twenty to one pupil-teacher ratio represented in urban schools. Twenty-five percent differential reflects the ability to offer scope of programs, ancillary services and competitive teacher salaries. That is, using $3000 as state average cost times twenty students will yield $15,000 more per classroom in one district over another. If sixty percent goes to salaries, for example, nothing will alter the ability of the 'small' district to successfully compete. This one fact must be addressed at some point by our lawmakers and allow certain inequities of program, of State aid, or of ability to pay, to exist by design.

To continue with defining 'small,' one must realize that even after the school reorganization of the early 1960's Iowans still expect neighborhood-like schools in their ever-declining communities. As the legislators are wrestling with how to cope with these expectations they are striving to find a balance between State aid and property tax as well as the aforementioned educational program equity. All of this in the face of reapportionment which will cause a shift in the present structure for the next decade from a rural influence to an urban influence. Will schools under 300, 600, 1000 survive? Should they? Will twenty-five years see further shifting of rural population to our cities? Historically, Iowa has lost 170,000 students since the inception of the present finance formula. From 652,000 students to 480,000. In that same period only twenty districts fewer are serving our children . . . from districts numbering 455 in 1966-67 to about 435 districts in 1987. To generalize, 235 school districts have under 600 enrollment and serve only eighteen percent of the students; 334 of the state's school districts are under 1000 enrollment and serve about one-third of the student population. Conversely, this obviously means that one hundred districts (less than one-quarter) are already serving two-thirds of the total student enrollment. Only thirty-two schools are over 2500 and further,

only eight are larger than 7500. (In a national education forum article, most define small districts as between 6000-10,000 students.) Iowa is indeed a rural state with many 'hard to give up' inefficiencies and inequities perpetuated by tradition.

Another dimension is the distribution of Iowa's population and wealth. There is an area covering about one-third of the state, a triangle from Dubuque to Des Moines to Keokuk, wherein about two-thirds of the state's population and two-thirds of its wealth rests. This item of demographic data may well cause our decision-makers to legislate differently as to state aid and/or local option recognizing 'small' districts out of necessity but not small by choice to continue with the same state monies. This sparsity factor could well serve the region outside the "Golden Triangle."

Limitations on transporting students is another diversity in attempting the restructuring of more cost efficient districts. Rural citizens voice this concern in a cavalier manner that appears to represent soundness. These same people also say their educational dollars are diluted by bussing costs and further erodes the comparability of dollars spent on rural educational programming with their urban neighbors. In truth, there has been very little shift in the percentage of transportation costs to total budget since the Foundation program commenced in 1971 and is, in fact, a bogus concern that can presently be handled by a School Budget Advisory Committee.

If decision-makers feel political suicide is eminent by shaping Iowa's educational delivery system then numerous inequities will likely continue. The breakdown of the source of property tax by county tells a great deal about how those Legislators are likely to vote. Some rural counties have well over one-half of the property tax support from agricultural land. It is far safer to allow the unequal abilities of a school corporation to pay to use local initiatives to fund inefficient units than it is to provide incentives to restructure those corporations into more cost efficient, program equitable, tax equitable units. A fact many will admit to while in the security of understanding constituents.

The goals of financing the next generation of school units in Iowa have become reasonably well defined. Not all of these are compatable. For example, open enrollment allows children to have educational opportunities not dependent by chance of his or her residency. This will not lend stability, irregardless of money supply to districts who, from sheer lack of members, have to continually hustle to just meet the 'minimum educational standards.' Another illustration would be the goal of more effective and efficient use of limited state and local money. This very pursuit, normally praised by taxpayers' groups, smacks of reorganization. And yet another example of dichotomy of goals and wants is the need to recognize local leeway to finance rural schools and still maintain equitable opportunity in some form of congruency.

It does indeed appear Iowa will maintain some form of pupil driven formula that will reflect weightings for special student population, for

ability to pay, and provide at least a tolerable level of program equity. It is the belief of the writer that incentives for tax relief, or stabilization of taxes, with a mandated maintenance of program standards likely will couple for dynamic changes in the state education's delivery system. It is now emerging that cost efficiencies, or possibly inefficiencies to the point of being 'back-breaking' to many ultra-small schools, will impact quickly and mercifully within the next half decade. It is the further opinion of the writer, that there are between 170 and 180 common communities in Iowa that would make that many secondary units. As these emerge in the coming years, the murkiness of how to finance schools will suddenly clear up. In summary, there possibly should be:

- a pupil driven formula that provides a balance of state aid with ability to pay;
- incentives to hasten, in a positive manner, the progress toward 170-180 more cost efficient units;
- the recognition of certain local factors such as sparsity, geography, topography;
- a formula to provide equal dollars for educational programming;
- a definition of minimum standards for programs for special children in all areas, i.e., at-risk, special education, talented and gifted, and vocational offerings, and that all children be afforded appropriate opportunities by weighting for budgetary purposes;
- the lattitude to satisfy specially identified local needs by opting for local leeway;
- equalized ability to provide facilities for educational housing through a statewide schoolhouse levy.

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Don Van Ryswyk, Board Member
Indianola Community School District

Rural education in Iowa needs to be on the same level as city and urban schools. The curriculum offerings and quality should be equal. The rural population has strived to provide better education at a cost we can afford and has always paid more than its share in support of the Iowa school system. Rural education should be funded by state and local taxpayers in a way that would be equal to all students in the state. Transportation should be from a separate budget so all students can have equal dollars to start with. There are many ways to be studied to be more efficient: consolidation, sharing, county schools, circuit teachers,transportation systems, county central offices, county maintenance systems, county superintendent, county nurses, county-wide foreign languages, county technical type schools, the list can go on and on. Communities need school facilities to stay alive and provide a place to socialize. Many of these places for community activity could be elementary buildings. It has worked well in communities in Warren and Marion counties. In the meetings I have attended (district, state, county, and round ta[illegible]les), I feel most superintendents and Board members are concerned about their own school systems. They are not giving much thought to student's finances, or statewide programs that have some merit. Sharing has worked well and will get better. In time it will be a great program if school boards are given guidance and incentives from the State Department of Education. School boards need to have direct contact with the Department of Education and not necessarily have to communicate through the administration. In Warren County, the six or seven schools have met quarterly and many good things have come out of these meetings.

As for equity, educators should be paid the same in all systems. We have seen salary differentials of $10,000 to $15,000 between rural and city teachers. This is very unfair to the rural student. At the time I am writing, it looks like open enrollment is going to be the law. I hope it doesn't leave us with a rich and poor (two level) system here in Iowa. I see many good things coming from open enrollment but I really have some concerns.

Iowa leads in education because of its rural atmosphere. We have few minorities and few big cities. If we had to average-in student achievement of a Chicago, St. Louis, or St. Paul we would just be average This is another reason to work and save rural school systems in Iowa. Sometimes I feel we need to preserve Iowa culture and feel it needs to be done in schools. I have not touched on the needs of the adults in communities all over Iowa. I find myself and my wife using and needing more continuing education. I feel we need to build more quality into education not more efficiency. I will sure be glad when schools have all the money they need and the military is having bake sales to buy arms.

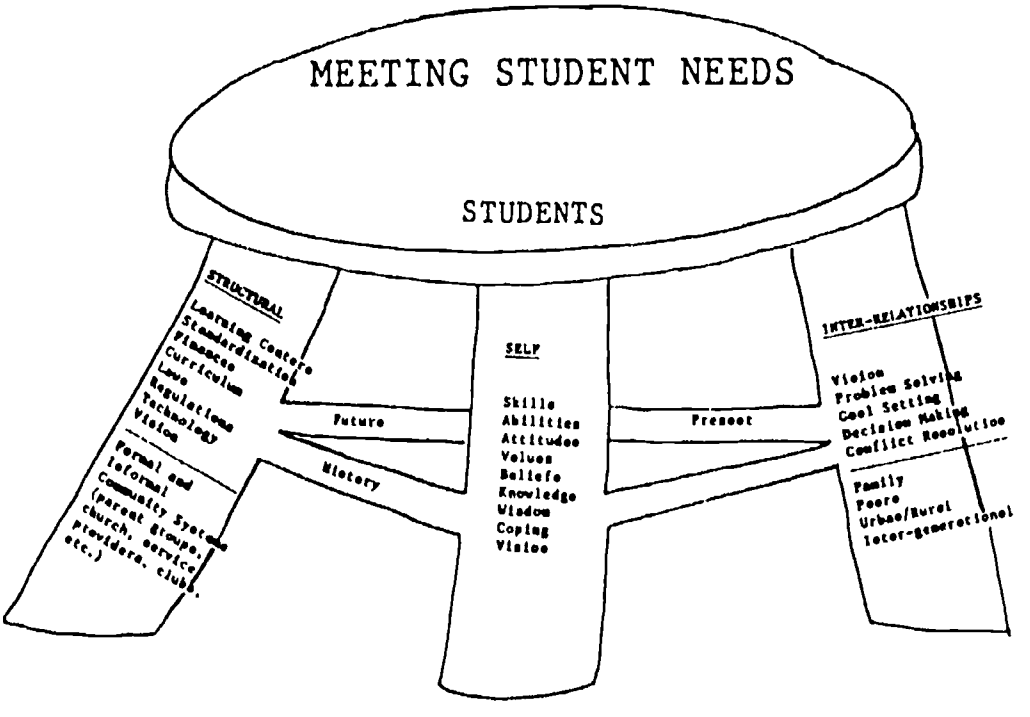
Section V
Meeting Student Needs in Rural Education

Introduction

Meeting student needs in rural education requires the preservation of some sense of continuity as we contend with change and uncertainty in the decades to come. Whether urban or rural, change will continue to occur and the ultimate goal of education must focus on the student.

Conceptual Framework

The analogy of the three-legged stool is used to depict a conceptual framework by which the facets of the needs, strengths, and resources regarding student needs can be articulated. One broken or weakened leg threatens the stability of the stool.



The seat of the stool, that which is primary, is student needs. The legs represent components of structure, self, and inter-relationships. What braces the legs of the stool, giving us continuity in time of change, is culture. Often times culture has been perceived as a barrier rather than a vehicle by which we incorporate our strengths in times of change and uncertainty. Yet, it is culture, the sum total of living built up by a group, which sets the stage of a democratic civilization.

Structural

The structural component contains all of the things that are created formally and informally to address the global needs. The school represents an example of a formal structure to meet the educational needs of a community. In addition to many of the formal structures, a number of informal structures evolve such as parent groups, service clubs, church groups, etc., which provide structure in the developmental life of an individual. In this process of creating structures to deal with global needs, the needs of the individual is sometimes lost.

Self

Perceived individual needs are sometimes not addressed in structural developed systems. Educational personnel need to be aware of unique needs which allows the individual to identify those abilities, skills, attitudes, beliefs, which may not be addressed within our formal structures.

Inter-Relationships

The development of self is dependent upon the establishment of relationships which add meaning to the person's self-identity. The individual's self-esteem is determined by the acceptance or rejections of one's interaction with others. Developmental patterns of behavior relating to problem solving, decision making, and conflict resolution in dealing with family, peers, and work associates are learned by the diversity and intensity of experience.

Cultural

What does it mean to be part of a rural culture? Culture includes patterns of beliefs, identification of roots and tradition. Culture is often easier felt and experienced than described. Culture is the brace holding together the structure, self and relationships. Culture allows people to understand their situation in the context of time, place and meaning. From a cultural base, we can expand our choices, act with intentionality increasing a sense of control and change patterns, as opposed to being immobilized round a particular issue. Culture is a framework from which we build

esteem both independently and cooperatively. Culture, for the sake of this discussion, can be viewed in three ways:

1. the past as defined by legend of yesterday;
2. the present as defined by lessons of today;
3. the future as defined by legacy for future generations.

The symbolic meaning of the power of culture has perhaps been best described by Korczak Zwlakowski, the sculptor commissioned to create the Crazy Horse monument. Korczak said that "without legends, there can be no dreams; without dreams, there can be no greatness." Our children, the students of today, somehow must develop a sense of legends, lessons and legacies if they are to master the dilemmas which come with uncertainty.

THEMES

Often our language limits us in our ability to make necessary connection. Therefore, we propose the following themes to be considered in meeting student needs through rural education.

Assumptions

Individuals, communities, and societies all have assumptions about rural life. When discrepancies occur, conflict may result. A critical role for education is to provide a forum when assumptions can be affirmed, changed or dispelled. It is important to recognize that assumptions have power — whether they be truth or myth, they direct us. The role of education is to create awareness about assumptions and the consequences of those assumptions. However, once assumptions have been shattered, critical dilemmas arise for one cannot function without assumptions.

A common assumption held dear by ruralities has been that prosperity was assured when folks worked hard.

In a recent study of farm families in Iowa and Pennsylvania, families told how beliefs about the connection between hard work, effort and success were largely flawed. Beliefs about the reward of hard work has been challenged by continuing economic stress. Though families talked about how working hard didn't pay off, they continued to work hard, often two or three jobs. This contradiction raised a fundamental question. Children are hearing their parents realize how work is not being rewarded but are observing that they still work hard. What will be the consequences of these desperate messages for future generations of youth? Will they redefine the reward system or challenge the merit of work? Will the economic rural condition of the '80's give birth to chronic mental health concerns and poverty as has been the case in Appalachia and other areas that have faced structural change?

Community

Community is a set of relationships among people and systems. It involves a cluster of interests and values, a sense of belonging and place. We have the opportunity to make use of community in different ways to meet different needs. A school if isolated from community will be unable to meet student needs.

Problem-Based Goal Setting:
Problem-based community crafting is a traditional process used to assess needs, identify problems and develop appropriate strategies to deal with those problems. It can be highly structured and dependent upon experts or people who have high skill levels. Community members often feel ill-equipped to handle big problems and may leave those problems in the hands of professional helpers. Problem-based community crafting is reactive by its nature.

Vision-Based Goal Setting:
Vision-based community crafting is a process which encourages a variety of community members to work on what they would like their community to be in the future. Specialists, generalists and community members of all ages can be part of a team to work on what they would like to see in their community in the future. It is proactive in that it initiates change to create a new reality rather than only responding to the eradicating symptoms.

Partnership

Partnership exist within community around a set of goals, shared mission or commitment. Community systems, both formal and informal, have the ability to set goals in one of two ways.

Change and Continuity

In any given culture, there is a process of evolution which includes both change and continuity. Change or continuity in and of themselves are neither positive or negative but it is the meaning we attach that is the critical issue. If the meaning of change is not processed, discontent and polarization results. Unfortunately, seldom is there a process to deal with this emerging discontent and polarization. When individuals and communities are stuck in stages of loss, the energy needed to renew and rebuild is diminished or denied. Rural education when determined by edict leads to polarization. The future of rural education can only be determined by education of an uneducated population.

Primary issues or themes identified in the group discussion and the position papers on the "Meeting Student Needs in Rural Education" group include:

1. self-esteem,
2. education is a life-long process,
3. the attachment of meaning to loss,
4. assumptions of reality,
5. cultural education,
6. communities working in partnership,
7. involvement of youth in forging the future.

The following articles authored by those from varied disciplines present thought-provoking views on "Meeting Student Needs in Rural Education."

Joan Blundall, Coordinator
Northwest Iowa Mental Health Center

Many students, families and community members have gone through tremendous changes in the 1980s. The economic and social upheaval of the rural debt crisis of this decade, though put to death by many, continues to impact our rural systems. While many rural youth have experienced major losses direct (change in residence, working status of parents, role changes within the family), some have experienced those changes indirectly (friends exiting communities, discussions of school/church closing). What is unknown to school personnel and helping professionals is the extent of which the changes of the 80s have been processed by children or the extent to which these changes continue to impact the lives of children.

A recent study done by the Iowa State University Department of Sociology and Anthropology, supported by a grant from the Department of Human Services, assessed the impact of the chronic economic crisis upon the mental health of Iowa's rural population. In this study, it was found the chronicity of the economic stress has had substantial impact upon rural mental health. Indicators of depression levels were substantially higher in Iowa than in any other tested area. 30.8 percent of those interviewed indicated a financial loss in the past year. Also found was a strong relationship between economic stress and depression.

Educators will feel the impact of the reports of this study within the classroom. When children's parents are depressed, parenting skills are impacted. Just as individuals on one level experience depression, communities can experience a generalized depression because of the state of its citizenry. Individuals and communities suffering from depressive moods act in predictable ways which may impede one's ability to problem solve, seek alternatives, and heal. When one loses a sense of the ability to respond, the value of being an active member in building a present or a future diminishes. People and institutions may pull back and pull apart, playing and replaying their depressive reactions over and over again. Both withdrawal and increased anger are common. Though community members might not identify anger and rage as a symptom, it is a common symptom which has the same impact on family and community life. Anger and withdrawal tend to isolate, divide, and polarize. Also, when resources are perceived as scarce or becoming scarce, people tend to act as to protect their own interests and turf or respond in a passive, fatalistic manner. Because of the chronic nature of the rural economic condition, children have been growing up in an era of uncertainty. Ten years ago families and communities functioned with the following set of assumptions:

- Prosperity was assured when folks worked hard.
- Children would have a quality of life that was equal to or exceeded that of their parents.
- What was needed for families was available in their communities.
- Rural America was the best place to raise children.
- People who wanted to work could always find work.

- Children, when grown, would have a viable choice of remaining in their communities.
- Communities would continue to grow.

A new set of assumptions needs to be generated within rural communities for an individual/community cannot function without assumptions.

Rural schools cannot be expected, nor are they equipped, to "cure depression" in rural areas. Rather, the school could see itself as an integral player within rural communities, involved in a partnership to envision new assumptions for the present and the future as well as a part of the substance within a cauldren to build and blend on the esteem, values and strengths of youth and families.

