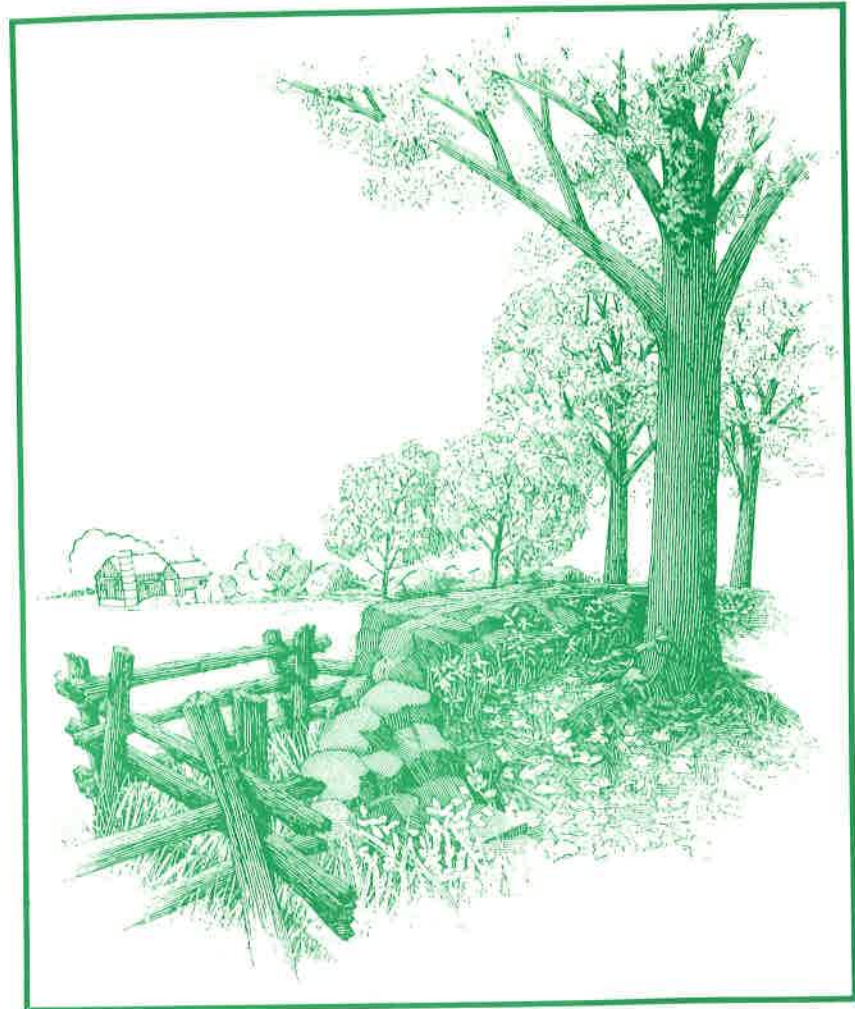


# FRESHWINDS

IN EDUCATION

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## Contemporary Issues in Rural Education

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Decker  
Erekson  
Helbling  
Nelson

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# Teaching in Rural America: Helping Students Develop a Positive Sense of Self

Edward W. Osborne  
University of Illinois at Urbana-Champaign

*I've come to a frightening conclusion that I am the decisive element in the classroom. It's my personal approach that creates the climate. It's my daily mood that makes the weather. As a teacher, I possess a tremendous power to make a child's life miserable or joyous. I can be a tool of torture or an instrument of inspiration. I can humiliate or humor, hurt or heal. In all situations, it is my response that decides whether a crisis will be escalated or de-escalated and a child humanized or dehumanized. (Ginott, 1973).*

A teacher's influence on the development of students goes far beyond academics. While students are learning to compute, speak, and write, they also are desperately trying to find out who they are. They are formulating a concept of self. A student's self-concept takes shape as a result of direct and indirect experiences, such as grades in school, success in athletics, success in relationships, and praise from a parent or teacher (Lefrancois, 1982). A student having positive experiences will feel worthy and capable, and therefore, develop a positive image of self. Likewise, students who frequently experience failure will form a negative sense of self. A student's sense of worth is most affected by his or her ability to achieve and experience success (Covington & Beery, 1976). Research has consistently shown a clear relationship between self-concept and academic achievement, with each directly influencing the other (Purkey, 1970).

With the current emphasis in America's public schools on academic rigor and excellence, the individual student may become lost in the maze of academic requirements and standards. The constant push for achievement may leave some students further behind and create a wider gap between those who "can" and those who "cannot." Even in the small, rural schools, where teacher-student ratios are more favorable, students sometimes experience an unhealthy pressure to excel. Educators, particularly teachers, must remember that the purpose of schooling is to enable students

to function in society in their chosen endeavors. This is accomplished by helping students acquire the necessary academic skills and by helping them develop a positive sense of self. Indeed, "... a major responsibility of the schools is the nurturance and enhancement of self-concept" (Velasco & Muller, 1982).

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**With the current emphasis in America's public schools on academic rigor and excellence, the individual student may become lost in the maze of academic requirements and standards.**

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But what about the need to focus on self-concept development in students attending rural schools? Do the unique environmental elements present in rural schools offset the need for teachers to be concerned with ways in which they may nurture the self-concept development of their students? What are the pertinent characteristics of rural education in America, and how should teachers in rural schools respond to the call for more positive teacher influences on the self-concept development of students?

## Features of Rural Education

Urbanization of the American countryside seems to be occurring at a rapid pace. Nevertheless, as Nachtigal (1982) clearly stated, "... rural America is very much with us." In fact, over one-third of all U.S. public school students reside in rural areas, and three-fourths of the U.S. school districts are located in rural

areas (Carmichael, 1982). Much work has been done to document and describe the unique features of education in rural America, as compared to public education provided in urban and suburban settings. As Nachtigal (1982) suggested, rural communities are not simply scaled-down models of cities; they have many different characteristics that heavily impact upon educational programs and approaches. These differences are based primarily upon the social and demographic conditions of rural America (Fratoe, 1980). According to Nachtigal (1982) rural school and communities differ from urban and suburban ones in the following ways:

- less bureaucracy is present in the schools,
- teachers are a mixture of long-tenured "locals" and "outsiders" who are likely to leave after several years,
- teachers are more vulnerable to community pressures,
- the school may be the biggest "business" in town,
- high school teachers may have as many as six preparations per day,
- a greater percentage of students are involved in extracurricular activities,
- a closer link exists between the school and the community,
- a closer relationship is established between parents and teachers, and
- classes are smaller; teachers have the opportunity to get to know students better.

While educational policymakers have ignored the magnitude and uniqueness of rural education in America (Nachtigal, 1982) it is clear from the figures cited earlier that rural education efforts represent a major piece of the American public school enterprise. The distinguishing features of rural schools cited by Nachtigal also suggest that teachers in rural schools have a greater opportunity to get to know their students. Whether they take advantage of this opportunity in a positive and constructive way is yet another issue. As Dunne (1977) cautions, teachers having the opportunity to get to know each student better can work to the disadvantage of students in that teachers may prejudge the abilities and nature of certain

students because they are so familiar with family status, performance of siblings, and family work values. The possibility and even likelihood that teachers may form certain expectations (positive or negative) of individual students that will significantly influence student achievement is well documented in the work of Rosenthal and Jacobson (1968). Dunne (1977) contends that there is heavy pressure on teachers in rural schools to accept biased judgments of their students. "In the country, where the school, the home, and the community are closely tied, the self-fulfilling prophecy is even more likely to form (or warp) a child's self-concept" (Dunne, 1977).

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### **Influence on Self-Concept**

One's self-concept is learned; it is gradually molded as a consequence of the ways in which people are treated by those who surround them as they are growing up (Combs, 1977). Thus, a person's sense of worth is formulated as a result of interactions with other people. If these interactions are positive and success is experienced, then a positive sense of self is created. On the other hand, if these interactions result in failure to achieve, failure to gain acceptance, or failure to find warm relationships with other people, then a poor concept of self is learned (Charles, 1985).

Of course, students in rural and urban schools alike should have unlimited opportunities to experience success or failure as they interact with peers and teachers. However, according to Covington and Beery (1976), many classrooms in today's schools are failure-oriented. That is, students' shortcomings receive greater attention than their strengths, classroom atmosphere is discouraging rather than encouraging, and teachers treat students with disrespect rather than warmth and encouragement. Combs (1977), one

of the leading authors on the topic of self-concept development, cited as the major problem in the educational system today a lack of humanity, an indifference and disrespect toward individual students.

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many classrooms in today's schools are failure-oriented. That is, students' shortcomings receive greater attention than their strengths, classroom atmosphere is discouraging rather than encouraging, and teachers treat students with disrespect rather than warmth and encouragement.

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A fascinating account of self-concept development in students is provided by Covington and Beery (1976). According to these writers, competitive achievement, a central feature of most classrooms, is the worst enemy of a positive sense of self-worth. School represents a major threat to a student's belief in his or her own ability. Covington asserts that all students must experience failure, because it is a non-negotiable element of life. The key is to interpret failure in its proper perspective. Do students see their failure (lack of success) as a lack of effort or a lack of ability? If students believe they are not capable of completing a given task, then their sense of self-worth is negatively affected. If, on the other hand, students see their failure as lack of effort, then their personal abilities are not condemned, and a positive self-concept is maintained. According to research cited in the recent U.S. Department of Education publication *What Works* (1986), students often confuse a lack of ability with a lack of effort, particularly as they move into the upper elementary grades. "Once students believe they have failed because they lack ability, they tend to lose hope for future success" (*What Works*, 1986). At this point, students employ what Covington and Beery (1976) refer to as failure avoidance techniques. They skip school, they don't try to complete tasks, or they don't become involved in classroom experiences so they can protect their self-worth. They avoid failure by not seeking success. Schools cause students to become less eager to attempt success be-

cause (1) evaluation of student performance is formal, (2) mostly extrinsic rewards are given, and (3) someone else (the teacher) sets the standards for success. In order for students to be willing to achieve they must (1) recognize their own progress, (2) have an increase in meaningful success experiences, and (3) realize that these successes are under their control and a result of their efforts (Covington & Beery, 1976).

## What Teachers Can Do

A generally accepted tenet is that a student's self-concept is learned, is alterable, and is influenced by significant others. Teachers can become significant others in the lives of their students and help students develop a positive, healthy sense of self. The following strategies are suggested as ways in which teachers may act to nurture the self-concept of their students. Since self-concept development is such a complex phenomenon, it stands to reason that a teacher's efforts must be multi-dimensional and as encompassing as possible.

- Understand the importance of self-concept and how teachers can influence it (Newcomb, 1980). Teachers need to become sensitive to the notion of self-concept and committed to act in ways which will enhance a positive sense of self-worth. Teachers who have a positive concept of themselves and their abilities are in a better position to favorably influence their student's self-concept.
- Use student-centered (democratic) teaching (Covington & Beery, 1976; Newcomb, 1980; Purkey, 1970). Teachers should show their concern and caring for each student. Students should be taught to solve problems, be creative, and develop autonomy. The classroom should contain an atmosphere of challenge, freedom respect, warmth, control, and success. A democratic learning environment is by far the most important factor for encouraging students to achieve.
- Believe that individual worth is a given. As discussed earlier, teachers in rural schools have many opportunities to get to know their students as individuals of worth. Teachers must use events such as extracurricular activities, field trips, school functions, home visits, and informal conversations in the school and community for this purpose. Teachers must get to know their

students, accept them for what they are, and help them become what they want to be.

- Establish reasonable, clear standards for success (Covington & Beery, 1976). Setting clear educational objectives stimulates student achievement. If students fail to meet a specified standard, then they will try harder. Learning is enhanced when teaching activities are well organized and teacher expectations are positive and clear.
- Provide tasks within the student's range of challenge (Newcomb, 1980; Covington & Beery, 1976; Labenne & Greene, 1969). Each student must experience success. Many opportunities for success should be provided. However, standards for success should be set such that success is obtainable, yet the possibility of failure still exists. Students will be more motivated to attempt tasks if they believe success is within reach. Success is a strong motivating force and a prerequisite for a positive sense of self. Students should be recognized for working at tasks within their range of challenge but beyond their current achievement.

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**Teachers can influence the nature of their students' self-concept by the way they treat them, the academic and behavioral expectations they convey, and the nature of their relationships with students.**

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- Help students recognize their limitations (Covington & Beery, 1976; Purkey, 1970). A primary task of the teacher is to help students gain a positive and realistic image of themselves as learners. Students need to seek out and test their limits; accepting one's limitations is as important as overcoming them. Teachers must help students accept their limitations without letting students devalue their self-concept or destroy their eagerness to learn.

- Help students interpret failure (Covington & Beery, 1976; *What Works*, 1986). Failure in the classroom is most often related to lack of effort rather than lack of ability. If students can be taught to distinguish between effort and ability, then failure can be accepted as a lack of effort, and the student's self-concept will not be damaged.
- Provide encouragement (Covington & Beery, 1976). The best teacher response is encouragement, rather than praise. Encouragement provides hope. Praise provides extrinsic reward and is authority dependent.

## Summary

Self-concept has been shown to significantly influence achievement, and vice versa. Students develop a sense of self by the degree of "success" they have in school and when interacting with others. Self-concept is learned, and it is particularly responsive to the actions of significant others during the school years. Teachers can influence the nature of their students' self-concept by the way they treat them, the academic and behavioral expectations they convey, and the nature of their relationships with students. A student's feeling of self-worth is an extremely sensitive ingredient in the schooling process, for it affects motivation and achievement, which in turn influence subsequent teacher actions and expectations.

People develop to their fullest potential only when their experiences nurture feelings of self-worth and adequacy (Clute, 1980). Teachers need to treat students with concern and genuine caring. As the American Vocational Association's 1984 Teacher of the Year stated, "there are a lot of students who simply need someone to believe in them and demand good work from them" (Garrison, 1985, p. 25). Teachers need to consider the following questions as they encounter students on an everyday basis: How can students feel wanted in school unless their teachers want them to be there? How can a student feel accepted unless he or she is accepted by others? How can a student feel liked unless someone likes him or her? How can students feel they have dignity and integrity unless teachers treat them so? How can a student feel able unless he or she has some successes? "The best rural teachers are the ones who are able to cope with diversity and sparsity, are creative enough to develop their own curriculum materials utilizing community

resources, and above all, are capable of teaching children rather than subjects" (Carmichael, 1982).

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Dr. Osborne is an Assistant Professor in the Department of Vocational and Technical Education, University of Illinois at Urbana-Champaign, Illinois.

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# A Computer System to Improve Rural Education

Robert Decker  
University of Northern Iowa

Could it be possible for a microcomputer to communicate with every school district in the United States? Could it be possible to teach students in one school district while the teacher was miles away in another town and/or school district? Could it be possible to individualize instruction and manage that instruction in such a way that individual performances could be evaluated and monitored at any time? Is this technology available? Would it be economically feasible?

The answer to all five questions is yes. Such an effort is being carried out with the use of a computer-satellite technology interface system. The technology for such a venture has been very costly, because the capability for such communication has been solely by use of telephone hook-ups. When paying for such a service on a minute-to-minute basis, has proved to be prohibitive for tight school budgets. However with the advancement of information technology, schools and especially rural schools, can take advantage of such a system at a fraction of the cost of only a few years ago.

## Computer-Assisted-Instruction

Computer-assisted-instruction was first developed at the University of Illinois. The system, called PLATO, has become very sophisticated in the three decades since it was first conceived. PLATO has the capability of transmitting, via satellite, top quality software to schools, no matter where they are located, for a cost of pennies per student per month.

During the past three years, researchers have developed an interface between computer technology and satellite communication. Both technologies, once thought to be too expensive for educational use, have proved to be facilitator for distance education and providing areas to quality education for some small school districts. This networking system, allows schools to access over 10,000 hours of sophisticated educational software in over a hundred different subject matter areas via satellite, and with the aid of the

telephone, it becomes interactive with a mainframe computer. The mainframe computer is a specially designed computer which is able to handle thousands of users simultaneously and is expandable when additional services and users come "one-line."

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**Economic consideration and the lack of educational financing in many parts of this country have caused considerable difficulty in providing a balanced educational program for rural schools in this time of "educational excellence."**

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Technology has been developed to distribute the satellite signal to both urban and rural sites schools need a satellite downlink (dish) and some special modems to receive the software. Then, with the use of a unidirectional telephone line, over four hundred computer terminals can transmit information to the mainframe computer.

With the transmitting of data via satellite at 1.544 megabits per second, the system is able to transmit at a fast rate of speed and with satellite capability, able to distribute to many locations all at the same time. Also, with the advancement of telephone technology, a unidirection telephone line can handle over four hundred terminals and not just the few that are being done presently. By sharing the cost of the telephone line as well as seeing a reduction in long distance telephone rates adds to an already economical computer networking system.

Let us look at an example of this communication savings over traditional telephone operation. Suppose a school district in Arizona, or a group of school dis-



tricts, joined together and supported three hundred terminals on the networking system. Suppose the cost from Arizona to the mainframe computer for such a service was \$900 per month. If we were to average the communication cost per terminals out, it would be \$3 per terminal per month. This allows for the computer to be used for educational purposes 24 hours a day for the entire month. Another thing educators need to remember is that this is a per terminal charge, not a per student charge. There is no minimum or maximum student use requirements.

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**the main problem in the United States is not computer literacy but literacy itself. With the use of technology as a tool . . . the problem of literacy can be remedied.**

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This system is called NovaNET. It has many features that will aid and support education, both rural and urban. However, the NovaNET system is not going to solve the problems of education, especially rural education alone. If technology is understood and used throughout the curriculum, students will become better educated and appreciate the capability of technology and correct uses which will assist them throughout their life. Remember, the main problem in the United States is not computer literacy but literacy itself. With the use of technology as a tool for assisting the teacher for instructional concepts, the problem of literacy can be remedied.

Small rural schools cannot provide many student needs alone. Economic consideration and the lack of educational financing in many parts of this country have caused considerable difficulty in providing a balanced educational program for rural schools in this time of "educational excellence." A coordination of efforts between school districts appear to help in reducing costs while providing for an improved program.

The computer-satellite educational based NovaNET system is another cost effective way to share programs, instructors, and information to equalize education. The capability and flexibility of this computer system transcends any other system in opera-

tion today. It is truly educational technology that is on the "cutting edge" and can have far reaching impact on the education of students in this country and around the world.

## **NovaNET and Rural Education**

The following are some of the capabilities and reasons why this system should be considered as usable technology for rural education.

- Schools will have access to over ten thousand hours of lesson materials in over one hundred subject areas. The lessons are versatile in providing for presentation in drill and practice, tutorial, problem solving, and simulation. The lessons are written to accommodate individual rates and styles of learning. The system also allows the lessons to be automatically and instantaneously updated.
- The NovaNET system has developed a sophisticated but yet simple way to perform recordkeeping and curriculum management functions. Because the users are directly linked to a vast mainframe computer, there are no disks to manage - no library of disks, no check-in and check-out system to manage, no disk destruction or vandalism. The system also keeps track of who worked, when they worked, for how long they worked, and what they achieved. Data collection can be done individually or over large groups and can be kept across multiple sessions.
- The system provides on-line consultation to site management that still require humans. The system also provides an efficient communication system to connect the student, the teacher, and the administrator to their colleagues and to each other. This feature within itself will have tremendous impact in rural schools. Just think, the ability to teach students in another district, to share resources and information without the problems of transportation, loss of time and disgruntled community involvement. The ability for school districts to share faculty expertise in areas where some schools could not offer programs either in remediation or for the gifted. How does this work? Any user can "talk" on-line to any other user no matter where each is located. Messages to a user at another terminal appear on the user's display after he or she has responded to being

paged. The two users then communicate by typing messages which both users can see. Also, a user can "monitor" another user's display upon request and with permission. This means, that students will be able to look at the teacher's display on his/her terminal as well as the teacher being able to look at the display of the student's terminal and both could be many miles apart. This concept alone could be the salvation of many small districts who are considering consolidation.

- Other communication features of this networking system allows for the capability of electronic mail, bulletin boards, and numerous notefiles, both private and group. The bulletin boards and notefiles serve as forums for users with special interests (e.g., math, microcomputers, etc.) and several general notefiles in which users can ask questions and get responses from anyone on the system. Messages can be transmitted to everyone on the system, to one individual, or to individuals on other linked systems.
- An exciting feature the system has for education is the ability for users to write and edit instructional materials. Until the present time, most of the software that is in use for education has been developed by professional computer programmers, not by educators. This system allows those interested educators, with minimal training, to develop their own software for their classes. It is understood that all educators will neither have the interest or desire to perform such a function on the system. However, it is an interesting possibility for school districts who have the desire to be creative and develop software, with ease, to meet the needs of their students. The concept of educators developing software has tremendous possibilities of developing programs from the grass roots level of those professionally trained educators who deal with students on a daily basis and are cognizant of the needs within their specialized areas.
- With all of the aforementioned capabilities, the system has more. There are non-instructional applications. They include word processing, data processing, information retrieval, the system management tools mentioned previously, personal services (computation, financial, career planning), interactive games, and much more.