Janet Fitchen, a noted rural anthropologist and author of *Poverty in Rural America*, provides a unique vision of rural poverty and depression which yields direction on finding solutions on today's tough issues of rural education. Key concepts for consideration include:

Recognition of dangers of further centralization in recreation/education may throw poor rural people into a situation in which they feel like outsiders and identification of alternate strategies is needed to offset negative consequences of centralization of the poor.

Insufficient education is but one facet of poverty. Better education and more of it only attacks poverty problems on one level.

Schools sometimes reflect stereotype that parents don't care about children and their children's education. Parents care but caring may not be recognized because: 1) caring may not be expressed in ways the school understands or expects; 2) parents may have unrealistic hopes/fears/expectations about school; 3) parents may be bogged down with stress overload.

A school is more than the sum of its academic programs — "it includes a myriad of social systems, interactional patterns, unplanned activities and microinvolvements."

Schools can help youth alter the balance between aspirations and achievements. Limited aspirations may be a realistic response to individual's actual and projected situations. Realistic opportunities for achievement are critical when youth have experienced a loss/stress overload.

Foster sense of competency by: whatever confidence/security the child derives from home should be recognized and valued; exposure to success by schools and other community institutions is critical; fostering wide range of skills and tools to build confidence in dealing with the larger world.

People attempt to reduce anxiety about unachieved goals by stressing the value of the things they already possess, rather than those they lack.

Goal substitution, goal reduction and restriction of psychological commitment need not be interpreted as "lack of motivation" or "apathy." These strategies are positive functions for individuals to reduce pressure so that goals are at a level that are easily attainable.

Cultural beliefs need not be viewed as barrier to progress but rather as a vehicle to creating a more positive future for today's and tomorrow's youth.

Finally, it is critical that there is a clear understanding of the role of the school in small rural communities. The school is frequently identified as a central point of community identity. For some communities, the school is a vital part of the local economy, sometimes being one of the larger employees. Certainly for children, the school has a central role for their lives and development. In times of distress for families and communities, the school provides stability and routine for both children and parents. With such a close integration of school and community, the fear of closing and consolidating schools not only impacts employees but the entire community. Sometimes such changes can be processed upon consultation with outside systems such as mental health, the church or mediation services which may have a history of dealing with difficult personal, social and cultural choices. A neutral third party enables all aspects of community to pull together rather than apart in times of change.

Paul Crandell, Counselor
Remsen-Union High School

The needs identified in this position paper are the needs that apply to rural students only. Rural students, without a doubt, share many other needs common to all students across the state of Iowa. Before student needs can be met, they need to be identified. A locally developed needs assessment instrument would be an excellent way to identify the needs of students in a particular school district. The listing of needs that follows should not be considered inclusive.

Educational

1. Few accelerated programs are offered which make it difficult for students to compete for scholarships as well as compete with other students from larger schools (in the college classroom) who have taken the advanced classes.
2. A lack of competition/challenges among academically talented students because there may be only a few of them in a class.
3. Lack of exposure to a variety of teachers, teacher expertise, and teaching styles due to one subject, one teacher.
4. Because of limited funding equipment/materials/books may not be state of the art.

Social/Personal

1. Stress resulting from the farm crisis (financial insecurity/changes in family structure).
2. Students feel bored (say that there is nothing to do) because there is a lack of a stimulating environment (small town syndrome).
3. Feeling of inferiority when compared with street-wise city kids.
4. Isolated from trends.
5. Students from small towns feel that they are impervious from what happens in the city (drugs/abuse/crime/etc).

Attitude Development

1. Small town stereotypical attitudes regarding careers.
2. Limited role models.
3. Lack of cultural enrichment.
4. Limited employment opportunities outside school.
5. Lack of interaction with minorities which can lead to prejudice and discrimination.
6. Naive in terms of the outside world (beyond local community).

I feel that the new state standards regarding At-Risk Students, Talented and Gifted Students, and K-12 Guidance Programs will certainly

have a very positive impact on some of the needs that have been identified. I would like to suggest some possible solutions.

Meeting Student Needs

1. Provide opportunities for students to take advanced classes at local colleges/universities/community colleges.
2. Increase sharing of teachers between districts.
3. Use community/area resource people in the classroom.
4. Provide students with cultural enrichment activities.
5. Provide job-shadowing experiences for students.
6. Offer satellite courses.
7. Provide teacher exchange programs between districts.
8. Provide opportunities for visiting teacher/experts.

Robert Frank, Professor
University of Northern Iowa

"Eighty percent of students entering school feel good about themselves and who they are. By the fifth grade only 20 percent have high self-esteem. By the time students become seniors in high school, the percentage who have managed to keep a positive level of self-esteem has dropped to 5 percent." (Curriculum Review, 1988, p. 2)

A few years ago a graduate student of mine constructed a scenario of an "oppressed" school in which the human relations components of a school were highlighted. Examples of this school were identified by a variety of verbal and written communications between administrators, teachers and students. If the illustrations were not so painfully consistent with what actually occurs in the daily life of the school, they would be humorous and entertaining They were neither humorous or entertaining. Students, teachers and administrators often create situations which demoralize or destroy the self-esteem of its participants. Education to create maximum individual learning for each student during their academic life, should teach the concept that learning can be enjoyable and possibly even fun. For example, students who enjoy reading find reading a valuable life time experience. To those who found reading a painful experience, reading ceases as a pastime. A focus of education should be to develop in students a love for learning (Krumboltz, 1988).

During the summer of 1989, the State of Iowa will implement a new set of educational standards for Iowa schools (1988). One of these standards stresses the need for each school to provide guidance services for students of all grade levels staffed by certified counselors. This particular standard will have a profound impact on Iowa schools and on how schools address the multitude of needs that students of today face. Rural school districts may be seriously handicapped in their efforts to meet these standards (Iowa Standard 12.5 [21]).

Fifteen years ago counselors were located only in the senior high school and their daily commitments typically included scheduling courses, providing career information, meeting with college representatives and often performing quasi-administrative duties. Although counselor/student ratios have decreased substantially during this time span, the scope of guidance services has increased dramatically.

Counselor contacts today are more likely to deal with a never ending assortment of issues which effect how students feel about themselves. Almost every counseling contact deals with issues which effect truancy, substance abuse, classroom management, adolescent pregnancy, delinquency, absenteeism, interpersonal relationships, self-concept, shyness, anxiety, self-preservation and depression. Issues such as youth suicide, physical and sexual abuse, and eating disorders are common. Family influences, in terms of parental pressure, parental conflict, violence, academic achievement, stress, dealing with loss such as divorce, loss of close friend or death, are daily factors with which students are dealing. The

impact of economic issues, as illustrated by the impact of foreclosures in rural areas has led to a concept of farm stress on the student and family.

How can students benefit from an educational experience if personal/social concerns make it impossible to participate? Schools are often places where fear and failure pervade the atmosphere. Counselors are in a key position to help make learning a positive experience by being sensitive to individual differences and by facilitating communication with teachers and administrators as well as students. Teachers, because of their need to focus on discipline, management control, norms and competitive versus cooperative environments, must focus their attention on *groups* of students. Counselors learn to identify with each individual's uniqueness, growth and development. Students learn individually and achieve individually. A blend of teaching and counseling is critical to maximize individual learning.

Elementary school students are in the process of developing their self-identity and self-worth. As children develop this self-confidence, their self-esteem rises. They also are learning to relate to peers and adults and to assume an increasing responsibility for themselves. With positive experiences, a sense of belonging occurs which facilitates the learning process.

The junior high student is slowly moving from adult expectations to seeking and establishing their own expectations through interaction and friendships with their peer group.

The senior high student needs to develop skills that will enable them to make choices to prepare them for entry into post-secondary education or the work force as well as develop responsibilities of an adult. All of these developmental processes need to be developed in addition to the learning which adults expect will occur as one progresses through the educational system. At times the two expectations are in conflict and one or both suffer at the expense of the student.

People can learn to love the process of learning or they can learn to hate it. While people can learn under all kinds of circumstances, both positive and negative, inspiring a love of learning will motivate a life long eagerness to continue the development of knowledge and skills.

Students need to feel important, but certain types of school experiences (grading systems, test scores and labeling of students) make them feel degraded and unimportant. Students need to cooperate in friendly ways with their peers, but the traditional school structure often forces them into isolated competition against each other (Krumboltz, 1988). The social structure of the school contributes to keeping people apart. Both teachers and students have few opportunities to share their work, discuss individual differences and problems, or make plans together. Students tend to be evaluated on the basis of what they can do alone, not what they do as a part of a group. Research clearly demonstrates the values of cooperation over competitiveness but schools still rely more on competitive behavior than cooperative behavior (Johnson, et. al., 1981).

Gelatt (1986), a noted authority on decision making, 25 years ago proposed a decision making framework based on classical decision theory. This process includes: (a) defining objectives clearly; (b) collect data and analyze to relevancy; (c) study possible alternatives; (d) evaluate consequences; and (e) choose the best alternative. He has recently developed a new theory called "Positive Uncertainty." The basic idea is that it's all right to be uncertain and act inconsistently. If you can learn to be uncertain about what you want, what you know and what you believe, then you will be open-minded, flexible and versatile. This will make you inconsistent in what you do. And you will be ready to adapt to the many changes that are sure to come. You will then feel positive about your uncertainty and your decision making in the future.

With "positive uncertainty" comes a recognition of the chaos of our society; students are understandably confused about what they value and what they must do to cope with the society they live in.

During 1987, the Guidance Section of the Iowa Department of Education released a new guide for guidance and counseling in Iowa schools. A comprehensive model was proposed which has become the model for Iowa educators as they seek to meet the educational needs of students. This model is based on the belief that all students should participate in activities and instruction which will assist in their optimal personal/social, career and educational development. This involves dealing with the normal developmental stages of students as well as dealing with problem solving skills so that students can analyze choices, determine options and make deliberate and appropriate choices. Consistent with this comprehensive concept of guidance, the American School Counselor Association adopted, in December 1988, a definition of a school counselor:

> "School counselors are specifically credentialed professionals who work in school settings with students, parents, educators and others in the community, they design and manage comprehensive developmental guidance programs to help students acquire skills in the social, personal, educational, and career areas necessary for living in a multicultural society. School counselors accomplish this by employing such interventions as guiding and counseling students individually or in small groups, by providing information through group guidance, by contributing to the development of effective learning environments, through student advocacy and through consulting with others."

Counselors have an increased interest in working in primary prevention (developmental) guidance which assumes that many problems can be prevented if students are taught coping strategies before the problems occur. Counselors can work effectively as consultants to others in establishing a cooperative school environment; teaching peer assistance strat-

egies; intervene with crisis intervention methods; network with community agencies and in making effective referrals (Sweeney, 1988).

Referral and working collaboratively with other professionals is becoming more a part of the school counselor's role because:

1) More outside sources of help are available to the general population with the advent of community mental health centers, licensed professional counselors and other resources.
2) It has become more acceptable to seek help and more affordable for mental health care.
3) Professionals outside the school are willing and often eager to work with school counselors, recognizing the tremendous impact of the school culture on students. (Cole, 1988, p. 132)

Increased use of community systems (Blundall & Herzberg) should become common practice in addressing the needs of students.

Counselors will continue to provide responsive counseling in dealing with the variety of student problems identified earlier in this paper.

Counselors will use a multitude of strategies involving individual and group methods. Group activities such as group guidance, support groups, classroom psychological education, career groups as well as peer groups, parent groups and teacher groups will involve an increasing amount of the counselors' time.

Career activities, long a focus for counselors' activity, will continue to occupy the counselors' attention. Tests will continue to provide a foundation for educational and career exploration. However, present day activities will be part of the sequential career development of each individual student beginning in the lower elementary grades and progressing through the exploration of apprenticeship, pre-college and post-secondary activities.

All these represent continuing pressures for the student, but clearly the most important is to identify and use methods that foster the enjoyment of learning and high self-esteem.

As an advocate for students, the counselor should model a "caring" for students which provides an unconditional positive regard for each student. Through assisting the student to develop a concept of "positive uncertainty" the counselor can be a model of open-mindedness, and flexibility that students can integrate into their own learning and self-esteem. With a high self-esteem, students can maximize their learning with the resulting enjoyment of individual satisfaction and success.

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Kim Herzberg, Social Worker
Northwest Iowa Mental Health Center

The following and similar statements have been common in conversations with rural parents, school personnel and community leaders:

- "There is no future here. You've got to get out while the getting is good."
- "Look he stayed here and will work at that factory the rest of his life. What kind of a future is that? He's not doing anything for himself."
- "She's a new teacher. Where else could she get started? She won't stay long!"
- "What happened to the time we could do business with a handshake?"
- "I get the general impression that large schools are adequate and that small schools are inadequate. I'm sure they have their problems, too."
- "I like teaching and living in a small community because it allows me to really know and help the kids."
- "What does it say about what I have done with my life if I can't encourage my kids to follow in my footsteps even if they wanted to?"
- "Kids sure don't want to take responsibility for their future. They are just plain not motivated."
- "Our town used to really be something, but now everyone leaves because there is nothing left here."

A common theme of mixed messages indicating despair and hope emerges as rural Iowans have faced the economic fragility of the nineteen eighties. Abandoned businesses and farms, poorly kept properties that once were neatly groomed, new businesses representing only outside financial interests, expectations of inevitable decline and the mistrust of one's neighbors are becoming more common in rural communities. If a person displayed similar characteristics such as withdrawal and mistrust of others, poor grooming, negative statements about the future and general despondency, one might conclude the person has a low self-esteem or is suffering from depression. If a child were identified as described above, the teacher, counselor and parents would likely take actions to provide the opportunities for the child to raise their level of esteem. Community members may also make efforts to contend with the "esteem" of the community. There seems to be a connection between the esteem of the community and that of the individual. A helper may assist the child identify strengths, provide encouragement, give opportunities for success and empower the child to make appropriate choices weighing the consequences. Rural cultural education can be a vital component to enhance both the esteem of the student and the esteem of the community. The school, as an institution of the community's self-expression, plays a vital role for the individual student, the collective school population and the community.

Thorough rural cultural education will intentionally include the following components.

1. It will seek to address the increasing fragmentation of home, school and community. One goal is to reduce the polarization between parents and teachers, professional educators and their new communities, and students and rural culture.
2. Rural cultural education will integrate and utilize valuable community resources including the skills of community members, the valued heritage and legends and the strengths of the broader community.
3. Providing local community education in connection with education about the broader culture will help students critically examine their choices. It allows students to be more creative in making life choices, and may give validity to the options of remaining in the community or leaving it.
4. A component of rural cultural education is connecting students with the necessity of rootedness in a place they value. According to Wendell Berry in the 1988 Iowa Humanities Lecture given in Harlan, Iowa on November 13, the costs of educating our young people to leave our communities are great both psychologically and culturally. Psychologically, Berry proposes that children who leave their homes permanently are often immobilized at the adolescent stage. A great fear many adults have for adolescents is that their choices and actions will result in their exploitation by others and their self-destruction. Berry suggests the same of communities which lack an "authentic local culture." Rural cultural education will enhance both the individual and community development.
5. With the changes experienced by many in the Midwest in the nineteen eighties, rural cultural education will integrate the student's knowledge of the broader economic, social and political movements with their experience in the family and community. With a clearer understanding of the forces which act upon rural communities and the effects of these forces, persons in and from the rural community will be empowered to influence public institutions and policies according to rural values.

An integrated rural cultural education may be another avenue by which the needs of students can be addressed. As the beginning statements indicate, there is both hope and despair about the future of our children and our communities. Building both simultaneously, seems to be an option worth considering. Wendell Berry proposes that the most promising future for our society is in the renewal of rural communities as the fix from the outside has not materialized. Giving children a base of strong esteem seems to be one means by which educators can enhance the development of the whole student and thus the whole community.

Edward Ranney
Guidance Consultant
Iowa Department of Education

Equitable access to educational opportunity is becoming more complex as Iowa's demographics continues to rapidly change. In 1987, one public school district graduated two students, one district graduated five students, two districts graduated seven students, one district graduated eight students and two districts graduated nine students. Sixty-one school districts graduated classes with less than twenty students. The largest school district graduated a class of approximately 1850 students.

There are rural school districts with limited numbers of students. Iowa presently has 56 school districts involved in whole-grade sharing agreements. There are projected for the 1989-90 school year, 84 districts in the state who will be involved in whole-grade sharing agreements.

Students in the twenty-first century in Iowa will probably include toddlers, children, youth, adults, and the elderly. A typical Iowa school district may provide learning experiences and training for students 3-21 and for adults ages 21-80 plus. Students could have many of the following options within the extended framework of the day and year:

1. Attending school seven hours a day and 210 days or more a year, depending on their needs and ability to handle tasks.
2. Selecting a variety of programs, both required and elective, in academic, vocational, or enrichment programs.
3. Working from an interactive computer video disc learning situation at home or school.
4. Working on a job and going to school.
5. Doing apprenticeships with master teachers.
6. Having opportunities for expanded time in a science laboratory, music class, art class, or vocational class.
7. Having opportunities to be tutored individually or in small groups.

Administrative structures and policies, along with high technology delivery systems of educational programs and services, must have a basic foundation of human growth and development principles. These principles could be categorized into three components of education which would impact personal and social development, educational development and career development of all ages of students enrolled in educational institutions.

Personal and social development, or learning to live, involves the development of the uniqueness of self which is of primary importance. The development of the self-worth of each individual in the educational process is basic to that person becoming a contributing member of society. The student also needs to develop an appreciation for others that will enrich interpersonal relationships. Students in rural environmental settings may have difficulty in having experiences which involve acceptance of the similarities and differences among people. Multi-cultural experiences and

skill development in interacting with others may involve a strong emphasis on global education and student exchange programs. Students also need to utilize knowledge and skills for developing and maintaining good emotional, physical, and mental health as a part of responsible citizenship. Students moving from a restricted rural setting to a less structured urban setting need to learn how to deal effectively with emotions, to cope successfully with stress and to practice self-discipline.

Educational development, or learning to learn, involves the student developing an understanding of the importance of minimal educational competencies in order to function in a rapidly changing society. Skill development in the academic disciplines will assist transition to our fast-paced society. The State of Iowa can be proud of its ranking of first in the American College Test and Scholastic Aptitude Test, college entrance examination results. However, Iowa ranks 49th nationally in percent of graduates for advanced placement candidacy consideration by institutions of higher education. This fact is cause for concern, if not alarming. Limited accelerated course opportunities by school districts with limited enrollments might be a contributing factor to this extremely low ranking by the state.

Career development, or learning to make a living, involves the student developing an appreciation for, and a positive attitude toward, work. Decision making skills and the development of employment-seeking skills might be of some difficulty with students who reside in a rural setting where the primary possible industry available for student exploration is related to agriculture. Student enrollments in vocational education course offerings has also been declining in Iowa's school districts. The student's choice of vocational education course selection involves the need for a broad comprehensive program of vocational offerings. This reinforces the need for a study of grades K-14 vocational program offerings for all of the citizens of Iowa.

The citizens of Iowa can be proud of their historical commitment to education as an important institution. Iowa is unique in its traditional family, school, church and governmental institutional values. We now need to seriously study proposed changes in education which will impact the family, church and governmental agencies within the state.

Jan Von Arb
Division of Mental Health
Department of Human Services

Rural students in the 90's will probably continue to experience losses and changes in their assumptions about rural life, their communities, local institutions, their families, and their futures. In all likelihood, structural changes in rural communities will continue at an accelerated pace because of the financial losses experienced during the farm crisis. The ability to fund local services through the local tax base has been eroded by the agricultural losses and the migration of the rural population. It does not appear that funding from other sources will be available to make up for those losses. As a result, one of the effects of the eroded local tax base and the de lining rural population of child-bearing age, will be the closing and consolidation of rural school systems. When rural schools are closed or consolidate, one of the questions that needs to be asked is, how will this affect the emotional well-being of students and their ability to focus on their future?

In listening to educators describe the issues involved in school closings or consolidation, they mention finances, educational program, and the community's emotions. Professionals and community members are usually available and willing to discuss financial issues, educational programs and construction of buildings, but little time seems to be given to the rational nature of emotions. Many times emotions are considered to be irrational and attempts are not made to understand the beliefs and assumptions associated with an emotion. Emotions are likely to be seen by persons charged with the responsibility of consolidating and closing schools as a problem, rather than an opportunity to learn about the community's beliefs and assumptions. It is only through knowing a community's beliefs and values that one can begin to understand a community. A good understanding of the context of a community is vital to meeting the educational and emotional needs of students. A student may not find meaning in, and may become alienated from, an educational program that does not respect and understand the context of the student's rural community.

In addition, with the loss of any significant person, institution and resource, individuals and communities go through a grief process. A student who is attached emotionally to a school, will also go through this process and the student's loss must be addressed. The risk of not helping students deal with this loss, has the potential of students becoming focused on the past and present and not on the future. This becomes evident when the literature on grief is reviewed. This literature describes essentially three phases individuals, communities or systems go through when dealing with a significant loss. The first phase is one of shock, alarm, or denial. The focus during this phase is on the past. Even though the event is anticipated, it is shocking when it occurs. The response to this shock is often alarm. There may be a reaction which is characterized by physiological changes in individuals, denial, ambivalence between the past and

the future, and bargaining to a spiritual power to postpone the inevitable. In the second phase, pain, anger, and guilt may be experienced. The focus in this phase is on the present. It is characterized by emotional unpredictability, loss of self-esteem and identity and searches for meaning. The third phase is acceptance. The focus in this phase is on the future and involves the re-establishing of a meaning and purpose, revitalization of identity and self-esteem, and an ability to cope and carry on with everyday tasks.

If communities and students' emotions are ignored when rural schools are closed and consolidated, the risk of students not finding meaning or a purpose in their future comes from two sources. The development of a school progam that does not consider the context of the environment in which the student lives, individual students may not be able to focus on the future if they are grieving the loss of their school. The latter could also occur when any individual student does not resolve their grief around the losses in their lives. With the potential of rural students experiencing more than a loss of a school, schools will need to be aware of the emotional needs of students. A student stuck in the first two phases of grief for a long time, has a possibility of becoming depressed which will not only complicate their desire to succeed in school but their ability to learn.

Lee Wagner, Coordinator
Students Empowered for Rural Action

One of the most disappointing phrases I hear from adults is, "Kids these days! What they really need is . . ." Before we begin to analyze what needs to be done, we must try to understand what rural youth want to be done. As a rural youth myself, the purpose of this paper is to better help build an understanding of what it is that rural youth want. Let's take a look at what rural youth today are faced with:

Ozone layer — Nice hole we've left them! Hope someone can fix it.

Groundwater — One out of every five wells in Iowa have nitrate levels above the standard recommended tollerance for pregnant women and infants.

Nuclear war — Occasionally I hear, "why should I worry, we'll all get blown up in a war anyway!"

Pesticides and chemicals in fruits — As a "consumer-driven" industry molds our food into larger, uniform, easy-to-process and easy-to-transport widgets, We have sacrificed the safety that one has come to expect from the industry.

It's hard to be a care-free youth these days.

How Do Farm Youth Feel Specifically?

Throughout the "farm crisis," counselors, educators, and friends, all had excuses not to deal with the "crisis." As I went through the University of Nebraska, I was constantly told that it was just some bad managers, and that the small farm was on the way out, there was just nothing we can do about it.

And then someone said the farm crisis was over, and the "experts" breathed a sigh of relief. They now had another scape-goat, and anyone who complained about the crisis was not only a bad manager, but also just complaining for no good reason.

But as my parents declared bankruptcy, I began to wonder if the University was right. After all, I could see that the price of corn was too low, and the costs of machinery was rising. Couldn't the University see?!?

The town grocery closed, and another mall went in its place. An implement dealer closed, as did another bank. Was this all the result of bad managers? Are our schools filled with bad managers when they are forced to merge or delete programs, or share teachers? And should rural hospitals be closed on account of bad management because they don't receive equal government medicade reimbursement?

Can Rural Youth Be Depressed?

Rural youth ARE depressed, probably more so than we realize. One large danger I see is that their needs have been ignored. Their wants have

gone unresponded to. Although farm hotlines, extension services, and financial and legal assistance has been given to the farmer, little attention has been paid to the youth who have experienced the same crisis, leaving them confused and scared about their future.

When the future of rural youth is shattered, so too is the future of the community. Rural youth need to believe in themselves again. But we must beware of inappropriate counseling methods. Although we must deal with their emotional side, we also need to take some form of action that will empower them to change their situation, so they don't slump down into the same rut of depression.

One thing they really do need, is to be treated like the vital part of the community that they can be. Too many times, community projects fail to include youth in the planning and organizing process, and then wonder why the youth aren't excited about the activity.

As rural educators, we can no longer bury our heads in the sand, and continue to teach as if there was no tomorrow. We must rebuild our communities, to provide a place where youth will be proud to return to. And we must empower youth to pursue their visions, and dispell the myths that are having a death-blow on their future in rural communities.

Section VI
Redesigning Iowa Rural Schools: Sharing, Restructuring or Consolidating

Introduction

As a group of public school educators, university professors, parents and interested citizens sat together for three days to discuss redesigning of Iowa rural schools, it was evident that this was not going to be an easy task. Many, many issues were discussed and how they impacted the recent (renewed) interest in redesigning Iowa rural schools. As one participant indicated, "School restructuring is much more than an educational issue. It addresses the very social fabric of rural Iowa or possibly the entire state. . . ." Conference participants who had an interest in the restructuring segment of the conference held strong beliefs about rural education and what the history of the educational process has achieved over the past century. No one was willing to eliminate rural schools but more of a realistic attitude that some restructuring needs to take place and it should be done in an orderly, systematic process based on researchable and factual information, not on the perceived will or whim of the state legislature.

If restructuring Iowa rural schools is to become a reality and accepted by the majority of rural Iowans, two issues will need to be addressed. First, educational equality and just what does that mean for rural education. Second, financial efficiency and impact of this issue on programs, personnel, and academic accountability. As a participant stated, "The combination of these two basic issues has given rise to the current concern on redesigning Iowa rural schools. The basic questions are: What is the minimum acceptable quality of education available to each student? And, how much will the residents pay for that education?" Given these issues and the financial incentives the state of Iowa is giving school districts who enter into sharing agreements (student, faculty, administrative, and program), has created a tremendous impetus for rural school districts to look

for new ways to "do business." However, as these financial incentives begin to fade and become non-existent, fundamental restructuring will take place. The following position papers are the thoughts of conference participants who had a special interest in the topic, "Redesigning Iowa Rural Schools: Sharing, Restructuring or Consolidating."

Norman Boyles, Professor
Iowa State University

In 1980, I wrote the following as a part of an Area Education Agency's state mandated reorganization plan:

> "The restructuring of school districts in the United States has flourished for the past 50 years. This has been especially true since World War II. These changes have been brought about by a variety of forces.
>
> > "The development of the telephone, radio, and television had an effect on communication. Better roads, automobiles, and trucks, along with airplanes and trains, knit the people of the nation closer together. On the farm the steel plow replaced the wooden one just as the tractor did the horse. Better seed, better fertilizer, and better agricultural techniques resulted in a revolution in the rural areas with fewer but larger farms. All these technological advances affected social institutions. Technological developments have also affected the manner in which people are distributed. The United States is now predominantly an urban rather than a rural nation. Such changes have stimulated reorganization of the structure of public education.'[1]
>
> With the restructuring process still a factor in all of the states, certain states are more attuned to some or all of the problems indicated by Knezevich. Iowa faces the problems of reorganization, restructuring or school district change (whatever one chooses to call it) because of two immediate factors: 1) declining enrollments in almost all areas of the state and 2) the fact that the state funding plan is tied directly to the number of students in each district.
>
> Because of these two factors and the additional element that the state legislature controls the local districts resources for education through the State Foundation Plan, many districts are faced with insurmountable problems. Given the previously stated circumstances some form of change is unavoidable."[2]

Following this introduction a plan to "share, cooperate and confederate" was put forth. The idea was to put into action a plan which would allow districts to move through certain steps to eventual reorganization into county-like units. I take some pride in this plan because I think it was conceptually sound. Conceptually, maybe? But it was not what the people of the AEA wanted. Faced with low enrollments (less than 300 in seventy percent of the districts in that AEA), they resisted the plan to bring about an orderly restructuring of their schools. Who was right? The citizens committee who did most of the ground work and the consultant who put their ideas into writing and a framework, or the general citizenry who rejected the plan with a resounding NO!? I have come to believe that the citizenry may not be right, but they are never wrong. They hold the

ultimate power in these matters . . . the vote. Those who are elected know that the vote will be used to express feelings about reorganization.

If the citizenry is never wrong, in what ways were they right? I assume that they felt that there must be another answer to this problem:

"If they can put a man on the moon, then . . ."
"Why not solve this problem in another way?"

These are common retorts to the asserted need for reorganization.

Recent information does suggest that the smaller school district can do the job of educating their youth. Also, the promulgator of the open enrollment plan for Minnesota indicates that the out-migration of students in that state, thus far, is from the large district to the small district.

How then do we provide for the small school?

My answer is restructuring. We must restructure our schools with two things in mind: (1) Restructure so that districts are economically feasible, and (2) restructured districts must be educationally sound.

Number one is the proposition that what we create as a part of the restructuring process must be defensible in terms of the total state economical picture. In restructuring the school districts, smallness could be the by-word. We might ask, "How small can a district be and yet be economically feasible for this state and its financial base." In other words, we would not start with an attitude of larger is better, but rather an attitude of preserving the smallest possible entity.

Second, what is created must be educationally sound. Educationally sound is like saying the educational system must be "appropriate." "Appropriate" and "sound" by what definition? Our present state standards might well serve to be the measuring stick in this instance. As arbitrary as it might seem to be, the decision of appropriateness and soundness must be made.

Taking these two elements and applying them to a scheme for restructuring the schools of Iowa would be done in one of two ways: (1) let a commission look over the scene, review the data and make the decisions, or (2) let the process that is taking shape run its natural course. With the current state standards and the coming revised state foundation plan, which should abandon the phantom student and other ruses to support the unsupportable, there should be an evolution of district organization into an appropriate and sound state organizational structure.

A note is appropriate here to my call for an attitude of smallest possible units. Iowa has produced students with an uncommonly high educational ethic. Whether by genetic influence or by staying power or superior instructional acumen or small intimate school setting, we must not lose the edge. I think we can best maintain that edge through an evolutionary restructuring rather than a revolutionary restructuring of the schools of Iowa.

Others in this conference have the task of putting a face on the role of technolgoy for rural education but I must include a word here because of the importance technology should play in the evolutionary development of the school districts of Iowa.

With the use of technology, each school and school district would have choices. Those choices would demand an internal restructuring of the curriculum and instructional programs.

Technology and its accompanying benefits demand new approaches. Shall we set a student down to a computer and tune him/her into a educational data base service and let him/her alone? No, I don't think so, but I do think that a carefully planned use of such a data base for most students would resolve several of the problems of the small district in Iowa. Marry that data base with the several other information sources and the need for students to be knowledgeable about the use of information sources and a district may have available an answer to many of the problems inherent in the small districts of Iowa.

We must face the economic inefficiency of the smallest districts in Iowa. We must bring about an orderly restructuring of those districts and give the support they need to progress and provide the traditionally outstanding educational experience provided to young Iowans for more than a century. So, establish standards and set the financial parameters and let the process evolve.

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Robert Decker, Assistant Professor and
Adrian Talbot, Adjunct Instructor
University of Northern Iowa

Sharing a Superintendent: Placebo or Panacea?

Faced with unfavorable demographic and economic trends, many Iowa school districts have been seeking innovative ways of re-shaping themselves in order to continue providing high quality educational programs. Many districts, encouraged by legislative incentives are currently sharing grades, teaching staff, and administrators. During the 1988 fall semester, the authors solicited the opinions of superintendents who have been employed simultaneously in two or more neighboring districts. Based upon their responses during a semi-structured interview, we take the following position:

> In the absence of sincere school board intentions to pursue grade sharing and possible reorganization with a partner district within three to five years, we strongly discourage administrators from entering a shared superintendency.

To justify our position, we will outline briefly some of the difficulties and challenges which face the shared superintendent.

The first challenge focuses on the need for communities and administrators to redefine the superintendent's role. A large number of participants recounted the difficulties communities had encountered adjusting to a superintendent who was far less visible and accessible than had been the case prior to sharing. In many small systems, patrons are used to raising questions informally with the superintendent during his/her attendance at civic functions. Indeed, participation in community events and maintaining a home in the school district are often high priorities among community members, and have a direct bearing on their perceptions of the superintendent's effectiveness. To employ a superintendent who lives in a neighboring community and is rarely seen talking with residents, is a difficult concept for some patrons to accept. Communities must be prepared to redefine their expectations, if they decide to hire a superintendent who is only employed by them half-time.

Superintendents must also analyze their manner of operating. This may well necessitate a re-ordering of priorities and delegation of authority. Due to the requirement that separate meetings be held with the board in each district, superintendents frequently find themselves "besieged by paperwork." The consequence of the increased bureaucratic demands is a diminution, and frequent cessation, of instructional and curricula leadership. In spite of working weeks which often exceed 70 hours, time spent traveling between districts and meeting board members leaves little opportunity to become directly involved in the educational program. As a consequence, superintendents frequently experience a sense of isolation, a

remoteness from the actual practice of education. This separation is compounded by the stress created by long periods away from home and family.

A second challenge presents itself in the need to constantly "change gears." Physically moving from one district to another can have a disorienting affect, forcing superintendents to take "reference checks" to ensure that the appropriate policy is being enforced in the correct district. When administering a single district, a lot of details are absorbed subconsciously and are referred to frequently without the superintendent really being aware of it. When sharing two districts, however, superintendents find it necessary to ask themselves "now which district is this," before making specific decisions. The maintenance of two separate offices, in two locations, often 10 or more miles apart, merely adds to the difficulty of living "a double professional life." This need to be almost constantly in transit, generates the sense that little is being accomplished. Few significant tasks can be carried through to completion before it is time to don the hat in the "other" district.

A fourth challenge to be faced by the shared superintendent is to satisfy the expectations of two communities whose aspirations, philosophies, financial status, and enrollment may be dramatically different. The magnitude of this challenge increases dramatically where intense, and sometimes acrimonious rivalries have existed between the districts (often generated by athletic competition). Attempting to be all things to all people under such circumstances can be an exacting undertaking.

Despite the increased work load, stress, role ambiguity, and conflicting community expectations, respondents *did not* condemn the concept of the shared superintendency as being totally unworkable. As we inferred in our position statement, superintendents are willing to face these challenges for a prescribed period of time. Where two districts have a sincere intention of moving toward further joint agreements, within three to five years, the superintendent has a target date when, hopefully, pressures will dissipate. In addition, where districts are motivated to share in order to improve the quality of the educational programs available to students, superintendents are prepared to put their shoulder to the wheel. Under such circumstances the authors endorse the shared superintendency. By contrast, when the primary motive is cost saving and economic efficiency, we, along with superintendents are far less inspired. The sincerity of districts' motives in this regard is soon reflected by their relative openness to expending state incentive monies on hiring specialists in curriculum development, whose services are traditionally far more limited in rural areas.

In closing, we make one further comment. Contrary to our initial expectations, the most satisfied superintendents were individuals who were shared by two districts which had had a number of other sharing agreements already in operation *prior* to the advent of the shared superintendency. In essence, far from being the engineers of some new arrangements between two districts, the most successful shared superintendents

were the capstones on a pre-existing structure. For districts contemplating some form of re-configuration in the future, contrary to what might appear to be intuitive wisdom, sharing a superintendent should be the last as opposed to the first avenue to pursue.