Any personal computer can be programmed to run

on the system, however, the quality of the display will be limited by the resolution of the micro's display. Most Nova programs are designed for a screen with 512 x 512 resolutions. For displays with resolutions less than this, the information must be "crunched" to fit on the smaller display resulting in some degradation of display quality. For those personal computers with resolutions close to 512 x 512 the "crunching" still results in an acceptable display. For terminals with lower resolutions (200 x 320) the quality is considerably less.

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**The real concern is whether or not educators are ready and willing to use technology to assist them in building better programs and meet the individualized needs of students today, tomorrow and in the future.**

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Both administrators and teachers have had, and will continue to have, questions and concerns about the quality of software whether it be on a stand alone system or one like NovaNET using a mainframe computer. The NovaNET system does not validate courseware. The system permits any individual to author a lesson and to make that lesson available on the system. However, there are many hours of courseware which have been tested in the classrooms over long periods of time with large numbers of students. In addition, the system's world-wide communication network provides an easily accessed means for educators to evaluate courseware relative to the needs of their specific environment and students. The educator can easily find out what courseware has been successfully used in other institutions, consult with experts in curriculum development and instructional design, or even talk to the author of the course to suggest improvements.

The interactive mainframe system that can link and network microcomputers throughout the United States and the rest of the world has tremendous capabilities and application to meet the needs of rural America. School systems virtually fighting for their existence can meet the needs of students as well as the

ever increasing mandates of state legislatures, state departments of education, and federal programs and guidelines. The ability to share programs, information, and access a wide variety of material can only enhance our ability to provide a well balanced and intellectual stimulating experience for students. Remember, however, the capability and technology is here and available today. Educators and educational technologists developed the system over many years of research. The best possible pedagogical techniques have been implemented within the existing software as well as the most advanced technology has been developed for education. The real concern is whether or not educators are ready and willing to use technology to assist them in building better programs and meet the individualized needs of students today, tomorrow and in the future. I hope we as educators are ready!

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*Dr. Decker is an Assistant Professor in the Department of Education Administration, University of Northern Iowa, Cedar Falls, Iowa.*

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(For more details on this technology and its use in education, please contact the author at the University of Northern Iowa, 508 Education Center, Cedar Falls Iowa 50614-0604 (319) 273-2605 or Compu-Sat Inc., 3895 N. Business Center Drive, Tucson, Arizona 85705 (602) 888-3076.)

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# Telecommunications and Computers: Tools for Curriculum Enrichment for Rural Schools

Carl L. Reynolds  
University of Wyoming

One of the major problems encountered by teachers in isolated, small, rural schools is the inability to provide current, up-to-date small, rural schools is the ability to provide current, up-to-date resources for students. In many areas, the local newspaper, if one is available, consists of a weekly or biweekly publication filled with descriptions of local events, classifieds, and grocery ads. Major newspaper sources, which cover national and world events, are frequently several days late.

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**Data banks of current events, bibliographical abstracts of library materials, curriculum lesson materials and market prices for various commodities are currently available for rural teachers to access via computer.**

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Most rural school personnel, realizing that resource materials are limited, maintain access to larger library services where references can be ordered on loan. In some subject areas however, where timeliness is the key to frequent use and maintenance of high interest levels in students, the wait for resource materials to arrive complicates teachers' plans and causes students' interests to shift to other areas.

## Application in the Classroom

Since computers have become a popular tool in classrooms, sources of information available from various computerized databases are viable options to

more traditional methods of obtaining reference material. Data banks of current events, bibliographical abstracts of library materials, curriculum lesson materials and market prices for various commodities are currently available for rural teachers to access via computer. Time delays, from the moment the need is established for a source of information to the time it is received, can be reduced to minutes with computerized telecommunications. By using modem with a classroom computer and subscribing to one or more of the various telecommunications databases, a teacher can bring into a lesson an exciting way for students to find facts, to solve problems, or to complete an assignment.

For example a social studies teacher hears on the radio that President Reagan has placed farm support reductions as a high priority in his proposed budget to congress. The next day in class, the teacher asks the students to access The Source, which includes the United Press International News Service. Using key words such as "federal budget," "agricultural policy," and "farm support programs," the students are able to obtain a news story containing excerpts from President Reagan's speech about the issue.

## Telecommunication Information Services

Several telecommunication services are available, each of which have unique features that appeal to specific subject matter for teachers at various grade levels. One is CompuServe, an information service that offers several features for the teacher. It includes news retrieval from the newswires, financial information, theater and book reviews, an electronic encyclopedia, software exchange, and electronic mail service for sending and receiving messages to and from other users.

Potential users also should consider another service, "The Source." Billed as "America's Information Util-

ity," it offers key word searching for items in UPI News Service, stocks, bonds, mutual funds and money market information on the New York exchanges, airline schedules and other travel guide information, and electronic games and educational drills.

Another service, more specifically designed for business interests, is the Dow Jones News Retrieval service. In addition to accessing current stock market information, users of this service can retrieve news stories from The Wall Street Journal, and also general news stories, both foreign domestic, as well as sports and weather service information.

A valuable service for rural teachers, especially those who have found school libraries to be seriously short on references, is the Bibliographical Retrieval Services. Using keyword descriptors, the user can obtain detailed abstracts of references on almost any subject. With the help of a teacher, students can make up a list of descriptors for a keyword search that will limit the display of abstracts to those specific to the topic being studied. The abstracts can be quickly printed out so the student can study the information in detail. If the abstracts do not provide enough information, the teacher can order the complete reference through a lending library service. The time spent on-line with the computer usually amounts to no more than five to ten minutes.

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**the incorporation of telecommunications services into classroom instruction . . . can provide considerable enrichment to the daily classroom routine.**

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Other vendors who provide similar bibliographical services are Dialog and Orbit. Typical start-up charges for accessing these types of telecommunications databases range from \$50 to over \$250 for annual fees. In addition, the user will be billed for connect time charges of \$25 to \$30 per hour plus, in some instances, long-distance costs.

A service specific for agriculture has grown in popularity among high school vocational agriculture teachers. The service, called Agridata, provides news ser-

vice, electronic mail, a shopper's guide for agricultural products and equipment, current reports of research and technology, market reports, United States Department of Agriculture reports, and market forecasters' analyses. It also includes a dictionary of agricultural terms and over 500 curriculum lessons.

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**With practice, rural teachers will find broad use for services that can provide considerable enrichment to the daily classroom routine.**

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The Agridata service was introduced to vocational agriculture teachers in Wyoming utilizing a unique approach. Funded by a grant from the Carl D. Perkins Act. through the State Department of Education, staff at the University of Wyoming provided phone modem equipment and subscription fees to 15 rural schools. In-service education was provided for the teachers in both group and individualized format. Weekly newsletters were sent by electronic mail to all users in the state. Instruction in the use of the service, completing log-on procedures, conducting keyword searches and receiving and retrieving files were given to teachers, on-sit, in their schools. Demonstrations were conducted by the staff in schools that illustrated how the telecommunications service could be incorporated into lessons.

## Summary

A wide variety of sources exist for the incorporation of telecommunications services into classroom instruction. With practice, rural teachers will find broad use for services that can provide considerable enrichment to the daily classroom routine. However, dedication and persistence are required to fully learn how to perform the mechanics required in using the services. It was found with the Agridata project conducted in Wyoming, that extensive in-service, especially the individualized service, was the main factor to bring about effective use by the teachers and their students. It is believed that the best approach for adoption of telecommunications services in the cur-

riculum is to provide an aggressive agency that will do whatever is necessary for teachers to be successful in acquiring and using any of the services that are available.

### Resources

- Bibliographical Retrieval Service, 1200 Route 7, Latham, NY 12110, 800-833-4704.
- Source Telecomputing Corporation, 1616 Anderson Road, McLean, VA 22102.
- CompuServe, 500 Arlington Centre, Box 20212, Columbus, OH 43220.
- Dow Jones News Retrieval, P.O. Box 300, Princeton, NJ 08540; 800-257-5114.
- Dialog, 3460 Hillview Avenue, Palo Alto, CA 94310; 800-227- 1927.
- SDC Orbit, 2500 Colorado Avenue, Santa Monica, CA 90406; 800-421-7229.
- Durkee, J.R. and C.L. Reynolds, "Developing Exemplary Sites for Telecommunications in Vocational Agriculture Instruction," Department of Vocational Education, University of Wyoming, Laramie, Wyoming, September, 1986.

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*Dr. Reynolds is an Associate Professor in the Department of Vocational Education, University of Wyoming, Laramie.*

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# Rural Vs. Urban/Suburban Teaching Roles: Implications for Teacher Preparation

Michael D. Wright  
Ohio Northern University

The next several years will continue to bring more changes in the field of education as local schools, state agencies, and universities strive to address the concerns and issues raised by the various studies, reports, and "mandates" that emerged during the first half of this decade. Several of these reports have proposed major revisions in teacher preparation programs (e.g., The Holmes Group, The Carnegie Forum). There is an underlying assumption regarding teacher preparation in these reports which may not be completely accurate — that all teachers occupy similar roles and therefore require very similar programs of preparation. I would suggest that the role of the teacher in the small, rural school is quite different from the role of the teacher in the large urban or suburban school. If this is true, it would need identical teacher preparation programs.

A recent literature review suggested that little attention has been devoted to the differing roles and responsibilities that teachers have as a result of school size. The purpose of this article is to address some of the differences in the roles of teachers in small, rural schools and teachers in large, urban or suburban schools and the implications that these differing roles may have for the preparation of teachers.

## Teaching Assignment

A primary difference in the teaching assignment of rural teachers is the lack of subject matter specialization. Teachers in large urban or suburban schools might be assigned to teach one cluster area, such as physical science, mathematics, or welding. Teachers in small schools on the other hand, may be assigned to teach physics, social studies, biology, and algebra; or welding, woodworking, small engine repair, drafting, and social studies. Teachers in small schools are not afforded the opportunity to specialize. They must be a "jack-of-all-trades".

In preparing teachers, considerations should be

made for rural schools. For the student teacher assigned to a small, rural school, a single subject area of specialization is not an appropriate preparation (assuming that the placement is compatible with the student's long term goals and not just expedient for the university). This student needs coursework which will integrate and synthesize the fragmented group of courses known as the university curriculum. The student planning to teach in a rural setting needs the opportunity for more "breadth" than "depth" in their professional program. Unfortunately, the university curriculum is frequently too rigid to permit the type of variation needed by students with different career goals.