Guy Ghan
Iowa Department of Education

The purpose of this School District Restructuring Report is to summarize the restructuring activities of 1987, chronicle the restructuring events for future reference, and analyze problems that developed during the year. This report, which has been produced annually for many years, is normally a more routine data based summary of events. However, an analysis of the events that took place during 1987 leads to the conclusion that a different style of writing is necessary if future generations are to use the Department's annual report to gain a true understanding of the large-scale changes that are taking place.

It is with this in mind that the author of this report, the Restructuring Consultant in the Bureau of School Administration and Accreditation, frequently uses a more personal manner of writing. One cannot have become aware of threats and vandalism, and even witnessed this on occasion, and still remain totally scholarly in style of reporting.

Part one of the report summarizes a speech that has been given by the Restructuring Consultant over two dozen times during 1987. The remaining parts are similar to portions of reports that have been produced in prior years.

Before launching into the body of the report, the reader needs to be aware of three conditions that entwine all other elements of school restructuring: (1) The term school restructuring came into common use during 1987. It includes three specific types of actions—reorganization, dissolution, and whole-grade sharing. All are very strong measures and actions of strong public policy. (2) The public school districts of Iowa are at the beginning stages of large-scale changes similar to the changes experienced between 1952 and 1966. (3) The changes are being driven by more than education considerations. Political elements seem to play a very important role in the process. Seemingly more pronounced than education issues and well planned political strategy are the emotional directives of individuals, groups, and communities. School restructuring is simply a very personal and raw emotional activity.

THE SPEECH

School restructuring is much more than an educational issue. It addresses the very social fabric of rural Iowa or possibly the entire state, and the current trend of restructuring is the culmination of a series of conditions that have been with us for many decades. First, the population/demographic circumstances within the State started the process. In 1900 Iowa's population was 2,231,853 and in 1980 it was 2,915,197; whereas, the farm population of 964,659 in 1930, shrunk to 391,070 by 1980. The advent of mechanization and chemicals on farms has enabled farmers to work larger and larger amounts of land. This, along with smaller farm families, has greatly reduced the number of people living on farms. That dwindling number, in turn, has led to the reduction of the populations of

many small rural towns. Two other population factors that are causing changes in school enrollments are the aging of Iowa's population and the outmigration from the state.

Following on the population/demographic changes are the strengthening elements of the metropolitan areas and the other more populated municipalities. Employment, mercantile activities, and leisure pursuits have been leaving rural areas for the population centers. The automobile, good highways, shopping malls, large advanced hospitals, and sporting complexes have all brought population to more concentrated locations.

School districts, as they make the moves to become bigger in the late 1980s and beginning 1990s, are merely reflecting government change that is following on the heels of the other changes that have already taken place. We must understand that schools are government entities that are put in place to provide a service to the citizens of Iowa in an economical manner and of an equitable quality across the state. It is difficult for citizens to view their schools from an unemotional, businesslike perspective. Schools tend to be places where many happy years were spent, where basketball games were played, the home of the "Bulldogs, Spartans," or whatever name was given to the school.

Population/Enrollment Information

Iowa tends to think of itself as a state of small school districts. Depending upon a person's definitions of small, this is usually a mistaken notion. Presently there are 87 districts with less than 300 students. The total student headcount of all these districts is approximately 19,000. The single school district of Davenport has almost that many. Over half the schools in Iowa have less than 600 students. The total number of children in all districts of less than 600 is approximately 85,000. That is not very many, considering there are about 480,000 students in the public schools.

Another mistaken notion, relates to the number of very large geographic areas in school districts. A routine county is twenty-four miles by twenty-four miles. That produces 576 square miles. Only eleven districts have territory that is greater than one-half of a routine county (288 square miles).

A recent newspaper survey noted that a majority of Iowans like the small districts. The problem with interpreting that sentiment is the definition of small. Department of Education staff, in talking with people encountered situations such as the person from Ankeny who said, "sure I like small schools like Ankeny." Ankeny has almost 4,000 students. That is small compared to the 30,000 in Des Moines.

Types of Restructuring

There are three types of restructuring. The term restructuring is not used to hide the word "reorganization." It is used as a term to include reorganization, dissolution, and whole-grade sharing. The words, consol-

idation and merger are synonymous to reorganization. All three types of restructuring are major government activities and none should be taken lightly.

Reorganization is a citizens' process that is started with a petition signed by citizens and culminates in an election. If successful, the process produces a new district, with a new board, new boundaries, a new tax base, etc.

Dissolution is a process that is started by the school board and ends in an election. If successful, the dissolving district is divided into two or more neighboring districts. New entities are not formed as in reorganization.

Whole-grade sharing is a relatively new legal option. This restructuring process is started and completed by the boards of directors of two or more districts. In "one-way whole-grade sharing," the board sends its students (usually junior and senior high) to a neighboring district. In "two-way whole-grade sharing," two districts enter into a contract whereby one provides the education for some grades, and the other district provides the programs for other grades. For example one district might have the junior high and the other the senior high. Whole-grade sharing is more temporary in that a board may terminate the contract at the end of the contract period. Most contracts are initially established for multiple years. Department staff note that a district is not very likely to be able to bring a program back to its own building after whole-grade sharing. In other words, it should be considered as a prelude to reorganization or dissolution.

Historical Perspectives

Iowa has gone through many phases of school restructuring. During the Sub-districting Period (1872-1900), the township districts were allowed to break into parts. The all-time high was 17,522 districts in 1900. Since that time, the state has been trying to reduce the number.

The most recent round of restructuring took place between the 1952-53 school year and the 1966-67 school year. During that time the number of districts was reduced from 4,558 to 455. Most of the reduction involved the closing of the one room elementary districts. However, the number of high school districts was also reduced from 836 to 455.

The period from 1966 to 1985 saw very little restructuring activity. The number of districts merely declined to 436—about one reorganization per year. Whole-grade sharing was not a part of the process.

The changes of the 1950s and 1960s were largely brought about by legislative incentives. The only major direct action was to cause all territory of the state to be in kindergarten through twelfth grade districts. The reduction in the number of high schools was caused by a series of other measures. Among them were: (1) county reorganization plans required, (2) the ability to discontinue a school and contract with a neighbor, (3) appointing the county superintendent rather than electing that person, (4) mandatory county reorganization plans prior to reorganization,

(5) enforcing standards that were already in existence, (6) new reorganization chapter in the Code, (7) allowing county boards of education to join or merge, (8) new standards, and (9) the elimination of the two-year college teacher certificate. All of these put together helped bring about the massive changes.

Current Restructuring Activities

Whole-grade sharing has increased dramatically in recent years. There were ten districts doing this in 1985-86. That number increased to twenty in 1988-87, and then to forty in 1987-88. Eighteen more districts have signed contracts for 1988-89; however, six districts are eliminating contracts due to reorganization or dissolution.

The number of districts reorganizing has increased slightly. Four districts were scheduled to merge on July 1, 1983. As of January 1, 1988, several other reorganization and dissolution actions were pending. Some are at the election stage, and others are waiting court action or other procedures.

Although superintendent sharing is not a form of restructuring, it is a process that can help speed change. Simply stated, it is often much easier for two districts to restructure if they share the same superintendent, as opposed to two districts, each with its own superintendent. In 1986-87 there were 22 districts sharing superintendents. That number rose dramatically to 67 for 1987-88.

The number of districts contemplating or studying restructuring has increased greatly. In 1987, the staff from the Bureau of School Administration and Accreditation completed fourteen full fledged feasibility studies. During that one year period, the Restructuring Consultant personally visited with seventy boards, or sixteen percent of all districts. This amount of activity is a clear signal of the pending change.

Recent Legislative Activities

The Legislature has not passed acts that will directly cause restructuring. However, many of the bills proposed and passed are causing changes similar to those that took place between 1952 and 1966.

The State Board of Education was mandated to provide restructuring plans and to develop new standards. Obviously, it was expected for the new standards to be more difficult than the old ones, and that is the type of action that could cause change.

Over the course of several years, legislation was enacted to provide monetary bonuses to districts for sharing students, for whole-grade sharing and for sharing administrators. Tax breaks were given to schools that reorganize or dissolve.

A minimum salary of $18,000 was established. This is not intended to cause restructuring, but it will highlight the inefficiency of small districts that have very few children in classrooms. Can a regular sixth grade class

with only five children in it be economically operated when the minimum wage is $18,000?

The Department staff and some legislators are pointing toward the early 1990s as an era of increased change. A new U.S. Census in 1990 will illuminate the decrease in rural population. Reapportionment in 1991 will produce more urban and metropolitan legislators, who will be elected in 1992. The 1993 and 1994 sessions will possibly be much different than those of the 1980s. In any event, the restructuring movement, like all other historical movements, could run its course. Very possibly, 1995 might be the last year for change, with a plateau starting at that time.

Feasibility Studies—Basic Considerations

Pursuant to Iowa Code Section 274.38, 1987, the Department of Education conducts feasibility studies when requested by the local boards. Other Code citations provide for assistance to AEA boards. The studies are usually conducted by the Restructuring Consultant and the Accreditation Consultant who has responsibility for the area where the schools are located. These teams have developed a set of criteria to follow. Each school and each study is considered as a unique situation. However, there are common elements that seem to run through all circumstances.

The major considerations are population and demographics. The study involving a large district and a small district is viewed differently than one including two smaller districts. Schools located near metropolitan or other growing areas may have different futures than those supported by the farm population. In general, if it were not for population changes or for low population, restructuring would not be a major issue.

The next set of criteria are all considered together. They are educational program, geography, and long-term stability. The potential education program of restructured districts is of prime importance. If restructuring does not produce better educational programs, the effort to make the change is not worth the results. Geographical common sense is extremely important. Conditions, such as the dislike of the county seat, are not suitable reasons for the Department team to ignore decent boundary lines. When the year 2000 is upon us, the feelings and emotions of people will be changed and new people will be involved. Parents of the next century should not have to speculate why geography played a secondary role to personal prejudice when districts were established. Long-term stability is a very hard concept to study. In order to accomplish this, the study team establishes barriers around the districts being studied. Barriers are natural geographic barriers, such as the state border. Larger municipalities form barriers, and county or potential county districts form barriers. In other words, these barriers stop the domino effect from carrying the study to other districts.

Other criteria are examined during the study, such as tax rates, finances, buildings, roads, etc. These are important, but not as meaningful as

population/demographics, educational program, geography, and long-term stability. In other words, should a building built in 1960, be the major criteria for the existence of a district in the year 2000? These factors are generally more controllable by the state and by the local governments; whereas, population and long-term stability are not necessarily things that can be changed by government fiat.

Local/State Considerations

When conducting studies, the seventh part of the presentation to the board and citizens usually includes an analysis of the local situation. Since this report is concerned with statewide activities, a few generalizations are pertinent.

The natural progression method of school restructuring is working. Schools are changing. However, there are severe problems with this method. First, it is slow. Next, it is causing turmoil in the communities. We have seen the bitter fights and arguments first hand. The social fabric of a community can be torn apart by a reorganization effort. Even more of a problem are the poor alliances that are being put together. Often people from small schools will join with their weakest neighbor in an effort to maintain identity or to keep a building open. These efforts don't put together a large enough district, and the people run the strong risk of going through restructuring again. Also, districts frequently leave out neighbors. In some cases, districts are set aside by their neighbors and sheared of all good choices.

The Department staff working in this area have been in positions to see the activity like no other people in the state do. We have worked with small community groups, single boards of directors, gatherings of several boards, and crowds up to four hundred people. We have worked in districts of all sizes, at their requests. We have witnessed first-hand the turmoil and have seen the emotions of anger, sorrow, and fear expressed openly. Some people want the state to leave them alone. Others have implored us to give them guidance so they can improve their schools.

As we look back at the 1950s and 1960s, we can see that Iowans were expressing two messages. The one room rural schoolhouses were not doing a good enough job for the mid-century and every town did not need a school. What are Iowans doing now? It is much too difficult to analyze a significant piece of historical action when you are in the middle of it.

The suggestion of the Restructuring Consultant is that state officials become more concerned about what is happening in the small local districts and that state planning and policy be developed. Short of that, or short of forced reorganization, the problems of slow progress, turmoil, and poor planning will continue to exist. An idea that has lately been discussed is the existence of an "oversight body" at the state level. Its mission could be to help establish state goals, plans, and policies; assist local districts in their planning; and have the authority of veto over local plans that do not

conform to state policy. The last, controversial suggestion of an oversight body, is necessary if we expect the school district boundary map of the State of Iowa in the year 2000 to look like it was planned rather than just fallen in place from its own gravity. We need to understand that the children who began kindergarten in the 1987-88 school year will graduate in 2000.

Claudia Jones, President
People United for Rural Education

While reading this statement, you should be aware I have presumed three givens:

1. Rural schools in Iowa will be financed at a lesser rate than currently and that rate will be no less fair than it currently is.
2. There will be open enrollment in Iowa.
3. Current minimum standards will continue as they are to date.

Iowa has experienced a dramatic decline in students in public schools over the last 20 years. Rural Iowa in the 80's has suffered a severe economic crisis. These facts have created a situation that only those of us who live in rural Iowa can completely comprehend. We now have to deal with declining enrollment accompanied by rising fixed costs. Another factor that we have not had to confront in the past has to do with the higher poverty level in rural Iowa. That combined with more one parent homes has given us an increased number of at-risk students—something that has been very rare in rural areas in the past.

Because of the so called "greying" of Iowa, we are now facing a situation where often 25% or less of the people in our communities have students enrolled in public schools. In some areas this has caused problems in passing bond issues, enrichment taxes and often times coming to terms with sharing agreements and reorganizations.

This all sounds a bit dire to say the least but you must also know that rural people tend to be very resilient. They have more options than ever before. But even this will not save all schools in rural Iowa. I believe some reorganization is not only imminent but necessary. Only those schools with administrators and boards that are willing to view viable options as workable in their districts will survive the 90's.

As a parent, I can safely say that we have become more demanding of our local schools. Each of us expects our schools to meet the needs of our individual children not only academically and in extracurricular activities but also often times to meet social and emotional needs that have in the past been met in the home.

Schools face quite a challenge in the future, but many rural schools will be up to it. Whole-grade sharing in Iowa has increased sharply in the past 3 years. Before the '88-'89 school year there were 16 schools involved in whole-grade sharing. In '88-'89, 20 more schools joined their ranks. There are 80 school districts and 39 superintendents involved in sharing administrators in '88-'89. These figures will continue to rise as rural schools continue to achieve economic efficiency and expand academic and extra curricular programs. Many schools will look to sharing programs with merged area schools to meet vocational standards and needs. Sharing comes in many forms and I have mentioned only the most common but many communities will find new and unique ways of sharing if they are to

survive. An open mind will be the most valuable asset of community based schools of the future.

Hopefully, we will see telecommunications used more extensively in the future. This could be the most economic and effective way to offer enrichment courses in many rural areas. The mode of system should be left to individual districts because of the delivery needs of rural schools.

Economically, transportation has always been a major setback for rural schools and this will probably only increase if there is a dramatic reorganization movement. Sadly, this is a problem the Iowa Legislature has failed to confront for many years. We can only hope they may address this in the new foundation formula.

Open enrollment will not have a great effect on many rural districts but will require responsible parents to be more aware of local district programs if they are to make good choices. Those choices will go beyond where their children will be educated to addressing local problems. We as parents can no longer stand by apathetically and let people make choices for us. We must become a united voice in extolling the virtues of rural education.

I believe that professionals and others involved in Iowa's educational process have done an excellent job in providing quality education for our students while facing some challenging times over the last decade. I don't believe we are at the end of these challenges. I do believe that parental cooperation and involvement are very important in solving the problems of the future.

Marvin Judkins, Superintendent
Coon Rapids-Bayard Community School District

Iowa has historically held firmly to two basic, but contradictory assumptions about its schools. The first assumption is that Iowa's schools and their students are the best, or at least among the best, in the nation. The second assumption is that Iowa has too many small schools to provide a top quality education for its students. The past decade has witnessed an unprecedented attack on the quality of education provided by Iowa schools. The roots of that assault may be traced to two factors.

"A Nation At Risk" created a national concern with the quality of education provided children. While most of the issues and concerns about the quality of education raised by "A Nation At Risk" do not apply to Iowa's schools, Iowa schools have been victimized by this and similar reports. The second factor is the economic recession in the upper Midwest which had an especially negative impact on Iowa's economy in the mid 1980's. Declining state revenues and declining populations have raised valid questions about the efficiency of schools, specifically small schools in Iowa. These two issues, educational quality and financial efficiency have become intertwined and often confused.

The combination of these two issues has given rise to the current concern on redesigning Iowa rural schools. The basic questions are what is the minimum acceptable quality of education available to each student and how much will the residents pay for that education? Almost every Iowa school can provide services to meet the unique educational needs of all individuals if the financing is made available. Extremely small schools can not do that cost effectively.

Iowa schools must face some fundamental restructuring before the end of the twentieth century. This restructuring is made necessary by both issues of educational quality and economic efficiency. We must focus on how educators can best redesign Iowa rural schools or face a new design imposed by non-educators. The question is no longer the desirability of merging school districts, but the best method of effecting those mergers. While it is generally recognized that there is a need for additional merging of schools, there is not agreement on the extent of the needed mergers. An ideal number of schools is not easily identified, and much depends on the sparsity of the population and the distance students must travel.

Increasing school size does not guarantee improving the quality of education provided our students. Efforts to improve the quality of curriculum, instructors and administrators must be improved and continued regardless of school size.

While the major focus of this position paper will be on evaluating methods to implement the changes, not on debating the merits of the need for changes, the basic need for those changes needs a brief examination. A reliable, valid statistical data base for comparing the quality of education provided by the schools among states and within our state is only partially available. A necessary prerequisite to developing an effective restructuring or consolidation plan is the development of a valid data base to allow

more informed decisions on school restructuring. It should be designed to provide better definitions of the actual quality of education currently provided and to determine a correlation between school size and student achievement. Basic assumptions for this paper are partially supported by existing data but are mostly devoid of supporting or contradictory data. Existing data supports the contention that Iowa students are among the best in the nation. Unfortunately there are many voids in the existing data. Existing data indicates that Iowa schools with a K-12 enrollment of about 600 are the most efficient economically in the state on a cost per pupil basis. The U-shaped cost per pupil graph is probably caused by small schools being less cost effective and significantly larger schools offering more programs to meet the unique educational needs of students who vary from the norm and paying higher salaries to professional employees.

Three basic options for combining educational units are now available to Iowa schools. Sharing students, teachers and/or administrators is one option now encouraged and generously supported financially by the state. This option provides an excellent short term solution to the financial problems facing small schools. Sharing teachers and administrators is financially rewarding to small schools because of the potential of more efficient utilization of staff and increased state funding for shared employees. This also allows teachers to specialize in specific teaching areas. Sharing students on a whole-grade sharing basis also has these same advantages plus the additional advantages of increasing the potential for positive peer interaction. Advanced or special need classes can be offered much more efficiently in combined programs rather than in the separate schools. These sharing options can demonstrate to patrons of local schools that consolidation is in fact feasible.

The basic weakness of sharing arrangements, especially whole-grade sharing is the effective disenfranchising of a large portion of the voters in the school population. When students are sent to other districts, local voters in the sending district lose the opportunity to elect the board of education that makes the fundamental policy decisions affecting their students. While a short-term sharing arrangement is justifiable and desirable, this voter disenfranchisement for an infinite period is untenable. Whole-grade sharing agreements that involve only the higher grade levels also allow the continued existence of inefficient class sizes at the non-shared grade levels.

Restructuring and/or consolidation of existing schools are the remaining long term solutions and are also generously supported financially by the state. Larger school districts can result in fewer teacher preparations at the secondary level which should allow more time for each preparation. Increased number of course offerings for all ability ranges should be possible. Students should be challenged more through greater interaction in courses with students of similar ability. Additional special service programs should be more affordable. These improvements in the educa-

tional opportunity of students can often be attained without cost increases due to the greater efficiency of operation of the larger school district.

The best method of improving the schools in Iowa is probably a combination of restructuring and consolidating. Geographic distance and travel distance are valid concerns in school mergers. Consolidation, regardless of the source of the mandate for the change, should be designed at the local level. However, while supporting local control of the restructuring of schools, it is recognized that locally designed restructuring often does not result in the best possible educational arrangements because of old rivalries, local economic concerns and local pride factors. To maximize the arrangements, some school districts need to dissolve instead of merge so that distance and travel factors are minimized.

Even if school districts are restructured or merged so that all schools have a feasible minimum enrollment, further restructuring and sharing might be necessary. Our students have a wide variety of individual needs, and those needs should be addressed by the local school district as much as possible. The reality of sparsely populated portions of Iowa make it impossible to develop combinations large enough to allow schools to meet the needs of some special students. Even schools with moderate to large enrollments cannot always meet the needs of all students efficiently. In those unique situations, county-wide or even multi-county sharing arrangements to provide special educational opportunities are needed for a few special students.

A major dilemma is created by the perceived need for an accelerated rate of school consolidations and the seeming inability of too many schools to approach that task from an educational instead of a local economic perspective. While there appears to be few locally generated merger attempts, a lack of confidence in ability of state agencies to design feasible plans meeting the needs of the local students prevents the recommendation for a state level plan.

Iowa schools are not receiving proper credit for providing a quality education, but at the same time they are reacting too slowly to the school consolidations that are needed for educational and economic reasons. Excellent short-term solutions, such as sharing, are being utilized, but the long term solutions of school consolidation and restructuring are proceeding too slowly.

Alan Meyer, Superintendent
Schaller Community School District

The process for the redesigning of the Elementary and Secondary Schools of Rural Iowa has been going full bore for five years now. Encouragement in the form of legislation, financial incentives and mandated administrative rules have created a flurry of activity in rural Iowa that is unprecedented since the early 60's. The impetus for this flux has been the notion that too many administrative units exist in relation to the numbers of students being served in 1988 as compared to 1976. The outflow of families that has occurred since 1976 has caused a readjustment of state deliveries in many areas of services and now greater emphasis is being placed on education, from Kindergarten to the Post-graduate programs of our universities.

The unique concept of sharing was developed at the legislative level through encouragement of rural citizens (P.U.R.E., People United for Rural Education) to assist with dwindling resources and student numbers. The concept holds that through sharing of resources and students, two or more contiguous school districts can provide quality and equitable programs while maintaining their individual identity as a community and as a school district.

Iowans tend to be a very progressive lot unless it threatens the security that is developed through the stability of the past. Sharing to a certain extent threatens that mantle of security but yet leaves one with something that is basically their own, a patch-work quilt if you will, that is shared out of common labor and love but not totally possessed by any one community. It is a quilt that can be undone and reassembled with other blocks if need be.

Consolidation or school reorganization, however, is looked upon as a finished product, an item that is as definate as death and taxes. It does not provide a time for adjustment as does sharing, nor does it provide a locally guided base as well. In sharing, each district has its own board of directors, however, in consolidation a new board is established that represents the two or more districts involved; an item that is seen as a weakening of local input and control at a time of great *social* and *education* upheaval.

In rural Iowa, the school has been and still is a focal-point of social interest and activity whether negative or positive, and the educational opportunities therein are seen as an integral part of the fabric of each community. Schools are held in high esteem by the rural communities and participation is very high in *all* school related activities, academic, sports and other extra-curricular. Satisfaction seems to be high in the communities when one reviews the lack of candidates at local board elections, an assumption by many that things might be going according to Hoyle. This strong base of support, an integral part and the most important element of any educational program, is threatened when schools are thrust together unwillingly through openly mandated consolidation. A better vehicle to obtain the same end is through a process that effects the same change. Sharing is that vehicle, once it is embarked upon, there is not an avenue

for retreating to what was. All participants see that sharing is a commitment, the choice is to which partner or partners the districts have chosen or accepted. Sharing is not locking one district into the boundaries of another specific district but provides the option of seeking other partners in a variety of optional issues that enables each district the choice of direction. The end results will be reorganization if successful, or dissolution if not successful. The decision is local and not state.

It is my contention, that financial incentives for shared programs and reorganization should be continued. It is an acceptable manner or mode that meets with less resistence by the public and still achieves the ultimate end of consolidation. If the legislature, governor and the Department of Education feel that strangulation of small rural areas is the desired outcome for education, an item not founded in research, then sharing is the least painless and bloody.

Section VII
Staff Development and Rural Schools: Ways and Means

Introduction

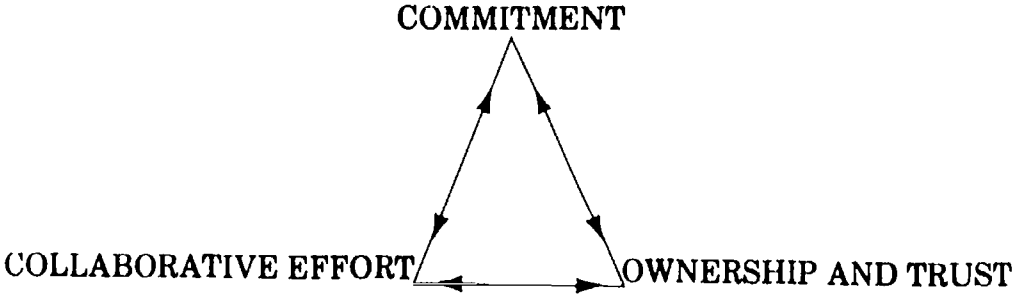
The papers written in this section discussed both preservice and inservice staff development. They covered the need for, as well as concerns about, staff development. Descriptions of programs which have been implemented were written about, and suggestions based on staff development literature were posited. This introductory statement is a summary of the group discussion in which the writers of these papers participated. The members of the group decided to look for the major themes found in the papers. The two themes which emerged were: a) elements of effective staff development in rural schools and b) the concerns about staff development in rural schools. After discussion of the themes, the group developed a set of recommendations about staff development in rural schools.

The group reached consensus on a list of eight desirable elements of staff development programs. No attempt was made to define these elements. However, the group operated on the assumption that staff development was a desirable commodity in rural as well as urban districts. The eight elements are as follows:

1. *COMMITMENT:*
   There are actually two parts to this element:
   a. Commitment *BY* the board, administration, and teachers
   b. Commitment *TO* the program itself, financial commitment, and commitment to release time, inservice days, etc.
2. *GOAL-DRIVEN OR FOCUS-ORIENTED PROGRAM:*
   The program will be context dependent. It could involve a needs assessment to determine the focus and will address the on-the-job needs of participants.

3. *"IN-HOUSE" PARTICIPATORY EXPERIENCE:*
   This element is in direct contrast with the staff development program which is generally an expert presentation/lecture resulting in a passive experience for the staff members. That type of "single-shot" program is generally ineffective. The participatory experience would involve peer groups, collegial teams, or quality circles.
4. *MAINTENANCE AND EVALUATION:*
   Maintenance and evaluation must be built into the program. Follow-up and an opportunity to practice are essential. The feedback could occur in the team setting. Evaluation of the program and of the participating staff members is also an important part.
5. *COLLABORATIVE EFFORT:*
   It is necessary to involve the staff in the planning as well as serving as in-house trainers. This mutual collaboration leads to the next element.
6. *OWNERSHIP AND TRUST:*
   The collaborative decision-making process fosters a high degree of ownership and trust.
7. *SHARED RESOURCES:*
   Rural educators need to consider shared resources and it is advisable for two or more districts to combine for staff development programs.
8. *ALTERNATE SOURCES:*
   Rural districts also need to consider alternate sources for delivery of staff development programs. Some possibilities include area education agencies, grants, and telecommunications.

A model which the group developed emphasized three of the elements which were felt to be interrelated and necessary for effective staff development.



The group then listed the ten following concerns that were believed to impact a staff development program:

1. Geographic location from inservice resources:
   a. University
   b. Consultants
   c. AEA

2. Cost efficiency related to number of teachers: many inservice programs cost several thousands of dollars. The smaller the system the higher cost per teacher.
3. Cost efficiency related to area of teacher expertise: problems with teachers teaching outside their major and the fact that it becomes difficult to provide subject area inservice.
4. High turnover: many rural schools have to hire first year teachers who have a tendency to work a couple of years and then move on to a larger system.
5. Budget concerns: concern about the phasing out of shared incentives. Several schools are using their shared funding to hire curriculum directors who are also responsible for staff inservice.
6. Time is an important factor: a) instructional time takes away from students, and b) actual time to conduct the staff inservice program.
7. Determining the focus of inservice program: how to select a particular inservice program for the school. Processes need to be established for needs assessment.
8. Availability of quality substitute teachers who could be used to "free up" regular teaching staff to participate in staff inservice with the least amount of disruption of instructional time for students.
9. Rural staffs may react to changes at a slower rate because they may view the inservice program as being a "fad."
10. Major concern is the development of a method that could measure the effectiveness of the inservice program on student performance and staff improvement.

Finally, the group generated the following recommendations for staff development in rural settings: a) fiscal commitment, b) district staff development coordinator, c) rural school networking, d) implement a district model, e) evaluation and report results, and f) preservice (student teachers) placement in rural schools.

Andrea Bowman, Assistant Professor
University of Northern Iowa

Staff development is generally viewed as a moderately structured "event" which occurs in an actual contracted teaching situation. Staff development can also be seen as a pre-service "event." The focus of this paper is on the staff development which occurred during a student teaching experience at Green Mountain School.

The setting in which student teachers are placed generally determines the kinds of settings for which they will best be prepared. Following that logic, any setting can be somewhat limiting. A primary consideration is whether the limitations imposed by student teaching in only one setting become a liability to student teachers. Secondly, do those limitations become a liability to student teachers placed in a rural setting any more than to those placed in an urban setting? These considerations need to be thoroughly explored before we can understand the whole picture. The case study presented here is one small part of that picture and supports the desirability of placing student teachers at Green Mountain School. There is no attempt to generalize this support to all rural settings, but to describe a student teaching experience in a particular setting under particular circumstances. The case study does present some direction for further study.

The perceptions voiced in the study are those of the student teachers, the cooperating teachers and the student teaching coordinator/researcher. These voices were captured through interviews, dialog, and through observations.

Background

Setting. Green Mountain School is located about eight miles north and east of Marshalltown, Iowa. Until recently, one building housed the entire K-12 district. Currently, Green Mountain District and Garwin District share facilities. Each district maintains an elementary school. The students of middle school age from both districts are placed in the Green Mountain School, and the high school students from both districts are placed in Garwin.

The Placement Process. Student teachers from the University of Northern Iowa (UNI) had not been placed in Green Mountain School previously, so this was a new experience for everyone involved — the administrators, teachers, student teachers and students. The process to place the student teachers there began in the fall of this current school year when the UNI student teaching coordinator for the Marshalltown area contacted the superintendent about the possibility of placing student teachers in Green Mountain School. The response was extremely positive and a time was set to discuss that possibility with the superintendent and principal. After some discussion about the number of student teachers which would be desirable, dates were set for in-service activities.

Many of the teachers had expressed an interest in having a student teacher. All of the elementary teachers and the principal participated in

in-service activities which took place during the semester before the student teachers arrived. These activities were facilitated by the UNI student teaching coordinator and were designed to provide some background information about student teachers in general, and to present and interact with the participants about the UNI student teaching program.

The student teachers. There were two student teachers placed in Green Mountain School for the first nine-week quarter of the spring semester. Both wanted to student teach there because they felt that that particular setting would resemble most closely the kind of setting in which they desired to teach. One grew up in a rural community and felt very comfortable in that setting, and the other currently lives in a rural community and had plans to stay there. Both were non-traditional students.

The teachers. The two cooperating teachers had not had student teachers previously and both expressed an excitement about the possibility of having a student teacher. They both felt that they had a lot of teaching experience they could share with students becoming teachers. One of the teachers wanted to share enough of the realities of teaching, both the good and the not-so-good, that the student teacher's first years of teaching would be easier. The other expressed a desire to enhance the teaching profession by helping to prepare more good teachers.

A Support Network. The student teachers placed at Green Mountain School were a part of the Marshalltown area student teaching support network and met with that group for seminars and for other projects designed to help their teaching. The cooperating teachers were also included in a support network among Marshalltown area cooperating teachers. The response to participating in these groups was generally positive.

Perceived Advantages

Direct Advantages. Neither the student teachers nor the cooperating teachers sensed any liabilities involved in student teaching in a rural setting. In fact they each expressed views about the advantages of student teaching in a rural setting. One advantage was the fact that the school and community were very interdependent and there were community activities, such as games and community-wide dinners, in which they could participate. Because of such a close interdependence it was felt that the school had greater accountability to the community. Similarly, the student teachers were able to observe the interdependence found in an entire school system, from the superintendent to the students.

They felt that the atmosphere was more relaxed and that because of that they were able to be more spontaneous and flexible in their teaching, to take more advantage of that "teachable moment," and to take into account the students' understanding before proceeding with a lesson.

In addition to the advantages for the student teachers, the cooperating teachers found that there were advantages in having student teachers in

their classes. The students were able to receive additional help, and the teachers learned from the student teachers. The teachers found it very satisfying to help a student become a teacher.

Indirect Advantages. There are some limitations in a rural setting, such as smaller classes and a more manageable population of students. However, these were not viewed as limitations, but as opportunities to learn things one might not learn in a larger school population. For example, the student teachers were able to concentrate on how to keep a class motivated by varying activities, rather than having to figure out how to "keep control." They felt that they had a better opportunity to learn to "teach."

There were also some misconceptions about schools in a rural setting. There was a concern expressed that there might not be as many resources available as in larger districts. However, the student teachers found out that the Area Education Agency provided many resources, including computers for the classrooms and a computer lab. There was also an expectation and concern that the students in the school would all be very much alike. The student teachers were pleased that they had students in their classes with special needs, a few with cultural differences, and, of course, with a wide variety of learning styles and individual differences.

Summary

Student teachers placed at Green Mountain School experienced the teaching "duties" expected during a student teaching experience. They planned, taught, and evaluated a full range of curriculum for a moderately diverse student population. They participated in extra-curricular activities with students. They also attended and participated in staffings, faculty meetings and staff development, in-service activities with the teachers.

While they did not have the experience of dealing with some of the challenges found in many large districts, there were many perceived advantages to student teaching in Green Mountain School, for both the student teachers and the cooperating teachers. This experience was very positive.

Richard Caldwell, Superintendent
Lohrville Community School District

Rural schools, such as Lohrville, are as committed to the achievement of academic excellence for its students as any urban school. Therefore, it is very important for every rural school in Iowa to provide a quality staff development program for its teaching staff. At one time it was thought that teaching was an art and you could either do it or you couldn't. However, there are too many studies showing that teaching is not necessarily an art, and with proper instruction all teachers can increase their effectiveness in the classroom. Since 1972, several of these studies and research projects have directly linked student achievement levels to the specific abilities of teachers to do such things as: improve student behavior through use of reinforcement techniques; increase student motivation to learn by using motivational techniques; make the lesson more productive for students through better lesson design; and make students practice more effectively through the application of learning research. At Lohrville, the Board of Directors feel that the real key to how successfully students learn depends on how effectively the classroom teachers transmit their information to the students in the classroom. Therefore, if the school is going to do the best job in educating its students, a strong staff development program has to be instituted by the school district.