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In most cases, the typical student teacher has been educated in departments that emphasize content specialization. They are prepared to teach a single cluster area such as mathematics, physical science, or industrial technology, but are expected to teach in several cluster areas, i.e., woodworking, drafting, general metalworking, remedial math, and social studies! one can easily envision a similar dilemma in other subject areas as well. The cooperating teacher, then, becomes a very crucial tutor. Not just a mentor or master teacher to guide in the art of teaching, but a tutor who must instruct the student teacher in new skills, perhaps, or at the least, show how to integrate various subject areas into a meaningful course. Many articles

have been written offering suggestions for cooperating teachers on how to achieve this delicate balance (for example, see Clark, 1986).

There are those groups and individuals, both inside and outside of education, who propose that the reform of teacher education programs should require more content specialization and fewer "education" courses. Indeed, some would suggest that mastery of a subject is all that is necessary to be a high school teacher. One of the prime concerns underlying these propositions is the relatively low standardized test scores of American youth compared to other industrialized nations. May one assume that the implication is that students are not achieving "well enough" on standardized tests because their teachers do not know enough about the subject area they are teaching? If low student achievement is the concern, it may be more prudent to focus on the conditions under which teaching occurs and the skill of the teacher to structure and present the subject matter.

Albert Shanker, President of the American Federation of Teachers, agreed that it is the system of preparing and certifying teachers that needs to be restructured. Shanker emphasized that although rigorous standards are crucial to improving the teaching profession, knowledge of subject matter does not guarantee good teaching. Appropriate techniques and methods are what allow teachers to inspire and bring out the best in their students (*Phi Delta Kappan* 1985).

Most of teacher education is focused primarily on "what" to teach, not "how" to teach. Prospective teachers are not adequately exposed to "the practical application of how to teach what they know until the student teaching experience" (Quimby, 1985). Knowledge alone will not guarantee good teaching or successful students. The mark of a good teacher is not just how knowledgeable he/she is, but how well that knowledge is conveyed to his/her students and how well one is able to inspire his/her students to seek that knowledge.

## Student Populations

Given that knowing "how" to teach is important, what is different about teaching in small, rural schools? One very significant difference is the effect mainstreaming has had in the past decade, and the availability of specialized support staff. There is an increasing number of students with special needs in regular classes today. In some schools, more than half of the students are learning disabled, disadvan-

taged, bilingual or unable to understand English, physically impaired, or emotionally disturbed (Haberman, 1985). It seems a bit ironic when, in some schools, only a minority of the students are defined as "normal". Here, normal does not imply desirable or typical, it only means those who are not classified as needing special instruction. How has increased preparation in a subject area concentration prepared one to teach any of those students described as special? In a small rural school, support staff are generally not as available and the regular classroom teacher is more likely to be responsible for diagnosing, prescribing, and implementing instructional strategies than a teacher in a large suburban school. Haberman (1985) observed:

A large and increasing number of young people have handicapping conditions: physical, emotional, linguistic, behavioral, cultural, economic, or, very likely, combinations of several such conditions. There is no rational basis for connecting success in university liberal studies programs with meeting the complex needs of such special students.

## Equipment and Facilities

The curriculum offerings and special student populations are just a part of the teaching assignment where differences occur between rural schools and urban/suburban schools. Another area of difference is related to the facilities and equipment that are available for instruction. Student teachers frequently come from a university setting where programs have good equipment and state-of-the-art technology. Small, rural schools cannot afford to acquire expensive equipment for the few students enrolled in specialized programs. The student teacher must quickly learn to adapt to the existing conditions in the cooperating school.

Alternatives are available to bring technology into the classroom in small rural schools. Nytes and Musegades (1985) described an integration model that has been successful in Minnesota where nearby districts enter into agreements and form technology cooperatives. These cooperatives utilize joint planning, sharing of resources, and group discounts for acquiring hardware and software.

Where enrollments are not sufficient to permit a full range of curricular offerings, small schools may consider forming an Instructional Television Consortium. Several districts can be joined by a cable televi-



sion system. According to Siegmund and McFadden (1985) several benefits may be realized by this type of arrangement:

- Exposing some of the best teachers to a larger number of students,
- Enhancing lesson preparation,
- Introducing new courses into the curriculum,
- Maintaining present courses in the face of declining enrollments, and
- Producing greater flexibility in offering courses

Another alternative for upgrading programs in small or rural schools, that is similar to the television consortium, is utilizing two-way microwave transmission for instruction. Several districts may be joined in an interactive video system in one class. The instructor is in direct video contact with every student. Properly placed cameras and monitors in each room make it possible to simulate eye contact, an important element in effective teaching, and one which has been absent from television and video-recorded lessons.

### Extra-Curricular Assignments

A fourth area of difference between rural and urban or suburban teachers' assignments are the extra-curricular responsibilities. Rural teachers frequently wear more than one hat. They may be teacher, coach, club advisor, dance chaperone, and yearbook director all rolled into one. Research has indicated that teachers in small, rural schools have significantly more non-paid extra-duty assignments than do teachers in large schools (Wright, 1985). The diversity of the teaching assignments in small schools would indicate a greater need for planning time. Yet, the extra-curricular demands may in effect mean that little or no planning time is available.

The student teacher preparing to teach in a rural school needs to realize that teaching is a way of life, not a job. He/she needs to realize that the "job" does not end at 4:00 P.M., but may frequently run into the evening hours or even weekends. These extended hours will also force the student teacher to conduct lesson planning well in advance, and frequently at night "on their own time". While this may be true for most student teachers in general, it is particularly burdensome to those in small, rural settings due to

both the frequency and duration, as well as the number of different preparations.

### Teaching Environment

The teaching environment is also markedly different in small, rural schools. Research has indicated several variables where small schools are significantly different from large schools (Wright, 1985). Two variables of interest are class size and salary. Teachers in small schools tend to have smaller classes but receive less pay for their services.

The environment in the smaller schools tends to be more relaxed, more informal. Students may have the same teacher for more one than one class, and these classes are relatively small. Thus, a more personal student- teacher relationship may develop. In addition, the teacher may be intimately acquainted with several of the students' families. This relationship may become a pitfall for the student teacher, however. An extremely awkward situation may develop for the student teacher in the warm, informal, nurturing type of environment that is typical of small, rural schools. The cooperating teacher needs to constantly monitor, albeit discreetly, the interpersonal relationships which naturally develop between student teachers and their pupils. Student teachers are frequently not prepared to cope with the intense feelings and emotions which may develop between a teacher and his students.

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The rewards for teachers appear to vary by school size also. Industrial education teachers in small, rural schools indicated that they perceived significantly more esteem/respect from their students, their principals, and the professional respect of their colleagues than did teachers in large schools (Wright, 1985). However, the teacher in the large schools received significantly higher salaries. Student teachers who place high value on intrinsic rewards may be well placed in a small, rural setting.

Student teachers should also be queried as to whether they prefer structure, guidance, and established procedures, or more autonomy, in their student teaching assignment. The amount of autonomy teachers perceived they have over selected aspects of their positions tended to vary by school size (Wright, 1985). Industrial education teachers in small schools perceived they have more autonomy over curricular areas whereas teachers in large schools perceived they have more autonomy over time-management and involuntary extra-curricular assignments. The "official" curriculum in a small school is likely to be the teacher's course syllabi. In large schools the district may determine the curriculum, after consulting "Experts," and then pass the documents down to the teacher.

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**Student teachers need to be carefully coached about local mores, establishments, and customs.**

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The community environment is also quite different in small, rural settings. Student teachers need to be carefully coached about local mores, establishments, and customs. Although after school hours are considered one's own time, the situation for teachers in rural communities is still one of scrutiny.

### Summary

The differences between roles that teachers play as a result of school size is a topic that has not yet been adequately researched. In the absence of empirical data, it seems questionable to make blanket statements that all teachers require the same preparation, especially statements that suggest more content specialization will improve the quality of teaching. Granted, "depth" in coursework is important, but not if it comes at the expense of "breadth", at least not as far as the rural teacher is concerned.

Our teacher candidates must be able to apply their knowledge and skills to new situations as time and technology move forward. A solid foundation in a variety of disciplines will enable them to adapt in a dynamic environment. The examples of bringing technology into small, rural schools cited earlier are only a

few of the possible ways teachers in these schools may choose to accommodate change. We must provide our student teachers with enough breadth in their preparation to accommodate change comfortably, as well as to enable them to fill a variety of roles as teachers.

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*Michael D. Wright is an Assistant Professor in the Department of Industrial Technology at Ohio Northern University, Ada, Ohio.*

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# The Teacher Education Reform Movement: Implications for Rural and Small Schools

Thomas L. Erikson  
University of Illinois at Urbana-Champaign

The education reform movement in the United States has resulted in several state and national initiatives intended to improve education. These initiatives have included items such as increased high school graduation requirements, stronger academic standards, competency testing, and longer school day. Of course the success of many of the reforms hinges on one key factor – the quality of the teachers.

Many agree that the quality of education is directly related to the quality of the teachers. Based upon this assumption, several groups and commissions have taken steps to recommend reforms in the preparation of teachers. The two national reports receiving most attention have been prepared by the Holmes Group and the Carnegie Forum. While these reports and their recommendations are still being debated, be assured that they will have a major impact on the reform of teacher education. Reforms of teacher education will have an impact on the preparation of teachers for rural and small schools. Thus, the purpose for this article is to present an overview of two of the major reform reports and identify the potential impacts that proposed reforms might have on rural and small schools.

## The Holmes Group

Deans of Colleges of Education at 17 “major research universities” began meeting in 1983 to determine ways of improving the quality of teacher education. As the group continued to meet its size increased to 23. It developed and submitted a proposal to several foundations and the U.S. Department of Education to provide funding for the effort. Following funding in 1984, a report, entitled *Tomorrow's Teachers*, was prepared and subsequently distributed in the spring of 1986.

When the report was released, 123 institutions were invited to participate in Holmes Group as charter members. Invitations were extended to institutions

belonging to the American Association of Universities, those with reputations or potential for excellence in research and development in education, and selected others. To date approximately 95 universities have become charter members. To become a member of the Holmes Group institutions were required approval by both the Dean of the College of Education and the Vice President for Academic Affairs (chief academic officer).

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## Reforms of teacher education will have an impact on the preparation of teachers for rural and small schools.

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The stated goals of the Holmes Group are:

1. to make the education of teachers intellectually more solid;
2. to recognize differences in teacher knowledge, skill, and commitment in education, certification, and work;
3. to create standards of entry to the profession, examinations and educational requirements, that are professionally relevant and intellectually defensible;
4. to connect institutions to schools; and
5. to make schools better places for teachers to work, and to learn.

To accomplish these goals, the Holmes Group report calls for radical changes in teacher education and

the profession of teaching. First, they call for an extended program for the preparation of teachers. This extended program would begin with a bachelors degree in arts and sciences, include a graduate level professional program in education, and culminate with an internship in a school setting. Thus, Holmes Group members intend to eliminate the bachelors degree in education. This is to be coupled with the improvement of undergraduate instruction. Thus, potential teachers will study the subjects they will teach with exemplary instructors who understand the pedagogy of their subjects. It also suggests a more in-depth study of subjects taught by prospective elementary teachers and more study of pedagogy by prospective secondary teachers.

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The Holmes Group recommends differentiating the roles for the profession of teaching. They propose three tiers of teachers:

- "instructors" who would be baccalaureate graduates without professional preparation permitted to teach under supervision for less than five years if they have a sound general education, a strong major or minor in the teaching field and the basics of pedagogy;
- "professionals" who would have completed the full six-year program and be recommended for certification; and
- "career professionals" who would engage in study beyond the master's degree, most likely leading to the doctorate, and be responsible for the supervision of the "instructors."

The Holmes Group calls for stronger evaluation of teacher candidates for entry, retention, and licensing. This is to be complemented with an active research program with stepped-up research on teaching, teacher education and the learning of academic subjects. This will include the utilization of expert K-12 teachers in the education of teachers and in the conduct of research.

Universities and schools will have a new, cooperative relationship. The Holmes Group suggests establishing "professional development schools" analogous to teaching hospitals. Clinical experiences in schools for prospective teachers will be enhanced through new university - school partnerships.

### Carnegie Forum

The Carnegie Forum on Education and the Economy was established in January, 1985. The intent was to draw attention to the link between economic growth and the education of people who contribute to the economic growth, and to help develop policies to meet future economic needs. A Task Force on Teaching as a Profession was established in March 1985. This Task Force produced its report *A Nation Prepared: Teachers for the 21st Century* in May 1986.

The Carnegie Forum suggests a relationship between the future well being of our economy and the strength of our educational programs and policies. They conclude that to achieve future economic well being the United States must have stronger, more demanding educational standards than ever before attempted. To accomplish this goal, the Carnegie Forum concludes that the United States must "create" a teaching profession "equal to the task."

In order to create a teaching profession equal to the task, the Carnegie Forum proposes the following:

- The creation of a National Board for Professional Teaching Standards to establish high standards for what teachers need to know and be able to do, and to certify teachers who meet these standards.
- Restructuring schools to provide a professional environment for teaching, freeing teachers to decide how best to meet state and local goals for children while holding them accountable for student progress.
- Restructuring the teaching force — introducing a new category of "Lead Teachers" with proven ability to provide active leadership in the redesign

of schools and in helping colleagues uphold high standards of learning and teaching.

- Requiring a bachelors degree in arts and sciences as a prerequisite for the professional study of teaching.
- Developing a new professional curriculum in graduate schools of education leading to a Master in Teaching degree.
- Mobilizing the nation's resources to prepare minority youngsters for teaching careers.
- Incentives for teachers to school-wide student performance, and provide schools with the technology, services and staff essential to teacher productivity.
- Making teachers' salaries and career opportunities competitive with those in other professions.

## Implications for Rural Schools

Teacher Education Reform will have several implications, both positive and negative, for rural and small schools. Overall, strategies to improve the effectiveness of teachers will work to improve education in rural and small schools. For example, factors such as recruiting academically talented people, particularly minorities, to become teachers and a stronger teaching credential along with a post-poned certification until the completion of expanded supervised teaching and coursework should improve the the quality of teachers for all schools. Improved clinical experiences with the active involvement of practitioners in teacher preparation and multiple assessments of teacher candidates before entering professional programs, during preparation, and before initial certification will also improve quality. There are several other areas of potential positive impact, too numerous to list for the purpose of this article.

While there are several positive impacts, the teacher education reform movement may not have considered the problems of rural and small schools. The report authors seem to have focused their recommendations on teachers for schools that sound very suburban or urban. Raywid (1987) expressed concern about the subject matter preparation of teachers for "specialty" or "magnet" schools as proposed by the Holmes Group. She suggested that these types of schools "necessitates a *different* kind of subject matter

preparation." While Raywid did not specifically identify rural schools, rural schools could be considered a "specialty" school with unique characteristics.

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Whether the reform of teacher education will bypass the issues of rural America has not yet been determined. However, the following questions are presented for consideration by teacher education reformers.

- Will rural or small schools have a part to play in the "professional development schools" and new partnerships with universities?
- Will teacher education programs be able to attract students into 5-6 year programs given teachers' salaries? Will this intensify the shortage of teachers willing to accept employment in rural and small schools?
- Will rural school administrators and school boards employ and/or pay higher salaries to teachers prepared through 5-6 year programs?
- Will the emphasis on indepth knowledge of the subject area for teachers create problems for rural and small schools that need teachers who are certified in several teaching areas?
- Will prospective teachers be provided clinical experiences in rural and small school settings?
- Will the research program on teaching and teacher education include research on the problems and concerns of rural schools?

It is too early to determine the actual impacts that the teacher education reform movement will have on

the preparation of teachers for rural and small schools. By reviewing the teacher education reform reports it is apparent that the unique characteristics of rural and small schools have not yet been given full consideration. However, the greatest benefit for rural schools may come from the debate that has come as a result of the teacher education reform reports.

The reform agenda is *not* cast in concrete. Zumwalt (1987) regards *Tomorrow's Teachers* as "a starting point for intra- and interuniversity dialogue and development." Thus, the opportunity for issues concerning teacher preparation for rural schools to be heard and considered comes with this reform movement. Rural educators need to become intimately involved in the debate and shaping the reforms to meet the needs of rural and small schools.

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*Dr. Erekson is an Associate Professor in the Department of Vocational and Technical Education, University of Illinois at Urbana-Champaign, Illinois.*

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# Improving Native American Vocational Education with Advisory Committees

Robert E. Croker  
Brigham Young University-Hawaii Campus

Rural communities are often removed from the mainstream of what might be considered "typical" for American education, if in fact there is "typical" education in America. While there are several issues and concerns for rural education, this article addresses issues of community involvement and vocational education in one such non-typical rural setting, that of the Native American.

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. . . education has always been, and continues to be, a principal concern of Native American people.

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Special attention has been given to many unique groups in education. Gifted, underachievers, handicapped, disadvantaged, among others, are identified as unique, and often have special programs designed to meet their "special" needs. Reservation life is unique to the Native American and, in most cases, in a rural setting. Thus, the problems of Native American education are often compounded by the problems of education in rural settings.

## Problems in Indian Education

Since its inception, the Bureau of Indian Affairs (BIA) has been responsible for education of Native American. The BIA administrators were predominantly non-Indian until Robert L. Bennet became the first Native American appointed by the Johnson administration to head the BIA. It is interesting to note that traditionally, Native Americans have not been

included in the administration of Indian Affairs. According to Cahn and Hearne (1972), on the Navajo reservation

...public schools which (Navajo) reservation-wide enroll over 80% Navajo students are in every instance controlled by school boards whose membership is over 50% non-Indian.

In addition to the lack of Native Americans involved in the education programs on reservations, the current educational prospect for Native Americans is not a pleasant one. According to Chiago (1981).

Approximately 16,000 Indian children are not in school. Dropout rates of Indian children are twice the National average. The level of formal education is half the National average. Indian children, more than any other group, believe themselves to be below average in intelligence. Indian children in the twelfth grade have the poorest self concept of all minority groups tested ... Indian unemployment is ten times the national average.

Many criticisms have been raised, especially by Native Americans, regarding education provided to them by the dominant culture. These criticisms exist whether the school is run by the BIA or the public. Chiago (1981) implied that education is a tool through which the dominant culture changes Native American culture. Tippeconnic (1981) indicated that where training takes place as part of education, there is little or no need for training.

To properly address the topic of Native American educational needs, a general statement of issues pertaining to Native American education would be in order. According to Kirkness (1976), Delacruz (1978), and Tippeconnic (1981), several pressing needs have been identified by Native American leaders in education, such as:

- Greater Native American control of their educational process;
- Utilization of the Native American community and its people as resources to education;
- Use of program advisement personnel from the community, including parents, to identify needed programs;
- Employment of educational staff sensitive to Indian education needs;
- Curriculum development addressing self-image improvement among Native Americans as well as in-service needs for staff;
- Development and use of bilingual programs;
- Development and application of minimum educational standards for BIA operated schools; as well as
- Numerous fiscal concerns.

It seems evident that education has always been, and continues to be, a principal concern of Native American people, and that the imposition of non-Indian processes and standards is very often tantamount to failure of the educational process (Chiago, 1981; Tippeconnic, 1981). Statistics show Indians, as a race, function far below the norm. Yet in the words of Chiago (1981), "studies using nonverbal tests have indicated that Indian children are at least as intelligent as American European children." Brod's (1979) conclusions indicate that education is desired and that high percentages of students believe education would likely improve the Indian way of life.

## Vocational Education

When discussing vocational education, preparation for various traditional vocations (e.g. carpenter, auto mechanic, welder, etc.) is the typical focus. Of course, vocational course offerings should reflect needs of the community. Campbell-Thrane (1979) found that a real need exists among Native Americans to increase participation and involvement of community members in all aspects of educational planning and development to adjust education to their unique needs — especially in vocational education programs.

One issue that has been consistently raised (Kirkness, 1976; Delacruz, 1978; Tippeconnic, 1981) is the

need for Native American input into their own education to establish relevance to Native American needs. Vocational programs for Native Americans must address those unique needs. Whatever their natural resources (forests, fish, energy reserves, tourism), Native American vocational programs need to address how those resources can be used and maximized to meet the needs of Native Americans living and working on reservations.

A concern of Native Americans is the need to improve occupational awareness among their young. In an effort to improve occupational awareness, Sabota (1978) developed a slide series depicting successfully employed Native Americans. He reported that this method was very positive. "Every group who viewed the slides reacted favorably. Slides illustrating Indians in successful situations created a positive outlook in the minds of Native American students."

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**Native Americans are seeking more involvement in the education of their children to provide an education that is germane.**

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Drop-out rates are also of major concern in Native American education. According to Ross (1976), "Too many fail to see meaningful relationships between what they are asked to learn in school and what they will do once they are out of school. Too many leave the educational system with a lack of self-understanding."

## Advisory Committees

Native Americans are seeking more involvement in the education of their children to provide an education that is germane. With the alarming drop-out rates of Indian youth from school, and the need for positive role models, what can be done? One suggestion is to look at a tool that has been around in education for many years, the vocational advisory committee.