This need for commitment to staff development is probably greater in smaller rural schools because of the higher rate of turnover in staff. Small schools have trouble competing with larger schools for the experienced teaching staffs. Usually, many rural schools have to hire the first year teacher. Through my twenty years of experience and observation, most of these young teachers have not been given a strong background on how to teach. Most of their time has been devoted to the learning of subject matter. As an example, other than subject matter, every teacher, whether elementary or high school, should be taught how to teach reading to the age group of his/her teaching endorsement because if the student can't read, then it becomes much more difficult for him/her to learn and to be successful in our society. If the college does not develop this skill in depth, then it becomes the responsibility of the local school to help provide the needed skills to the teacher. This can be done by a staff development program directed by the local school district.

Unfortunately, the Lohrville Community School, like most other smaller schools in Iowa, finds it difficult, if not impossible, to provide the comprehensive, on-going staff development programs that could give teachers the skills that would really make a difference in how students achieve in school. The key word is on-going staff development. Rural schools are going to have to select an area of staff development that will best fit the needs of their district and students, and make a commitment to work with this program every year making the necessary alterations each year in the program to keep it up-to-date. For this to occur, the building principal becomes an important part of any staff development program. It will become necessary for the principal, as instructional leader, to train

any new staff members in the staff development program and bring them slowly up-to-date with the rest of the participating staff members. Therefore, each year should begin with all staff members reviewing the major concepts of the staff development program.

A successful staff development program must be one that is spread out over time and involves several training sessions throughout the year. This would solve one of the main problems with several available staff development programs. They are usually "one shot" presentations for teachers who are then expected to put the program's new idea or concept to work in the classroom. Research shows us that this concept does not provide quality results. Teachers need to be exposed to a new idea or concept and then given time to practice it in the classroom. Along with practice, the teachers will need positive reinforcement from either peers or administrators when using any new materials or concepts presented by the staff development program. They have to feel that its all right to fail the first time they try the concept in the classroom and not have to worry about the principal chastising them.

There are several reasons why staff development is one of the biggest problems facing rural schools in Iowa. First, the staff development program has to have a strong vision and commitment by the Superintendent and Board of Directors of the school district. Good programs usually involve a commitment of general fund dollars by the district. Secondly, some of these available staff development programs can be very expensive for a small district to finance, especially with the limited funding the legislature has placed on the rural school for allowable growth. So, the Superintendent and Board of Directors of the district must search out ways to generate enough funds to finance a good staff development program. One way funding can be accomplished is to gain board support to write an Educational Improvement Grant. The Educational Improvement Grant allows the school district to increase property taxes to help pay the extra cost of the selected staff development program. The Phase III committee could direct some of its funds toward a staff development program. However, more and more of these funds will need to be directed toward performance-based salary programs which was the main reason for the Phase III dollars. Or, another way is to expand on the shared school concept and share the cost of a comprehensive staff development program with another school district that is close by. Because rural teaching staffs are usually small, two or more schools could, for this purpose, be combined and still not create an audience too large for a single presentor to work with in a staff development program.

Thirdly, staff support is needed before a good staff development program can be put into place within a school district. Without the commitment of the administrative and teaching staff to the program, it will not be successful. The staff has to be provided adequate information and given school time to work on the staff development program. The teachers will need to be shown how the staff development program will make teaching

better for themselves and their students. All the staff may not make a major commitment the first year. However, even a nucleus of teachers will profit from the staff development program. If the program is on-going, more and more teachers will become actively involved in the staff development programs as other teachers talk about their successes in the classroom with the students. It's a proven fact, 99% of the teachers want to do their best job of teaching; however, some just lack the tools needed to transfer the necessary information to the students.

For this reason alone, it is very important for every school in the state of Iowa to develop and provide a comprehensive staff development program for their teachers and administration. We need to provide every opportunity for all teachers in Iowa to be more successful in the classroom which will hopefully lead to increased student achievement and student success.

Marilyn Heilman, Board Member
Eastwood Community School District

The need for staff development that would improve teacher effectiveness and increse student learning is a universal need for school districts in Iowa. The need in rural districts is especially critical because of the existing danger of low morale among staff members. News reports about the so-called inferior quality of "small" schools probably contribute to this attitude. The pressure to meet pending state standards can be overwhelming to small staffs in rural communities and also may be a contributor to the morale problem. Limited funds have been a factor in the lack of appropriate staff development that could counter-act the problem.

It is generally recognized by educators and members of the general public, that the key to a quality education is a quality staff. Well-trained, enthusiastic, and energetic teachers do more to enhance a child's education than any other single factor. Many of the teachers in our schools are very competent and do an excellent job but people do change and may become static. Thus, a staff development program with an emphasis on improving teaching skills is imperative if we hope to maintain quality education in our rural schools.

The components of an effective staff development program are the same for a small school as they are for a large district. Effective programs include these common components: (1) commitment to the program by the board and administration; (2) articulation of clear and specific goals which address on-the-job needs of the participants; (3) compatibility of program objectives with district goals; (4) involvement of staff members in collaborative planning of program content and as in-house trainers; (5) opportunities for staff to practice new skills; (6) collegial observation and feedback; and (7) utilization of local facilities for training purposes. Examination of these components indicates that they should be within reach of every rural district in Iowa.

A staff development program that utilizes these components is a process that takes place over a period of time and goes through several stages: (1) building commitment, (2) planning for long-term change, (3) training, (4) implementation, and (5) maintenance. Teachers often view the traditional in-service meeting as a waste of time. There is no follow-up and, as a result, no positive impact from these "single-shot" programs that are not part of a staff development plan. Without the necessary incentives or support, administrators and teachers in rural areas may be tempted to fall into the trap of the "single-shot" approach to staff development because it may appear to be the easiest and least expensive way to meet in-service requirements.

Staff development committees in many districts are charged with the responsibility of studying various programs and selecting those which appear to be most appropriate for the district. Giving such a committee decision-making authority fosters a high degree of ownership and accountability in the group.

An economical way for rural districts to approach staff development would be the formation of collegial groups or teacher support teams. These groups could generate their own needs and become their own delivery system. In essence, the plan becomes teachers teaching teachers in a form of peer coaching. First-year teachers, as part of a team, would have a built-in mentor system. Team members could be video-taped by a non-evaluative person and then self-evaluate their own teaching using a group-designed form or checklist. In such a process, people are energized into a change mechanism within their own buildings.

A variation of the collegial team approach would be to implement a visitation program. Teachers would visit teachers in other buildings/districts to observe, share, and discuss specific successful strategies. The visiting teacher would write a personal statement regarding the visit to share with the team. Another low-cost variation would be "telephone time" with other teachers of the same level/discipline once a month.

If it is desirable to bring in nationally-recognized presenters, it is advisable for two or more rural districts to share staff-development programs. Project S.E.E.D.S. (Student Excellence through Educational Development of Staff) is a three-year cooperative partnership between four rural Southwest Iowa schools. This project utilized several prominent presenters and offered extended contracts and release time for staff cadre members. A.E.A. consultants also participated as group facilitators at certain points in the training sequence. The project was funded by a grant, A.E.A. incentives, and a $5,000 outlay by each district (Richardson, 1985).

College credit often serves as an incentive for voluntary participation in a staff development program especially if it precipitates an advance on the salary schedule. Many colleges currently offer courses on weekends and would quite likely be willing to expand these opportunities to enter into staff development agreements that would benefit both institutions. One such program is the Regional Consortium for Professional Development formed by the University of Alabama and twelve Alabama school systems. Because graduate school credit is an option, the University pays for the cost of conducting the workshops — and that means no cost to consortium districts. Teachers pay tuition fees to participate. There has been an overwhelming response to these weekend workshops that are offered at central locations (Condra, 1986). This type of arrangement has real possibilities for rural schools.

Phase III monies have had a great impact on staff development in the rural schools of Iowa. Rural school advocates must lobby for these funds to continue in order to maintain the current momentum for improving teaching skills.

The Educational Improvement Allowable Growth Grants are available to each school in Iowa through applications to the School Budget Review committee. Some Area Education Agencies — A.E.A. 13, for one — have designated educational improvement incentives for districts that have developed an effective school plan.

Boards of education of rural districts need to be aware of the importance of staff development in their individual districts. There must be board commitment for funding as well as for release time, substitutes, and inservice days in order for such a program to have the desired impact on teachers and students.

Goal-based evaluation seems to be a natural partner with staff development programs. Individual teachers could set personal goals which they work to achieve through a workshop or a collegial team. Administrators could outline a program of minimum expectations for teachers who are having problems or resisting staff development opportunities. Eventually, the evaluation could be made on the actual changes that have taken place.

The threat of a possible open enrollment law, which could be detrimental to rural districts, may provide the impetus for aggressive and productive staff development. Teachers are the most important resource in the educational delivery system; therefore, rural districts must invest in them via professional growth programs.

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Harold Pruin, Superintendent
Lawton-Bronson Community School District

I will relate my position on the state of staff development in rural schools from the perspective of my past experience, what is happening now, and what may be in the future.

The Past

My twenty-one years in eight different rural schools in Iowa have seen staff development change from lip service only to a present scramble of sorting through the maze of where to go from here.

Starting in 1967, staff development was a day in Des Moines when all teachers in the state attended the ISEA Convention at Vet's Auditorium. As a rookie principal, I remember working with the superintendent on some staff development material he was working on through Iowa State University. We used some resource material on improving teaching provided through the tri-county superintendent's office.

When I had my first experience at a national principal's convention I "stole and borrowed" what staff development materials I could get because there was no money in the budget for such frivolous pursuits. In 1975, the advent of Area Education Agencies led to promoting and supporting staff development for rural schools. While there was still no money in the local school budget for system-wide emphasis, the educational services branch of the AEA made certain opportunities available.

In one rural school we had a counselor who would get excited about educational improvement. She would sell me on how we could improve our school and students and talk me into providing time, money, and my organizational skills as superintendent to the project. We involved the cooks, janitors, and bus drivers for our staff development programs. In a rural school, one involves everyone because there is a feeling of family involvement. Having K-12 all in one building made articulation natural. AEA consultants told us we often got more done in rural areas than in an urban district or at the AEA Staff Development Day that all teachers attended. Staff development in rural areas centered more on fragmented curriculum areas before the AEA's introduced a concept toward whole system development.

Ways and means in rural schools during this twenty year period of 1967 to 1987, centered on the individual school and whether its administrators were willing or inspired to do some staff development.

The Present

Today can be measured by the January visit I had with a regional consultant of the Department of Education. During this one-day "educational audit," our working budget was examined to see if money had been budgeted for inservice and what was being utilized. The Phase III plan was also analyzed to see where and how staff development was being actualized.

I asked what was happening in the rural schools in AEA 12. He mentioned the influence of Phase III for staff development and its main effect of getting teachers to take classes. With funding available, staff development is happening. The development of Phase III plans has opened the discussion between school board members and teachers on the effectiveness of staff development.

At the present time, ways and means are answered by the positive effect of state leadership, AEA's, and Phase III dollars. Many rural districts are able to adjust more quickly to the new state standards and without as much red tape as the urban districts. Since rural schools have already been sharing athletics, academics, and administrators, it has been a natural step, and more cost effective, to poor resources for staff development.

Presently, the state-mandated staff development guidelines are the dominant force in the type of programs that are being presented. We recently organized a Student-At-Risk inservice program in cooperation with two contingent school districts.

The Future

I base my projections of the future on my own feelings and a recent interview with the instructional services coordinator for AEA 12.

Research indicates that the most effective staff development occurs when you utilize local leaders trained over a period of time. At Lawton-Bronson, we are utilizing a team approach with the principals and our own locally trained staff. We are letting each building decide their needs and own staff development program to address those areas.

I am frustrated with the 100,000 "dog and pony" staff development programs available today. Some programs work and a lot of them don't. We will reach an exhaustion point in the very near future. Like the weather in Iowa, if you don't like the staff development program we are using today, it will change tomorrow.

Summary

The answer to the ways and means question of staff inservice can be simply stated by the formula: *Phase III dollars plus state expectations equal staff in-service rural or urban.* When the political marriage that allowed Phase I, II, and III was made, the horse trade was that dollars will go for education as long as the state gets something back to show for the investment. Staff development is education's trade horse.

The programs that will survive in rural schools will be the ones that have the principal as the quarterback, utilizing staff input and ownership, networked with neighboring rural schools, and tied-in with building goals and staff evaluation.

Some rural schools are thinking about hiring a full time substitute who would also be responsible for staff development. It's a wild idea, but probably necessary for programs to survive and be effective. Rural school

boards would really be making a commitment if they would consider this approach.

At Lawton-Bronson we are completing two years of using the Kelwynn model for school improvement, which uses the effective schools research. This was my first experience with a school district who had actually applied a planned and organized total system to staff development. This was brought about by a combination of an aggressive advisory committee and superintendent support. This staff development committment followed the governor and legislatures "First in the Nation in Education" report and similar reports by the Department of Education, Iowa's Area Education Agencies, and regional groups such as NCREL. This combination of input causes a board to put real and significant dollars into an organized and validated staff inservice model. *Being rural no longer appears to be an obstacle to staff development, perhaps it is an asset!*

Richard Roach, Superintendent
CAL Community School District

My position on the ways and means of staff development in rural schools is similar to the ways and means of staff development in urban schools. Rural education has its peculiarities: sparse population, high transportation costs, low drop-out rates, high test scores, low pupil-teacher ratios, high parental involvement, strong moral values, etc. I don't consider, however, the opportunities for staff development in rural schools to be at a disadvantage. The need is equal between rural and urban schools, and our access to quality programs and presenters through Area Education Agencies (or ESU's, Coops, etc.) are just as profound as that available to urban schools. Some of the latest staff development programs have not only reached us in rural America, we are utilizing many of them such as: TESA, Coaching, Cooperative Learning, Whole-Language Approach, Clinical Supervision, and others. The availability of knowledgeable speakers in the area and in the state has not been a problem. We have encouraged our staff to attend professional growth activities; we average seven days per year per teacher strictly for staff development/professional growth.

Although "real-live" guest speakers and presenters are a popular way of providing staff development, I am not convinced it is the most effective form of improving teacher performance. Considerable amounts of time and resources may be devoted to securing guest speakers/lecturers, and recent research indicates staff persons may transfer only about 5% of the newly learned skill/concept on to the students. The research goes on to say we not only need to understand the theory, we need to demonstrate the skill, then practice and more practice, and finally we need direct coaching from peers or supervisors. A continuous follow-up as described here could raise our effectiveness level to about 90-95%.

A not-so-popular way and means of staff development, and one that is as old as the books, is through professional literature. No matter what size school one operates, it is important to know what research says about the various teaching strategies, methods, specific content areas, grouping, etc. As a rural school, we have access to all the credible literature, such as Kappan, Educational Leadership, (ASCD), Instructor, Learning, Classmate, Math, Computer, Oasis (talented and gifted), and the Education Week newspaper. If there is a special request we are anxious to obtain whatever additional reading material is needed. Professional reading is an under-rated form of staff development and provides teachers an excellent opportunity to learn what teachers (and students) in other parts of the country are doing and what "experts" are saying about school improvement. Rural schools can benefit greatly from this form of staff development.

The use of video-tapes is becoming an excellent means of growing professionally. We have recently viewed "Pitfalls of Textbook Adoption" by (ASCD) and "Effective Staff Development." These video-tapes are usually hosted by communication experts and contain effective visuals. We are able to obtain a wide selection of staff development videos through the

Cooperative Network Inservice Resources, a cooperative project of the AEA's and the Iowa Department of Education. Films and kits are also available through this agency, and there is no additional charge for this tremendous service. The use of this media enables us to focus on one particular aspect of staff development that we believe to be most important, and allows us flexibility in scheduling. The use of technology for staff development is moving to the point when we will be able to see, hear, and communicate with the presenter through video cameras, microphones, and monitors (a form of telecommunications). Rural schools may very well be leaders in this form of staff development.

Staff development is accessible to rural educators through college or university courses; a very logical means for improving professional skills. In our situation, we are within commuting distance to Iowa State University and the University of Northern Iowa. Both universities, and other colleges, oftentimes offer satellite courses that are geographically more convenient. This method of staff development is also an incentive for movement on the salary schedule.

Although our existing school calendar has created some staff development restrictions, during the 89-90 school year, we plan to schedule a two-hour block of time once per month to conduct professional development activities and "Quality Circles." This will be an excellent opportunity for small groups of teachers to meet and share an idea or technique they learned at a conference they attended, or professional literature they read, or even discuss problems they may have in the classroom and seek solutions from peers. Quality circles may be the most personal and meaningful form of staff development available to rural educators.

When we speak of staff dvelopment many things may come to mind: professional growth, instructional improvement, learning, meetings, etc. The one concept that is not talked about often when we deal with staff development is "change". Staff development is growing professionally, learning, improving our abilities and techniques with children. In order to effectively do this we must "change." We must discontinue doing something the way we've always done it and begin doing it a new way (changed behavior). We must apply the knowledge we've just learned in a way that students understand. Change is the key, and it is the most difficult aspect of true staff development. It is not enough just to learn something new about our profession — we must apply it to the point where it becomes natural. Rural schools may have an advantage in initiating the necessary change for effective staff development. We typically have community-based education. There is more of an informal setting. Teachers, administrators, students, and parents maintain a close relationship in and out of school. Change comes from trust, without it, it may not blossom. A small rural school may be more apt to produce a sense of trust because there probably is less bureaucracy, more personal relationships, a greater response to needs, and the traditional rural work ethic that says everyone must pull his/her own weight. If there is ever any real disagreement as to

whether rural or urban is more apt to create a sense of trust, we could always count the unlocked doors.

In conclusion, there is definitely a way and means for staff development in rural schools. It is very available, accessible, and highly participated in by rural educators. We realize the importance of staff development in maintaining a progressive school-community, and we plan to continue.