Native Americans have long desired to have increased involvement in their own educational processes. Federal vocational education legislation pro-



vides for advisory committee members representing the community's total ethnic background. As such, Native Americans could serve to advise programs in which their children are being educated.

Many Native Americans are in need of a unique type of educational program because of their isolation from the mainstream culture in the United States. In vocational education many traditional occupational training programs are not suited for Native Americans. As education frequently addresses the needs of special educational groups, so should it address the special needs of Native Americans.

Career information could also assist in meeting those needs. Many Native American students have indicated that they would like more exposure to career education. Positive role models are necessary to convince Native American youth that they could survive in a non-Indian environment, as all Native Americans do not live on reservations nor are all those that do likely to stay on reservations. Native American students tend to view role model occupational information very positively.

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**Native Americans have always placed strong emphasis on vocational education . . . all treaties which Native Americans have made with the United States Government have contained provisions for vocational education.**

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The presence of Native Americans on vocational advisory committees serve Native American students in the following ways:

- Committee members who understand the unique needs of Native American students;
- Community interaction in vocational programming so that it addresses community needs;
- Career needs presented which are more likely to be a benefit to the Native American population;
- Community members who can help students locate employment; and

- Role models to help develop an awareness of the worth of Native Americans.

Interestingly, Native Americans have always placed strong emphasis on vocational education. According to Delacruz (1978), all treaties which Native Americans have made with the United States Government have contained provisions for vocational education. Brod (1979) determined that 83.1% of Choctaw Indian students believed that education would improve young people; 72.8% felt that their tribe needed a vocational training center; and 73.8% felt their schools should provide job and career information.

In areas of vocational education, committees composed of community leaders, industrial/business leaders, labor leaders, educators, and parents are appropriate groups to gather on a regular basis to advise on vocational programming. Program advising leads to vocational programs utilizing training experiences similar to those encountered in actual work settings.

Native Americans needs have been defined and serious efforts have been made to meet them. Many of those needs have been satisfied through local citizen interaction with education. Citizen interaction needs to continue if vocational education is to serve the unique needs of Native Americans in rural settings.

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*Dr. Croker is an Assistant Professor and Industrial Education Coordinator, Brigham Young University-Hawaii Campus, Laie, Hawaii.*

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# Entrepreneurship for Rural Youth in Developing Countries

Robert E. Nelson  
University of Illinois at Urbana-Champaign

Vocational education programs in most developing countries seem to prepare their pupils, both technically and psychologically, for paid employment either in the modern sector or in government. However, it is generally believed that these two sectors together cannot absorb more than twenty percent of new entrants to the total labor force in most developing countries. The magnitude of unemployed youth, especially in rural areas, has inspired a number of developing countries to introduce training programs which prepare young people for self-employment.

## Entrepreneurship Development

Vocational training programs should include instruction to develop proper attitudes towards work, including attitudes towards self-employment and entrepreneurship. Self-employment and entrepreneurship concepts should complement instruction in vocational skills. Many graduates of vocational training programs have the potential to become self-employed if they had the knowledge and understanding of what it takes to own and operate an enterprise. Having an understanding of business and of entrepreneurship will help rural youth make informed decisions regarding their potential for becoming self-employed. Training programs would be more practical because they would not only focus on vocational skills but would also focus on the business skills and entrepreneurial attitudes which are necessary whether a person is seeking employment or seeking to become self-employed.

Emphasis on entrepreneurship development in rural areas should help to increase the supply of manpower capable of initiating new enterprises. This emphasis would focus on developing new, first-time young entrepreneurs.

Entrepreneurship education might be considered as any organized learning activity which is designed to help people prepare for small enterprise ownership, or to sustain themselves once they have started a new

enterprise. Entrepreneurship education is important because it is primarily through the development of viable small enterprises that job creation takes place in a country. New enterprises need to be initiated and weak enterprises need to be strengthened. Stable enterprises also need to be assisted in developing plans for expansion and growth.

Technical ability, managerial ability and entrepreneurial ability are three components essential for successful operation of an enterprise. Technical and managerial ability are skills which can be taught through vocational and managerial training courses. Entrepreneurial ability, however, is a behavior and can be developed in those individuals who want to use their entrepreneurial characteristics and traits in business.

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Entrepreneurship development programs try to achieve the following broad objectives:

- Stimulation of self-employment and small enterprise through entrepreneurship development of youth;
- Promote active youth participation in national development efforts, especially in rural areas, and
- Channel the benefits of economic policies toward the small enterprise sector to a wider section of the population by implementing entrepreneurial

activities.

## Rural Small Enterprise Development

In the past, the focus of small enterprise development in many countries has been primarily on urban/metropolitan areas. In many cases, these major cities account for a high percentage of the total number of formal small enterprise establishments within a country. For example, over 50 percent of all manufacturing activities in the Philippines was concentrated in the Manila area. Similar conditions can be found in other developing countries. This situation indicates that the potential for small enterprise development in rural areas is virtually untapped.

Current conditions in many developing countries necessitate that small enterprise development programs need to look beyond the capital cities and major towns for activities which will be beneficial to the spread and development of small firms throughout a country. In many developing countries, the rural population may account for up to 90 percent of the total population. Attempts to promote small enterprise development through vocational education must consider the needs of the large majority of youth who live in the rural areas.

Varying constraints have been implemented in major cities (such as Manila, Bombay, and Seoul) to discourage establishment of new small industrial enterprises or the growth of existing firms in urban areas. Reasons for such restrictive measures include: (a) need to reduce urban poverty and congestion, (b) need to lessen the movement to urban areas of rural young people seeking jobs, and (c) encouragement of small enterprise development in the less populated areas of a country. Such restrictive measures regarding small firms can only be effective if policies and programs are created to facilitate development in nonurban areas.

The small enterprise sector can have an important role in a rural development program which attempts to alleviate poverty by satisfying basic needs of the rural population and by promoting a more equitable distribution of income and employment opportunities throughout a country. Small enterprises are by definition labor intensive and can be efficiently established on a decentralized basis in rural areas. In addition to the lack of entrepreneurial skills, however, potential rural entrepreneurs may lack production skills, capital, and expertise in costing, accounting, marketing and management.

Most government institutions which are designed to promote small enterprise development are usually located in the major metropolitan areas of a country. However, if a decentralized approach to small enterprise development is desired, activities must be implemented at the regional and district levels. Studies have indicated that the promotion of small enterprise programs in rural areas has not been successful for the following reasons:

- Infrastructure supporting rural development has not been adequately developed. Several examples of this problem include the low level of electrification and the lack of good roads and transportation in rural areas of most developing countries;
- Lack of access to training, management assistance, financial resources, and facilitating institutions in rural areas; and
- Development of improper sites to serve as rural growth centers or as rural workshop clusters (in some instances, selection has been based on political considerations rather than on the resources available within a particular region).

Increasing the number of youth in small enterprises in rural areas involves more than just shifting existing types of services which are available in urban areas. A comprehensive needs assessment should be conducted for each rural area. The following factors should be taken into account when planning to develop financial and nonfinancial services for small firms in rural areas:

- One rural area should be selected to develop a training program on an experimental basis. This one rural area would serve as a model program, and procedures used in successfully implementing the training program could be used in initiating similar activities in other rural areas;
- Small enterprise development for youth in rural areas should be based on local demands for agricultural and nonagricultural inputs. Small firms should also be developed which provide consumption goods for a specific rural area;
- A survey should be conducted to determine the infrastructural needs in rural areas which are unique and essential for the involvement of youth in small enterprise development; and

- A major effort should be made to identify and encourage all government agencies within a rural area to coordinate their services to develop a successful small enterprise development program for youth.

Several important guidelines need to be followed if regional organizations are to be actively involved in the development process. First, there must be a commitment at the highest political levels within the country as well as at the various regional and district levels. Support must be given not only for policies that relate to small enterprise training for youth but also for action necessary to translate these policies into viable small enterprise training programs. Institutional arrangements must be coordinated and promoted at the regional level. This is necessary to create positive environment which will help to facilitate implementation of new ideas and preparation of young entrepreneurs within a given region. Lastly, there must be an integrated approach to all inputs within a given region.

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**It is in the best interests of institutions promoting small enterprise training for youth to look at the possibilities for decentralizing their activities in order to increase the effectiveness of their programs.**

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Because of differences in growth among rural areas of a country, regional development will be greatly emphasized in the future. It is in the best interests of institutions promoting small enterprise training for youth to look at the possibilities for decentralizing their activities in order to increase the effectiveness of their programs.

### **Entrepreneurship Development Programs**

A brief description of the selected entrepreneurship development programs which have implications for youth is given below. Aspects of the program descrip-

tions have been extracted from information supplied to the International Labor Organization (ILO).

*Xavier Institute of Social Services, Ranchi, India.* This institute has been training village entrepreneurs from rural areas since 1974. They offer a six month program to tribals with minimal literacy and numeracy skills. The program involves: technical training by placement with local tradesmen, motivation training, management + training, project preparation, follow-up and counseling.

*Madhya Pradesh Consultancy Organization Ltd. India.* This technical and management consultancy organization is promoted by all-India financial institutions and state corporations. It undertakes assignments for project planning, detailed engineering, market surveys, management services and entrepreneurship development programs. The entrepreneurship development programs focus on four target groups: (a) technical graduates, (b) unemployed graduates (general category), (c) scheduled casts, tribals and others, and (d) women.

Of 1,122 trainees in 45 courses, 380 businesses have been started and the overall success rate was 34%. If the 295 trainees whose completion has been too recent to evaluate in this manner, the overall success rate was approximately 45%. It is worth noting that in the 23 courses conducted for tribals and scheduled castes, 57% of those trained have started units so far.

*Vocational Training Institute, Kampala, Uganda.* The vocational Training Institute is a unit of the Directorate of Industrial Training of the Ministry of Labor of Uganda. In cooperation with the International Labor Office, a pilot program of accelerated training for unemployed secondary school graduates was designed and tested. The program of technical, management and entrepreneurship training was designed to encourage self-employment and workshop creation in services needed for reconstruction and rehabilitation of the economy in the rural areas.

Of the first 56 trainees, an independent consultant was able to interview 15 graduates three months after the completion of their program. Of these 15 graduates, 12 had started a small enterprise and on average had hired one other individual. Overall, it was estimated that 50% of the trainees had or would become self-employed.

*Calcutta "Y" Self-Employment Center, India.* This center began as a vocational program to provide self-employment skills for educated youth. However, it has developed innovative approaches to help people establish their own businesses, especially rural dwellers who

are involved in very small economic activities. Its target group is youth between 18 and 30 years of age who are currently without regular employment (approximately 50% are high school graduates). Established in 1971, the program had graduated over 500 men and women and 373 businesses had been established. At first, the failure rate of new businesses was at 50% but is now down to 25%.