Daniel Smith, Superintendent
Knoxville Community School District

Attributes of Quality Staff Development Programs

Staff development programs which are of high quality exhibit several characteristics. First, they are research based. As a result, they are not based on a current fad or on the whim of a group of school administrators. Good programs have a mass of verifiable data to indicate that teacher participation in the program will have a high probability of improving the service he/she provides to students.

Second, quality programs are focused. The research-based components are carefully selected and consistently reinforced. Good programs are not merely one-day inservice activities that deal with a single topic in isolation from other topics. There are a series of activities focusing on clearly defined topics, where the interrelatedness of each topic is stressed.

Third, the specific topics are arrived at through mutual collaboration between the teachers affected by the program and the administrators responsible for directing the staff development process. These administrators receive training with their staff members. The administrators and staff members work together to foster the implementation of topics and skills introduced in the staff development sessions. It is important that a high level of trust between supervisors and staff be established.

Finally, effective staff development programs should provide for and encourage an atmosphere in which teachers work together as professionals and, where the sharing of ideas and skills becomes the normal approach within the school.

Quality Staff Development and Rural Schools

Quality staff development in rural schools does not differ from such development in urban or suburban schools. There are several factors, however, that result in differences between such schools in regard to their attainment of quality programs. They are as follows:

1. Rural schools are often greater distances from universities and consultants who could help in the initial training process. As a result, rural schools may have to use alternative sources to get credible presenters to staff.
2. Rural schools may have more teachers who teach in areas other than those in which they received their primary academic training.
3. Rural schools may have a smaller number of teachers because such schools tend to be smaller in size. Fewer teachers can be both a strength and weakness in the development of quality programs.
4. Rural schools tend to have a higher turnover rate among teaching staff which results in the need to be constantly retraining.
5. Rural schools tend to have fewer dollars devoted to staff development budgets.

6. Rural schools, and their constituency, tend to view new ideas as fads. Thus, they tend to resist such ideas.
7. Rural schools tend to have fewer quality substitute teachers who could be used to free up the regular teaching staff to participate in staff development.
8. Rural schools tend to have a more clear and less diverse mission than many urban or suburban schools.
9. Rural schools tend to have a school climate which is based on trust. This trust can be beneficial to the long term success of the staff development effort.

The Means of Rural Staff Development

The above list indicates that rural schools have both advantages and disadvantages when trying to devise quality staff development programs.

Rural districts should use their limited resources in concert with other such districts to attract quality presenters. They should use special discretionary funds (such as Phase III in Iowa) for staff development purposes. They should fully utilize the educational services personnel of intermediate educational units (the AEA in Iowa). Finally, they should explore using telecommunications technology (such as TI-IN, Narrowcast, and microwave broadcasts) to enhance delivery capabilities.

In conclusion, quality staff development programs have similar attributes regardless of where the school district is located. The task before rural schools in providing such programs is to maximize the strengths inherent in rural areas and minimize the weaknesses.

Section VIII
Technology and Its Implications for Iowa Rural Education

Introduction

Educators concerned with service delivery to rural areas are once again looking to technology as a potential means for that delivery. In the following sections, contributors review key aspects of planning for and implementing technology applications towards improving these services. Four overarching observations are offered. First, educators must focus on the educational outcomes that are desired prior to proposing a technological solution. Too often, the opposite happens. Second, a systematic and comprehensive program needs to be undertaken to increase the awareness among potential producers (teachers and administrators) and consumers (learners) of successful technology applications. Third, state agencies must provide the leadership to local districts in facilitating the planning, implementing, evaluating and disseminating of information on efficient and effective uses of technology in education. And finally, in the course of implementing technology applications in teaching and learning, educators must take care to develop structures and mechanisms to accommodate the human aspects of technology use. Research has shown us that this is an important consideration to insure long term acceptance and effective use. In the following sections, the authors explore these and other points, as well as reflect on the implications of technology for rural education.

Larry Costello, Treasurer
People United for Rural Education

I have been a member of the Ventura Community School District Board of Directors since September of 1976, and on the board of Directors of People United for Rural Education (PURE) for the last ten years. Currently, I have daughters in fifth grade, eleventh grade and one who is a sophomore in college. I write this paper as a lay citizen, and a parent who has spent considerable time in educational interests.

I selected "Technology and Its Implication for Iowa Rural Education" as my field of interest because of the direction our local school is currently going. As we were discussing the new state standards, how to meet them and how we would enhance our students learning experience, we decided that we needed to really meet the challenge of the standards and not just meet the letter of the law. We decided to ask the voters of our district for a fifteen percent enrichment levy. On February 7, 1989 we were successful with a fifty percent turnout of voters. We received a seventy-five percent yes vote to modernize our school's curriculum. Technology is going to play a major roll in this endeavor as follows:

1) We are going to start by hiring a computer "expert." Yes, he or she will teach computer classes to the students but the primary responsibility will be to make the rest of the staff computer literate. He/She will see that other teachers acquire a basic literacy in computer usage. Then help the staff select software which will enhance their classrooms. *Each* classroom, kindergarten through twelth grade, will be provided enough computers so that they will be a natural part of the classroom setting. We want the computer to be used as one of many learning tools as opposed to simply using a computer for period activities.

2) Then we want to turn our 1940's library into a 1990's media center. Again, here will be several computers so students can be assigned research, or gather information and use the computer to organize and write their papers. We want to connect our computers to the Iowa State University or University of Minnesota computer library service so that the information available is greater than we can provide locally. Also to be housed in the media center will be VCR cameras and our current library of local tapes. The VCR camera and player will play an increasing roll in classroom work. National guest speakers can be present in each classroom with the use of a VCR tape.

3) We already have a satellite Dish which our social studies and Spanish departments use extensively. Third year Spanish is taught as "conversational Spanish" and much of the curriculum comes off the dish in Spanish news, sports, weather, and soap operas. Use by more than these two departments has been small due to the fact that the TV media room is the only room equipped to receive the dish. We will now be able to cable more classrooms so that all teachers will be able to use the dish for their classrooms.

4) We currently are not subscribing to any of the interactive instructional television satellite systems, such as: (a) the TI-IN Network uplink-

ing out to San Antonio, Texas; (b) Oklahoma State University's Arts and Sciences Teleconferencing Service; and (c) The SciStar Satellite Project originating from the Talcott Mountain Science Center in Avon, Connecticut. We are hoping to be able to add a second foreign language, calculus or any subject available that we have a student interested in. We are, however, using the dish for inservice training for teachers.

5) A year ago we added Computer Drafting to our regular drafting program. This year we have two seniors accepted into college with a drafting major because of this added program.

6) We already have a computer lab which we use for teaching computer class. We hope to expand this to more levels of instruction, and more efficient instruction through interconnection between teacher and student computers.

I feel that technology can benefit rural schools to a great extent, but we have to beware that it can only be used as a tool and not as a panacea. Computers are becoming even more necessary in our daily lives and our graduates are going to need to be proficient in their use, whether they go on to college or enter the work force. College bound students will need to be able to research with a computer, and to store information and later be able to retrieve it off discs. Satellite TV instruction is in its infancy. It can provide: 1) equity and increase quality of educational opportunity, 2) access to subject matter experts or career role models not available in the local community, 3) interaction and joint activities with students in other schools, 4) increased access to information and instructional resources, 5) opportunities for staff development and inservice training, and 6) increased school/community linkages.

With fiber optics and other technical advances, I feel technology will be a partner in our educational experience in rural Iowa.

Richard Drey, Superintendent
Maquoketa Community School District

Dateline, April 10, 2000 — Des Moines Register, Des Moines, Iowa

RURAL IOWA PROVIDES WORLDWIDE EDUCATIONAL EXCELLENCE MODEL

"As a result of what were considered at the time as 'radical initiatives' presented by Iowa educators approximately eleven years ago, today, the world stands in awe at the educational attainments now being demonstrated by students in all Iowa public school districts. The State has used technology to provide the most effective and efficient system yet documented by man anywhere. The Iowa technological model achieves but one practical purpose, namely, that all students are experiencing and demonstrating success at high standards at all levels."

Based on the following understandings, this is the vision I see as I gaze into Iowa's "Rural Education" crystal ball. First, the implementation of today's technological advances within Iowa's educational institutions in no way assures improved educational results. Second, the implications of today's technology for rural education are limitless; they are restricted only by our designated state and community leaders' narrownesses of perspective and petty jealousies. Third, there needs to be a realization from within the State that, from a national perspective, *all* of Iowa's educational institutions are "rural" in nature. Fourth, since the people of this state see value in these educational institutions being of all sizes and shapes, these institutions will remain dependent upon one another for their continued success. Until such basic understandings are accepted it appears that the major focus in regard to using technology will be to *preserve* an educational delivery model rather than to improve educational outcomes for all concerned.

So let's turn over the sands of time to that newspaper report of the conference of April 7-9, 1989. What took place then to alter Iowa's course in history so dramatically?

Dateline, April 10, 1989 — Des Moines Register, Des Moines, Iowa

RADICAL INITIATIVES PRESENTED BY IOWA EDUCATORS

"After considerable discussion and name-calling, conference attendees at an educational leadership conference at the University of Northern Iowa agreed to establish a plan for charting a statewide educational improvement plan for the State of Iowa. The plan is based on the premise that all students have a right to learn and succeed at high standards at all 'levels of education' without having to guess what those high standards are. A 'level of education' was

defined as any educational attendance center allowed by the State to meet the educational needs of students. Attendees initiated task forces representing each educational institution within the state to identify 'outcomes of significance' for all levels of education. These outcomes were not to be defined in terms of disciplinary scope and sequences or by courses to be taken, but in terms of answering the following question: 'What do we want students who graduate from this 'level of education' to be able to demonstrate in terms of knowledge, in terms of skills and in terms of personal orientations?' Around these outcomes, each task force is to be given the charge to design their 'level of education's' instructional organization, their subject content components and their practices for moving their students toward these outcomes.

The plan also calls for each task force to then recommend that each 'level of education' deliberately provide its students with both the time and the type of instruction they need to reach these 'outcomes of significance.' The newest of technological advances will be utilized throughout the State as a number of similar 'level of education' networks will be established. These networks will cooperatively support one another in meeting student needs. A few of the technological methods discussed to meet these needs are as follows:

1. *State-of-the-art student computer labs and administrative computer centers* are to be provided in such a manner that every student and teacher within the State has equal access. As a result, daily performance records will be available on each student showing continual progress toward the 'outcomes of significance' and daily plans of assistance for each student will be provided by computer to aid teachers in providing appropriate instruction.
2. *Satellite-based instruction* for students, teachers and administrators are to be made available at all 'levels of education.' State initiatives are recommended to encourage and make easier the utilization of this technology.
3. One *interactive video alternative* such as instructional television fixed signal (ITFS), two-way cable communications, microwave configuration or fiber optics is to be made available to every 'level of education' sanctioned by the State.

In addition, it was recommended that statewide computerized data systems be provided to every 'level of education' sanctioned by the State. Staff inservices are to be provided through statewide satellite teleconferencing all in an effort to clarify the focus of instruction on the outcomes of significance at each 'level of education.' A statewide acceptance of the 'outcomes of significance' by each 'level of education' is being asked for. It was the decision of the attendees that it

mattered little what kind of technology is available to rural educators now or in the future unless there is a consensus as to what purpose technology is to serve. Attendees called for immediate attention to be given to the task of redefining the present educational delivery model in terms of improving the achievement of all students toward 'outcomes of significance' by first identifying and defining those outcomes at each 'level of education'."

Can technology be used in achieving educational tasks? Only a foolish man would answer in any way other than "Yes." However, technology can be viewed only as another instructional tool or methodology developed to deliver knowledge, skills or orientations to students. The important consideration which first needs to be resolved before technology can be utilized most appropriately is what knowledge, skills or orientations are to result from this usage. Lily Tomlin has it right from the start back in 1982, when she rephrased a famous quote by stating, "Maybe if we listened to it, history would quit repeating itself." So did *Alice in Wonderland*:

"Would you tell me, please," said Alice, "wh h way I ought to walk from here?"
"That depends a good deal on where you want to get to," said the Cat.
"I don't much care where . . . ," said Alice.
"Then it doesn't matter which way you walk," said the Cat.
"So long as I get somewhere," Alice added as an explanation.
"Oh, you're sure to do that," said the Cat, "if you only walk long enough."

L. Carroll, *Alice in Wonderland*

Arnold Lindaman, Assistant Superintendent
North Scott Community School District

It is true that technology, economics, demographics and international factors are pressuring the nation and our state to completely transform public schools' uses of instructional technology or risk a growing gap between educational "haves" and "have nots." In 1988-89, 54.4% of the 433 districts in Iowa had a student enrollment of 600 students or less. These 236 districts enroll 18% or 86,582 students of the 480,346 students in Iowa. Indeed, with open enrollment bearing down upon us, rural district educators, board members and parents have yet another reason to look at uses of technology and wonder if they are keeping up with the "Joneses."

The educational achievement level of students from rural Iowa schools with a K-12 enrollment of 600 or less is a crucial factor to parents who are deciding where to live or considering transferring their child to another district under the open enrollment plan. Other trends/issues, besides the potential open enrollment plan in rural education, are school consolidation and its alternatives, utilization of distance education strategies, teacher preparation, recruitment and retention, and rural school effectiveness.

In the booklet from the Iowa Department of Education entitled "New Standards for Iowa's School," this issue is addressed specifically, "The Board shall adopt a plan for the efficient and effective use of technology in the instructional program. The plan shall provide for the understanding and use of current technology by staff and students and shall include a procedure to review the district's utilization of technology as a teaching and learning tool." As we redesign and seek financing for education, rural educators need to view this standard favorably and as an opportunity to solve some of the other issues also being discussed, namely, staff development, curriculum diversity and equity.

While the new state standard is noteworthy and computer and communications technologies are making teaching and learning more productive in the workplace, in the home and in private settings, productivity of the schools is declining, according to the report "Technology and Transformation of Schools."[10]

Dr. Lewis J. Perelman states that, "Merely injecting electronic tools into the classrooms, while leaving the basic design of education systems unaltered, offers little hope for major improvements in educational productivity." We need to overcome four main barriers that currently are blocking technological progress in education:

1. Absence of real choice is still problematic at this point in Iowa even with the quick legislative fix of open enrollment. We need effective cooperation and competition within the public educational systems to provide an incentive for administrators to adopt productive innovations.
2. Employers still over-rely on academic diplomas instead of detailed assessments of employees' knowledge and skills. Students who have advanced knowledge and skill do not see any economic payoff for

taking advantage of an instructional system that could accelerate their progress through a curriculum.

3. Continued financial support is needed to sustain local and state implementation efforts. It is estimated that in five years, 5% of the schools will be making significant use of technology to deliver and assess instruction. However, one limiting factor in using technology is the effect of the half life for technology. Computers and software on the cutting edge five years ago have been replaced with something more attractive. School districts that were adding equipment and software in stages now may have a compatibility problem. In large districts, this may represent only a logistics problem, but in smaller rural districts this may mean stepping off the technology train — maybe too soon.
4. Provisions for students who need to learn how to develop positive and healthy relationships with their peers and adults. This obstacle may be the biggest hurdle that even interactive technology may not be able to provide. Will technology have enough of the high touch aspects to meet the needs of its users?

Unless rural educators and legislators implement these incentives and seek these conditions, application of technology in rural education will attain only a small fraction of its potential. To remove these obstacles, this author offers Perelman's recommendation as a stimulant to begin the dialogue. He suggests that states deregulate their public education systems to give more choice to students and more autonomy to teachers and school administrators at the local level. Open enrollment may be a step in that direction.

Additional statements that may be helpful in developing a statewide consensus on this issue are listed here from the "Long-range Plan for Technology of the Texas State Board of Education, 1988-2000 (A Condensed Summary of Recommendations)" This document contains the following position statements for rural educators:[11]

1. No student would be denied, by virtue of district sparseness or teacher shortage, coursework necessary for employment or higher education.
2. Teachers can have both the responsibility and the technical resources to guide the instruction of their students in the most appropriate and efficient way.
3. Performance, not processes, can determine advancement.
4. Performance and socioeconomic status are unrelated.
5. Adults can continually enhance their job and life skills.

The need for reaching a consensus on the use of technology is truly great as the above statements suggest. There are other sources that also stress the need for immediate action. According to The Math Report Card done by

Educational Testing Service, Americans do not measure up well.[6] "If current demographic and economic trends continue, American business will hire a million new people a year who can't read, write, or count." Despite promising research of technology based learning systems, there is yet little recognition that the present methods are inadequate and are not working. Some see a revolution in the next 15 years in the way educational services are delivered. Our input, in terms of money including Phases I, II, and III in Iowa, has increased but what about output, as measured by academic achievement? Will our consumers and taxpayers continue to be willing to support an educational establishment that isn't meeting the needs of its learners?

What are the choices, then for rural educators? We can either lead, participate, or follow in, the revolution. This author's position is to strongly recommend the first action. The struggle to be the provider of educational services, a multibillion-dollar business, will be crucial to the survival of public education. The private schools have the advantage of flexibility and knowing in detail how the competitive market works. The consequences for public education, particularly rural education, if it does not become equally flexible and competitive, will be a decline of their share of the educational market. As that famous American cartoon character once said, "The future just isn't what it used to be."