*Bangladesh Management Development Center (BMDC), Self-Employment of Educated Unemployed Youth Program, Dacca, Bangladesh.* The objective of this program was to create employment opportunities for educated unemployed youth through their development as potential entrepreneurs. Of the first 306 youths trained, 300 project proposals had been submitted and 228 of them have been duly approved by the program's Project Appraisal Committee. From a survey conducted on the overall effectiveness of the program and from the response of the entrepreneurs trained under the program and settled in business, it was found that 177 youths are doing well in their business and may be considered successful entrepreneurs.

One of the unique features of this program is that it attempts to measure the contribution of each program component to the overall results. Measures are derived to separately identify the effectiveness of selection, training, credit and the overall program. The failure to differentiate and measure the results of each component of the program design is a significant handicap to deriving knowledge on which one can make improvements in the results. Thus, the BMDC program contributes to a better understanding of how to proceed in making these improvements.

Evaluation of the program is broken down into the following components: The efficiency of the selection and training under the program  $(228/306) \times 100 = 74.5\%$  and the efficiency of the banking sector in establishing the trained entrepreneurs in businesses was  $(177/228) \times 100 = 77.7\%$ . The efficiency of the total program was  $(177/306) \times 100 = 59\%$ . Total employment created, including the entrepreneurs, was 900.

*Entrepreneurship Development Institute of India (EDI-I) Gujarat, India.* This Institute has evolved from the Center for Entrepreneurship Development in Gujarat. Since 1970, it (and its antecedent organizations) has conducted 312 entrepreneurship development programs and involved 7,710 trainees. From these trainees, some 2,913 businesses have been created and another 1,438 are expected to be formed. The success of the program rate varies from 38% to 56%, depending on how restrictive is one's definition

of success. The success rate of the more recent program is even higher. The programs conducted by the EDI-I and its antecedent organizations represent the longest standing, largest scale, most comprehensive, organized entrepreneur development effort of any country.

*Hawaii Entrepreneurship Training and Developing Institute (Hetadi), Honolulu, Hawaii.* Hetadi was founded as a nonprofit corporation in the State of Hawaii in 1977. The company was formed as an outgrowth of the U.S. State Department's East-West Center Program on International Entrepreneurship Development. The goal of Hetadi is to promote entrepreneurship development in the United States and overseas through training and consulting programs.

During the last seven years, Hetadi has conducted entrepreneurship training and provided technical assistance and other management services to more than 2,000 small enterprises and potential entrepreneurs in six countries. The majority of the clients are minority ethnic groups. An independent evaluation of a sample of 105 clients from one of their programs found that 55% had started enterprises as opposed to only 10% from those who applied but were not accepted.

*The Entrepreneurship Institute, Columbus, Ohio.* The Entrepreneurship Institute is a nonprofit corporation specializing in the development of strategies designed to create jobs by assisting entrepreneurs to start or expand their firms. The Entrepreneurship Institute programs assist entrepreneurs through the direct involvement and financial support of the leadership of the communities within which the programs are conducted.

The Institute organizes a directorship of leading bankers, lawyers, accountants, entrepreneurs and other entrepreneurial support resources with which it shares responsibility for decision making and program planning. As a high level network of support with contacts in the entrepreneurial community, this group is asked to assume a leadership role in creating new enterprises, helping to expand young firms, and providing jobs in the area.

The program is directed in a way that addresses a significant handicap of government run programs, which is a lack of contact and involvement of the business community as a means of localizing a national effort. The success of this program is measured on the basis of a limited sample of programs conducted and participants contacted. An independent consulting firm was able to reach only 57% of past registrants. From this sample, 96 companies had been formed, 117

were expanded and 1,087 new jobs had been created. The salient features of this program are: (a) building of entrepreneurial support network, (b) active involvement of the leadership of the local community, and (c) private sector initiatives.

*New Enterprise Program, Manpower Services Commission, United Kingdom.* As part of the Government's overall commitment to small enterprise development, the Manpower Services Commission introduced a number of training schemes whose purpose was to aid the redundant or unemployed workers to establish enterprises on their own account.

Normally, participants of the New Enterprise Program must be unemployed at the time they begin the course. Each course lasts sixteen weeks. The first four weeks usually consists of a residential period at a business school and involves class and tutorial work on topics such as marketing and finance. The remaining twelve weeks are nonresidential and are spent in implementing a business proposal. Enough programs, with 60 to 70 percent of their trainees successfully starting new enterprises, exist to indicate that entrepreneurs can be trained. Programs, albeit with a lower success rate, have also improved enterprise formation among disadvantaged people and those with nonbusiness traditions.

### Content for Self-Employment Activities

The content of self-employment activities within a two-year vocational education program might include: (a) basic business skills, (b) self-employment skills, and (c) entrepreneurship skills.

*Basic Business Skills.* Activities during the first year are designed to create an awareness of business among youth and provision of basic knowledge and information necessary for operating a small enterprise. Identification of youth with comparatively high entrepreneurial potential for further development should also be an objective.

Approximately 20% of the first year's vocational education program would relate to business topics such as:

- overview of the small business sector
- business math
- managing money
- costing

- principles of work study
- managing stock
- business English and communication
- giving and receiving credit
- industrial safety
- organization of production tasks
- keeping financial records

The specific business skills and content to be taught would be determined by the administrators of the local vocational education program.

*Self-Employment Skills.* During the second year of the program, there would be development of the skills necessary for selecting, starting and managing a small business venture. This phase of the training program should be mainly practical and consist of the following three parts:

- Exposure to a variety of enterprises and business situations;
- Classroom sessions for imparting basic information and knowledge regarding self-employment; and
- Practical exercises regarding the operations of small enterprises.

Approximately 20% of the second year's vocational education program would be related to self-employment skills such as:

- identifying business opportunities
- conducting a market survey
- developing a business plan
- business decision making
- banking services
- business and financial planning
- being entrepreneurial
- finding and keeping customers
- choosing suppliers
- human relations

- providing quality products and services
- employing others
- finding a business location
- seeking business advice
- expanding a business

One of the primary concerns regarding the integration of business skills during the first and second year of the vocational education program is determining strategies and content of teaching these skills.

*Entrepreneurship Skills.* The purpose of entrepreneurship training would be to prepare vocational program graduates as future business owners. The training would be designed for graduates who are highly motivated and express a strong interest in becoming self-employed.

The timing of the training is important. Having just graduated from a two-year vocational program, the students would remain at a centrally located vocational institution so that there would be no interruption in their training. In some cases, students who leave educational institutions are less likely to return. The training might be offered for two months at the institution. The training would be full-time and highly intensive. The training period would be for only two months so that student interest, motivation and participation can be maintained at a high level.

Program officials would be very selective in choosing participants for the entrepreneurship skills training; hopefully the interaction among highly motivated participants would provide mutual reinforcement and support. A common goal of all participants would be to become self-employed at the completion of the two month training period. Participants would be able to learn concepts regarding entrepreneurial behavior in a relatively short period of time which would normally take many years for potential entrepreneurs to learn on their own through experience.

*Suggested Program Contents.* The two-month entrepreneurship skills training might include topics such as the following:

- problem solving and decision making: entrepreneurs make numerous decisions daily. They not only need to know the procedures for solving problems but practical techniques for decision making.

- developing a business plan: the business plan is the documentation an entrepreneur needs in organizing procedures to initiate a business. It is also helpful to have a detailed business plan when applying for a loan. The business plan provides structure and organization to the entrepreneur's ideas.
- human relations: entrepreneurs get things done through other people. Maintaining good personal relations with such groups as customers, suppliers and employees are important to entrepreneurial success. Entrepreneurs act in ways which reflect an understanding of their own and others' needs, values and goals.
- written and oral communication: entrepreneurs must be able to communicate their thoughts both in written and oral form. The more precise entrepreneurs are in communicating, the less likely there will be confusion or misunderstanding.
- creativity and innovation: being creative and innovative will enable entrepreneurs to provide different products or services than their competitors. Entrepreneurs must be able to apply new ideas to business situations.
- planning and goal setting: entrepreneurs who are able to establish goals and develop realistic plans to achieve these goals are more likely to be successful.
- understanding your business potential: understanding personal and business strengths and weaknesses will better prepare a person for being self-employed.
- risk taking: entrepreneurs attempt to gain as much information as possible to reduce their risks. They try to take informed action in situations where uncertainty exists.
- leadership: entrepreneurs need to learn how to be leaders rather than followers. They must be decisive in their decisions and in their actions to implement decisions. Entrepreneurs also must inspire others to action.
- financial strategies: financing is a critical element in starting a new business. Entrepreneurs must not only know the sources of financing, but also be able to develop appropriate strategies to secure financing.



- **conduct market surveys:** market surveys provide feedback to entrepreneurs regarding the business potential for a product or service. This activity is critical in determining the feasibility of a business.

## Vocational Training

Vocational training institutions can do a great deal to promote entrepreneurship and self-employment among youth in rural areas. First, vocational training institutions must realize that they are not the only vehicle for entrepreneurship and self-employment programs, and they must coordinate their work with other agencies and organizations.

An advantage that most vocational training institutions in developing countries have over other agencies involved in entrepreneurship programs is their strong links to employers' and workers' organizations. In getting involved with other institutions in developing entrepreneurship and self-employment programs, vocational training institutions should build on their strength which is occupational and trade skills training. In addition to their regular vocational offerings, special programs should be offered to train selected young people in both a trade skill and entrepreneurial skills.

Current interest of education and training authorities in entrepreneurship and self-employment have to do with the creation of job opportunities for young people graduating or dropping out of schools and vocational training institutions. Training for paid employment does not address fully the problem of mounting unemployment in most developing countries. Authorities dealing with education and training need to broaden the scope of their respective domains beyond the "employee culture" that is prevalent in most developing societies. Creating an entrepreneurial culture should be a primary goal of vocational education.

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*Dr. Nelson is an Associate Professor in the Department of Vocational and Technical Education, University of Illinois at Urbana-Champaign, Illinois.*

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# Strategic Planning in Vocational Education: An Illinois Perspective for Rural and Small Schools

Joseph P. Helbling  
Illinois State Board of Education

Gene L. Roth  
Northern Illinois University

Peter Seidman  
Illinois State Board of Education

Why is planning such a difficult concept to master and implement in a school system? A major reason is that it requires teamwork from the entire administrative structure. Planning requires educational leaders to work toward common goals. Such initiative requires objectivity from administrators and high quality communication.