Let's take a look at Iowa's educational future and see what changes may take place because of implementing technology. Here is a brief list of those changes:

1. Parents, staff and students may truly collaborate in the decision-making process involved in implementing technology. Families and students will be offered a diversity of settings, methods and technologies for learning, including at-home education, traditional academies and workplace centers for employees' children.
2. All students should have access to one full-featured and networked computer for every two or three students. The computers, according to experts should have a 1,000 by 1,000 bit-mapped color screen, a speed of perhaps five million 32-bit operations per second, memory of 4 million bytes, and a 3½-inch disk drive. Each system can access hard disk and CD-ROM and videodisc drives.
3. The entire content blocks of various curricula may become available in computer-assisted, computer-managed instruction format that fully integrates books, films, tapes, and other instructional media. It will encourage telecommunications among students and access to remotely located data banks.
4. Students may spend most of their school day working in small groups of three or so. Computers could mediate their learning activities. A mastery learning mode with cooperative learning might enhance the use of technology.

5. There may be fewer teachers, but they will receive a salary that puts them well into the upper middle class. Teachers will not spend as much time lecturing. They will serve more as mentors who help students attain mastery and will have more time for the students who can and want to make unusually rapid or creative progress.
6. Students will be expected to take on more responsibility for their own progress.
7. Roles, other than teacher, will come into being such as learning diagnostician, courseware composer, performance contract monitor and home-based instruction consultant.
8. As a result of increased educational productivity, most children will complete their basic education by age 15 leading to an expanded role for community colleges.
9. Local education agencies will be known less as (school) districts and more generally as "education districts," increasingly serving not only children but the entire family and people of all ages.
10. Learning no longer will be merely preparation for work but an inherent part of most American jobs, with the result that educational technology will permeate the workplace and the home.
11. Learning will become an important growth industry and a critical factor in America's international competitive advantage.

If rural educators want to bring about some of these technological changes, what actions are necessary? Some actions have already been implied but in summary they would include:

1. Pass enabling legislation that benefits rural education in Iowa. Propose legislation that will fund a technology allotment similar to $50 per-pupil amount in Texas. Study the funding source used in Missouri during 1988 where they enacted SB 709 which placed a three-cent excise tax on videocassette rentals with the funds earmarked for distance learning.
2. Reinstate support for instructional television.
3. Establish and maintain a statewide electronic information transfer system. A statewide plan for the use of technology in education, such as Iowa's Plan for Educational Telecommunications, should be submitted by the State Board to the state legislature noting specific applications for the rural Iowa school districts.
4. Establish a research and development consortium and demonstration programs.
5. Incorporate courseware adoption and review of educational technology into the textbook adoption process.
6. Support teacher and administrator training in technology.
7. Create rural educational advisory committee on technology standards to the state board of education.

Open enrollment, economics, demographics, technology and international factors are all pressuring our state and rural districts to make use of instructional technology or face a growing gap between districts with complete course offerings and those without. What are the choices, then for rural educators? As is true in most major movements in history, we can either lead, participate, or follow in, the revolution. This author's position is to strongly recommend the first action. This struggle to be the provider of educational services, a multibillion-dollar business, will be crucial to the survival of public education in rural Iowa school districts.

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David Scala, Superintendent
Glenwood Community School District

Technology in education is an issue which is of paramount importance today in all Iowa schools and not just rural school districts. Technological advances in educational delivery systems have expanded greatly during the 1980's and possibilities seem almost limitless for the coming decade.

Although available technologies impact upon all schools, we will concentrate on implications for rural Iowa schools for the purpose of this discussion. As schools in rural areas struggle with the challenges of preparing students for the competitive world and for making the tough choices in life, new technological advances in educational delivery systems provide tremendous opportunities for these schools to expand the curriculum and broaden the range of educational experiences available to their students.

How do rural districts located away from major metropolitan areas prepare students to enter business and industry which rely on the use of specialized technological equipment? Many districts in our area of the state have met this challenge by entering into cooperative programs with Iowa Western Community College in Council Bluffs. Programs such as "Model Office" and "Principles of Technology," administered by the area college, enable these schools to bring technological equipment utilized in business and industry into the local school setting in order to prepare students for the world of work. These two programs mentioned are in the areas of business education and industrial arts but there are also programs available in other curriculum areas. Without such programs, rural students would have limited knowledge and experience in these areas since their communities lack the industrial and business sites which would utilize many of the new technological advances.

Faced with declining enrollments and limited resources, rural school districts will have to look toward increased cooperation with agencies such as the area colleges or enter into educational cooperatives composed of two or more school districts working together to share the cost of equipment and instruction. This type of cooperation is essential in rural Iowa in order to provide equality of educational opportunity and to allow the smaller districts to continue their existence.

One new technological advance, which holds much promise for rural education, is the concept of interactive television. Through this method of instructional delivery, several classrooms across the state can be linked to the classroom where the instruction is actually taking place. With an interactive system, two way communication can take place between the instructor and students in any of the classrooms linked to the system.

This would allow districts the opportunity to provide advanced courses and supply resources for instruction which otherwise would not be possible in many rural districts.

The interactive television concept probably provides one of the greatest hopes for rural districts at this time if it will be allowed as a means of meeting instructional requirements. Utah's Distance Learning Program,

utilizing technology devised by IBM, was developed to meet the need for foreign language instruction and has proven to be a valuable method of instructional delivery. This type of delivery system is currently being discussed in Iowa as a means of linking all areas of the state into a system which has the capabilities of allowing two way communication with people in other parts of the United States and other parts of the world.

Not only is interactive television seen as a major educational tool for rural schools, it is also looked upon as an answer to rural concerns of economic growth. With the use of a network of fiber optic transmission lines, large national or international companies can locate in a rural community and maintain direct communication with the company's main headquarters. This capability, along with the capability to provide increased educational opportunities, has the implication of providing a brighter future in rural Iowa. That makes it imperative for local school districts to keep in tune with technological changes, and be prepared to take advantage of the new opportunities which are yet to become available to improve the quality of education we currently provide.

Not to be forgotten in this discussion is the role that the computer has played in changing the way we teach and administer our schools in recent years. The use of the computer has expanded greatly and has also made it possible to introduce new materials and new instructional methods into the classroom. To meet the ever changing demands of society, computer applications will need to be expanded. Computer technology now allows the opportunity to link a variety of electronic media to bring new learning experiences into the classroom.

Yes, technology does have far reaching implications for rural education, but it also provides renewed enthusiasm for those who wish to take advantage of new educational opportunities. It is an opportunity for rural school districts to provide experiences for their students which were not possible before and gives a renewed spirit which will allow Iowa to remain a leader in providing quality education programs.

Michael Waggoner, Associate Professor
University of Northern Iowa

Americans have long believed that "Yankee ingenuity" can be applied, to good result, in most any circumstance. We have faith in our ability to study a problem and fashion apparatus to address it, be it machine or program. Such a propensity has contributed, no doubt, to the unparalleled achievements in science and technology that we have seen in this country, and to the quality of life that we have come to enjoy. But there is some consensus that this advance has not been an unmitigated success. For it seems that there are always social consequences, however subtle, to technological progress and that these consequences occasionally have a dark side. One has only to look to the Industrial Revolution of the last century and the biotechnology advances since World War II to find numerous examples of social problems (and some remedies), and moral and ethical dilemmas (but fewer answers), appearing in the wake of technological breakthroughs.

So when we turn to a local concern — like the provision of education services in rural Iowa — it is not surprising to see technological solutions being proposed and developed. That is all well and good — let's invoke the "Yankee ingenuity" once again. But at the risk of sounding like a "New Age" Luddite, I urge caution. To borrow a familiar metaphor — before we harvest the yield, we must assess the market to select the right product, we must prepare the ground, then seed and provide nurture. The application of technology in education can have unintended as well as intended consequences. Care in the early stages — tempering the "Yankee" impulse with careful planning — can help ensure that the technological solution effectively addresses a real need.

Assessing the Market for Technology Uses

It has been long established that service delivery to rural America is problematic due to geographic expanse, dispersed population, and limited resources. While there may be some cause for judging rural education in Iowa problematic, it seems that on the whole, rural educators have coped remarkably well with scarce resources and working in isolation. In a 1987 study conducted by the Regional Educational Laboratories, rural educators noted that the following conditions required little or no improvement: student behavior, student attendance patterns, availability of quality instructional materials, classroom climate, stability of teaching staff and adequacy of facilities (Arends, 1987). Though rural America may not be an academic Camelot, many of these conditions would be the envy of teachers in many classrooms across the country.

The leading concerns on the list of rural educators as reported in that 1987 study were these: 1) the academic performance of children from low income families; 2) the development of thinking and reasoning skills; 3) the improvement of self-esteem and aspirations of children; and, 4) teacher isolation issues — lack of recognition for outstanding perfor-

mance, lack of quality staff development, and isolation from peers. Relatively speaking, it would appear that rural educators may be faring better, in many ways, than their urban colleagues. It would appear that the overall status of rural education is reflected in the title of the Regional Laboratories' report: rather than remediating an intolerable situation, rural educators are, as the title suggests, *Building On Excellence*. If that is the case, what is the role of technology in such a scenario? I suggest that two straightforward working assumptions guide our thinking. First, technology applications must first aim to ameliorate the unsatisfactory conditions, or, equity should be served. Second, they should also provide a structure that enables the enhancement of the conditions that are already productive.

We know from past experience that technology applied to education can provide choice, enable individualization, and enhance connectedness. For example:

—The use of audio and video teleconferencing for distance education has been used to provide instruction to remote areas where previously, in several single locations, there have been an insufficient number of students to justify the instructional cost.
—Computers and the increasing array of drill, tutorial and tool software have enabled increased individualization of instruction according to students special needs, thereby freeing the teacher's attention for other classroom activities.
—Computer conferencing and electronic mail have enabled the connection of students, teachers, and administrators, regardless of geographic location.

These illustrative uses could be applied to the stated needs of rural educators, particularly the linking of instructional staff for staff development and contact with their peers. These systems and approaches could also enhance currently productive practices. In Iowa, there is evidence of this enabling technology use apparent in different areas.

Preparing the Ground

Significant statewide technology initiatives are underway that promise enhanced educational opportunity through uses of technology. Under the auspices of Iowa Public Television, a statewide interactive television system is under development that will enable two way interactive television among any collection of educational sites in the state. Iowa Computer Using Educators (ICUE) is a young, growing association promoting increased productive uses of technology in education. At the University of Northern Iowa, a computer conferencing system has been established that enables a student teacher in the field to interact with faculty back on campus, and resource teachers and peers in other parts of the state,

thereby drawing upon the collective intelligence of the resources available through the network to solve problems of educational practice. With these trends evident, and initiatives underway, what is left to be done to productively apply technology to areas of rural education that, according to rural educators, need improvement?

From the recency of the above examples, one might draw the conclusion that only time is needed. But, if the history of technology application is any guide, educators will need more than time (Cuban, 1986). They will need to address a deep structural problem regarding the preparation of teachers.

Seeding and Providing Nurture

If cost were not a problem — if we could immediately fund and install the statewide telecommunications system and we could supply computers everywhere across the state — we would still be missing the mark because we are not preparing our teachers to use technology in their teaching (Electronic Learning, 1989). This is due largely to the fact that the teacher education faculty have not, for a number of reasons, integrated these tools into their teaching. This is not to suggest that computers can appropriately find application at every turn of the curriculum across every field of knowledge. But it does suggest that we can never hope to realize the potential of technology, of which we get an occasional glimpse, unless we invest in an enormous professional development initiative with the faculty of the schools and colleges of education. We must enable the faculty to explore applications of technology in their respective areas and incorporate those uses into their courses. This is both a capital and labor intensive proposition. But unless the faculty incorporate these tools and model them for students, we can not expect to see anything more than occasional, intermittent uses by exceptionally able and motivated teachers in the field.

The front end of the teacher education process must be reoriented at the considerable cost of equipment, release time, differentiated staffing, professional development programs, and resource and support staff. Until that happens, we will continue to tinker at the fringes of real change, and technology applications in the service of rural education will be a function of individual initiative and serendepity.

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Richard Wede, Superintendent
Everly Community School District

Students today and in the future will enter a complex world of rapid change and high technology. As a result, our schools must change to meet the needs of students. Modern technology has provided students numerous advantages which were not available to their grandparents. This is certainly true regarding education.

"Distance learning" has become the latest buzz word in education journals and at conferences. The interactive television instructional network is a part of that distance learning concept; and, it is *definitely* different from the types of learning that took place over television in the fifties and sixties. Today's television classrooms are primarily two types — satellite systems and instructional television fixed service (ITFS) systems.

The interactive television instructional system provides the needed link to assist local schools in providing substantial educational opportunities to students. Small schools could remedy four major problems through the use of the system. The first is the new standards. A second concern is the declining enrollment. Third is the teacher shortage in the foreign language fields and upper level subject area courses. The fourth concern is the geographical distances between schools.

Governor Branstad has proposed a telecommunications system to provide Iowa's rural schools with a fiber-optic broadcasting system for educational and vocational programs. Interactive television systems can help provide total educational opportunities to all Iowa students.

The learning process requires the student to be an active participant. Whether the teacher is located in the classroom or in one many miles away can become an insignificant factor if students experience two-way interaction during the learning activities. A discussion of the four major problems follows:

1. *New Standards*

The General Assembly has approved new standards for all Iowa schools to meet by July 1, 1989. The new standards will require all accredited schools to increase courses provided to students from twenty-seven to thirty-six. In addition, the new standards specify that each of the thirty-six units must be "offered and taught." An exception is allowed for the third and fourth year of a foreign language if *no* students enroll.

Many school districts will be forced into offering and teaching a third and fourth year of a foreign l age when only one or two students enroll in the course. Teaching a cou with a small enrollment is financially inefficient and a luxury that schools *cannot* afford.

Although several schools presently use interactive television instruction to increase student offerings, the state has determined that only interactive system courses with a certified teacher at the receiving site will be allowed to meet the required course offerings. School representatives and other groups have made several attempts to encourage legislators to

reconsider, thereby, allowing interactive courses taught by an Iowa certified teacher at the sending site to meet the standards.

If schools were permitted to use interactive television courses as part of the required curriculum, additional efficient and effective opportunities could be provided to students in all curriculum areas. Students' choices could include several different foreign languages: Russian, Japanese, German, French, and Spanish. A wider variety of upper level courses in math, social studies, and English could also be offered. In addition, students who desire enrollment in college-level coursework could participate through the interactive system.

2. *Declining Enrollment*

Each year school officials make decisions to teach or not teach specific courses based upon the number of students who enroll in the course. Courses are often *not* taught because hiring teachers for one-student or two-student courses is not economical. The interactive television system provides the opportunity for several rural schools to form a consortium so that students can take the low-enrollment courses in an efficient, economical format.

An often-used argument against small schools and small enrollments is that students are not challenged academically because of the limited number of students in the course. The interactive television system allows students to interact with others and be involved in many challenging educational situations.

Fewer interactive system courses will be made available to students unless local districts receive an incentive to provide them. The additional cost of tuition, books, and room proctors may cause local schools to omit television courses. This would be less likely to happen if the courses could be counted as a part of the required state curriculum.

3. *Teacher Shortage*

The new standards' original foreign language curriculum requirement specified four sequential years of one foreign language. At a State Board of Education meeting, board members modified it to require two sequential years of two different foreign languages because they believe that students deserve a choice regarding foreign language offerings. Since that modification, the standard has reverted to requiring only one foreign language; the State Board of Education discovered that an insufficient number of teachers were certified, making it impossible to meet such a requirement.

The State Board of Education was certainly justified in considering the two foreign language requirement. If the intent of the new standards is to increase the equity of course offerings for all students, regardless of their geographical location in the state, then it would appear necessary to *encourage* school districts to offer students a wider course selection.

The interactive television system provides that opportunity. Districts will be more likely to spend $15,000-$20,000 in order to participate in an interactive television system if there are incentives to do so. When the state refuses to recognize the courses as part of the required curriculum, most of the incentive is lost. Peter Stoll, at the Center for Learning Resources, stated, "If the United States is going to be competitive, given the wealth of high technology, we are going to require a highly trained work force. How do you get enhanced math, science, and second language education to our student population, particularly when this is an era of limited resources?" Technology has the answer — interactive television instructional systems. Local school districts must have cooperation and support from the state to properly utilize the technology.

4. *Geographical Distances Between Schools*

The state has provided school districts many incentives to share facilities and instructors. The concept can often look good on paper but bogs down in practical application when the distance between schools is too great to be economical. It may appear beneficial to offer a course taught by an instructor from a neighboring district; however, if the instructor spends more time traveling than teaching, the idea might be abandoned due to the expense of the teacher's commuting time.

Through modern technology, it is now possible to offer the course in a practical and efficient manner. An interactive television system can instantly link several classrooms and permit the teacher and students to communicate and interact at all sites.

Recommendations

1. The General Assembly and Governor must provide leadership in working with local schools to improve the quality of educational opportunities for students by implementing legislation which allows televised courses as a part of the required state curriculum.
2. The Department of Education and the Iowa Public Television Network must provide leadership in working with local districts to develop procedures and implement interactive television instructional systems that will provide educational opportunities for students.
3. Local districts must promote and develop educational opportunities through interactive television instructional systems by identifying funds and installing equipment to receive the courses.
4. The Department of Education, area education agencies, and local school districts must provide ongoing teacher inservice to insure that television instructors are properly trained, thereby providing effective instruction.

Conclusion

This paper identified four problems that could be minimized or eliminated if rural school districts were to install an interactive television system. School districts could more effectively and efficiently meet the new state standards. Declining enrollment would not be stopped; however, the effect of declining enrollment — small class size and/or elimination of small-enrollment courses — could be reduced. The ability of schools to hire teachers in specific subject areas could be increased through the sharing of staff. Geographical distances between schools would be immediately erased through the use of modern technology. By flipping a switch, schools within a specific area or throughout the state could be linked in order to provide excellent opportunities for students.

The fact remains that a roadblock impedes rural school districts from implementing available modern technology which would provide additional educational opportunities. The General Assembly, Governor Branstad, and the Department of Education must recognize that courses taught via the interactive television system are appropriate and effective. Good things happen for students when state agencies and local districts work together and utilize *all* the resources available to them.

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