This article focuses on a management system that has emerged from American management theory in the past two decades – strategic planning – that has implications for effective planning for vocational education in rural settings. Strategic planning is a management system that allows school administrators and other educational personnel to focus clearly on the nature of their business and the services they provide. It differs from traditional long-range planning by stressing potentials for change in the external environment (Morrison, Renfro & Boucher, 1984).

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**Strategic planning is a management system that allows school administrators and other educational personnel to focus clearly on the nature of their business and the services they provide.**

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Within the text of this article, examples of components of strategic planning will be drawn from the Illinois State Board of Education *Policy and Plan for Education for Employment* (1984). This initiative has

garnered a broad base of statewide support from improving access, quality, and efficiency in the state's vocational education program and it has significant implications for improving vocational education in rural settings.

## Components of Strategic Planning

The primary strategic planning tasks are to understand the environment, define organizational goals, make and implement decisions, and evaluate actual performance (Morrison, Renfro & Boucher, 1984). In the area of vocational education, a strategic plan embraces the administrative structure of the local education agency, the "corporate climate," the "competitive market" for delivering services, and the leadership styles of its policy makers. Strategic planning provides the framework for vocational education personnel to align the future of their departments with the global goals of the local education agency (LEA). This type of planning creates a "grand design" for the future.

A keystone for strategic planning is selecting a model appropriate for the scope of work. A strategic planning model requires planners to examine internal and external conditions which may make one future scenario more likely to occur than another. While there are several models for strategic planning, this article describes a four-step model (Hutchins, 1985). These four components are: environmental scan, organizational audit, opportunity analysis, and implementation plan. Each component may be used by planners to collect and analyze specific types of data relevant to the role of vocational education in the long-range goals of the agency. Each of the components of the model are highlighted by examples that have transpired with the Illinois *Policy and Plan for Edu-*

cation for Employment (1984).

## The Environmental Scan

Contemporary strategic planning recognizes that organizations are shaped by outside forces at least as much as by internal ones (Morrison, Renfro & Boucher, 1984). Certainly, many forces are capable of altering the course of education. Planners must examine political, social, and economic trends emerging in the region, state, and nation which may pose threats or opportunities. Trends in these three areas may significantly affect the future role and mission of an LEA, and in turn, the agency's focus on vocational education.

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**Planners must examine political, social, and economic trends emerging in the region, state, and nation which may pose threats or opportunities.**

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Many problems in vocational education in Illinois stemmed from lack of consideration of external forces. Vocational programs were offered because facilities, equipment, and teachers were available; little attention given to labor market demand for specific programs. In rural areas of Illinois, this meant that traditional vocational programs were being perpetuated with little consideration for the local or regional labor market needs.

The Illinois *Policy and Plan for Education for Employment* (1984) requires that local education leaders analyze the labor market and potential demand as a part of planning. This includes three major steps:

1. Formulate a profile of employers in the region;
2. Formulate a profile of the largest and fastest growing occupations in the region; and
3. Utilize employer and occupational profiles to identify occupations with the greatest employment potential.

In addition to labor market information, the Illinois *Policy and Plan for Education for Employment*

(1984) includes an assessment of information on population, student enrollments, census data, and unemployment data. These planning data are gleaned for trends that may point directions for vocational education program growth and expansion. Gathering and analyzing data such as labor market information helps planners assess external forces that may shape the future of vocational education.

Cetron (1985) examined over thirty reports issued by a variety of educational reform commissions and task forces. He identified important issues of technology, changing characteristics of the work force, and the shifting nature of the economy as concerns for schools. These challenges were identical to those identified by the Illinois State Board of Education in its study of education for employment (*Vocational education in Illinois: Annual Report*, 1985). A strategic plan for vocational education must include this type of wide-angled view, or environment scan, that may provide planners to project an accurate scenario for the future of vocational education. This is especially true for rural areas. The rural environment and needs are often much different than those of more heavily populated urban/suburban areas.

## The Organizational Audit

Planners should scrutinize the internal workings of school systems, placing a direct focus on the capabilities of the vocational education department(s). The future directions of operational, financial, and personnel components of schools will create undergirdings for future scenarios for vocational education.

Internal audits should focus on financial solvency (or perhaps enrollment numbers) of the vocational education department, characteristics of vocational personnel, quality and quantity of its programming, administrative efficiency and effectiveness within schools, quality of vocational facilities, commitment to staying abreast with innovations in instructional technology, and the school's capability and willingness to promote vocational education functions in internal and external arenas. Planners should focus on predominate trends which might have significant internal ramifications for vocational education. Educational planners must sense that it is not the school system which mandates its role and mission, but rather the constituency of that agency. Assessing the internal factors from a constituent centered viewpoint will enhance the relevance of vocational programming.

The Illinois *Policy and Plan for Education for Employment* (1984) stresses an organizational audit that profiles existing and potential resources. This profile includes an inventory of students, staff, facilities, and equipment. The administrative plan requests local vocational planners to develop short-term and long-term resource allocation proposals to implement new programs and maintain existing programs (*Program identification, implementation and evaluation*, 1986).

In addition to profiling existing resources, the Illinois *Policy and Plan* requires local planners to collect and compare student interest information with occupations having employment potential. Approximately 160,000 tenth graders were surveyed with an 18-question student interest inventory throughout Illinois in 1985. The instrument identified, in general terms, the types of vocational education programs in which student expressed interest.

The profile of student interest coupled with existing and potential resources provides the framework for the organizational audit. The audit should pinpoint strengths and weaknesses within the delimitations of the educational settings. Through this maze of capabilities, vocational education must align the relative strengths of the school system, and specifically the capacity for providing vocational education, with the constituent centered opportunities of the external environment. This alignment will create critical paths for planning and the most plausible scenarios for vocational education. This has been extremely beneficial in rural settings, where internal resources may be limited.

## The Opportunity Analysis for Change

An analysis of the organizational audit will provide planning parameters for the role and mission of the vocational education department(s). These planning parameters are key ingredients that permit planners to detail the scope of vocational education within an organization. Answers should be sought for these types of questions:

- Is the vocational education department a knowledge production unit?
- A human development institute?
- What will be the most marketable strategy for the future of the vocational education department?

Planning parameters and assumptions about vocational education should receive special attention from top planners in the educational agencies. Global, large-scale planning goals set the stage for specific planning objectives of each of the agency's units. Strategic planning objectives for vocational education should be detailed within the vocational education department(s) and moved up the hierarchical ladder for approval.

At this juncture of the opportunity analysis, the Illinois *Policy and Plan for Education for Employment* (1984) brings together findings from the environmental scan and the organizational audit. A list of potential vocational programs can be developed from the synthesis of the labor market information with student interest data. This list can be locally validated with the assistance of vocational education advisory councils.

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**Vocational education leaders must base their planning decision on quality data — quality data are the best indicators of programs that will meet the needs of tomorrow's workforce.**

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This list of potential vocational education programs must be compared to current offerings in the area. The opportunity analysis for change will result in these findings:

- Programs with considerable need which currently exist;
- Existing programs which do not have a substantiated need; and/or
- Programs with a substantiated need which do not currently exist.

Vocational education leaders must base their planning decision on quality data — quality data are the best indicators of programs that will meet the needs of tomorrow's workforce. Using a comprehensive analysis of quality data is particularly critical for rural

areas, where decisions are often based on local politics and traditions. These factors (politics and tradition) may render vocational education in rural areas obsolete. If vocational educators do not meet this challenge, others will.

Planners in vocational education should recognize the inevitable competition for students. Proprietary schools, the military, apprenticeship programs, and government employment and training programs will be waiting in the wings to offer their services. The purpose of any strategic plan is to increase the market share for one's program of focus. Strategic plans for vocational education should create an advantage for vocational education programs and services when compared to internal and external competitors.

### The Workable Implementation Plan

The preceding three parts of strategic planning set the stage for implementation and management of vocational education within a long-range plan. Outcomes of strategic planning should provide clear direction for the future of vocational education within a school system or a region of a state.

In Illinois, the workable education plan has evolved to the formation of "Education for Employment Systems." State sponsored planning grants were awarded to 61 geographical regions. These regions are alliances of secondary school districts and local community colleges that collectively plan, implement, and evaluate vocational programming on a regional basis. Each region has submitted articulation agreements developed among high schools, area vocational centers, and community colleges. This regional planning and implementation focus is especially well suited to rural settings — providing access to quality programs for students where rural schools individually can not provide a wide array of quality vocational programs.

The intended result from the *Illinois Policy and Plan for Education for Employment* (1984) is a drastic revitalization of education for employment programs. Local initiative, cooperative sharing, and better planning are keys to this new initiative (*How do we meet the challenge*, 1986). Over the next few years, Education for Employment Systems in Illinois will be involved in extensive staff development and curriculum revitalization, as well as articulation and collaboration with the private sector. The *Illinois Policy and Plan for Education for Employment* (1984) is a workable implementation plan that is securing a pivotal role for vocational education in the growth and devel-

opment of schools of the future in Illinois.

### Creating a Future

Status quo has become increasingly difficult to maintain in vocational education, let alone the pursuit of excellence. A well conceived strategic plan engages the support of business and industry, local communities, parents, teachers, and students in the common goal of excellence in education. A broad base of support has occurred in the implementation of the *Illinois Policy and Plan for Education for Employment* (1984). Through this effort, a future role for vocational education has been depicted within the scheme of the purposes of schooling in Illinois. This systematic planning is helping vocational educators in Illinois cope with the uncertainty, impending change, and complex interrelationships that await the schools of the future.

Rural schools can benefit from a well conceived and implemented strategic plan for vocational education. Strategic plans portray how vocational education will play a cost-effective and productive role in helping a school or consortium of school districts maintain a competitive edge in the marketplace. Such plans should delineate improvements in access to, and the quality and efficiency of vocational education. Once the plan has been developed in a well-conceived, systematic fashion, vocational educators must strive to ensure that the plan is used. A well researched and documented plan is a failure if it does not cause action to occur.

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*Dr. Helbling and Dr. Seidman are Contract Administrators in the Program Improvement Unit of the Department of Adult, Vocational and Technical Education, Illinois State Board of Education, Springfield, Illinois. Dr. Roth the Coordinator for the Office for Vocational, Technical and Career Education, Northern Illinois University, DeKalb, Illinois.*

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For Further Information Contact:

Joseph R. Ellis  
Department of Learning, Development &  
Special Education  
Northern Illinois University  
DeKalb, Illinois 60115  
Phone 815-753-8445

**Thresholds in Education Foundation**  
Box 771  
DeKalb, Illinois 60115

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