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ABSTRACT

The Cooperative Extension System (CES) is a national model which demonstrates the cooperation, collaboration, and partnering among/between local community resources. It is a publicly funded, nonformal, lifelong educational system designed as a partnership between the U.S. Department of Agriculture (USDA) and the land-grant universities. The functions of each of the system's components are outlined. The CES's strategic planning effort, "Framing the Future: Strategic Framework for a System of Partnership," advocates a balance between institutional autonomy and system-wide leadership. CES core programs support the community-based issue concept and represent CES's major educational efforts. Connectivity and access are discussed in an examination of the National Information Infrastructure (NII), distance learning platforms, and the role of County Extension leadership. Several programs offer opportunities for collaboration and partnerships within the community provided by CES. (Contains nine references.) (MAS)

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THE COOPERATIVE EXTENSION SYSTEM: A FACILITATOR of ACCESS
for COMMUNITY-BASED EDUCATION

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INTRODUCTION

The information revolution challenges the way we school the population--youngsters and adults alike. It challenges what people need to learn, when, and how; it offers up new ways to learn as well as new ways to educate; and it empowers new people and new institutions to be interested in doing some of the education work long expected only of formal institutions such as schools and colleges.

Mecklenburger, 1994

Situation Statement

Joel Barker (1992), in his book FUTURE EDGE, suggests that there are three keys to the future for any organization that wants to participate in the 21st century--excellence, innovation, and anticipation. Excellence is described as the basis of the 21st century, innovation is the way to gain a competitive edge, and anticipation provides the information that allows the

organization to be in the right place at the right time.

"Anticipation" further allows the organization to predict customer needs and innovate and produce high quality products or services required.

As educational service providers, we strive to demonstrate excellence and innovation. However, a key factor impacting our ability to be "at the right place at the right time" is the technological future, and the emphasis on a national structure for information access.

Recognizing that we are participants in the Information Age, there is little debate that our world is changing. In the past, our goal has been to distribute information to learners or clients; however, the technological advances of the 20th century set the stage for a key paradigm shift, from distributing information to providing access to information. For example, only weeks ago, for the first time any person with a computer, a modem, and access to the Internet's World Wide Web could contact a space shuttle circling the Earth. That meant 20 million or more computer users could have crowded aboard the shuttle Endeavour. Normally, there is only room for eight people in a shuttle, but the first 11 hours after Endeavour's launch on March 2, 1995, some 20,000 people boarded the orbiter via their

computers. The new service allowed a "virtual reality tour" with an equal opportunity to share the excitement of the exploration.

Today's topic is about change, about paradigm shifts in thought and action, about being catalysts for change in the organizations and institutions in which we work, of doing things differently. It is about the "change drivers" influencing the future, those powerful events such as the maturing of America, the Information Era, economic restructuring, the Mosaic Society, global inter-connectedness. And most important, it is about learning, about the impact of information access on a society that believes in the empowerment of citizens. It is about designing a framework for action that empowers citizens, a framework that is flexible, dynamic, risky, nonhierarchical, inclusive, that honors the individuality of all participants, is future-oriented, ...radically different from anything we've ever known.

This framework will provide the platform for the 21st century learner emphasizing shifts in thinking, including a recognition that learning is a lifelong necessity. This framework will depend on strong leadership, on leaders and entrepreneurs who can build and partner collaboratively; it will require flexibility in course and program delivery that is

"customer driven". Increased emphasis will be placed on providing education to the work site and the home.

Let me reiterate; society is moving from an educational dissemination model to one of access based on customer-driven needs. This access must be designed for ease and use of application. This shift represents a move in learning from teacher-centered to learner-centered, and from organization-government- and institutional needs to a focus on community-centered needs. In this context, the learner and community takes greater responsibility for accessing the information and/or education with the role of the teacher/educator moving to one of facilitator and/or broker. As Dr. Chere Gibson (1992) so aptly put it, the teacher/educator moves from "the sage on the stage to a guide on the side".

Another factor impacting the "context" of learning in the 21st century is the expectation that education will begin to be organized around service. For example, technology-enabled learning is about to rise exponentially; it will be the norm in 2001! University boundaries will dissolve with some proposing the classroom paradigm will reverse. Rather than one teacher/guide per 10-20 students, there will be one student per 10-20 experts. Ubiquitous networks and universal access will

make this possible. In addition, we are also talking about "just-in-time learning" and the return of apprenticeships.

Trends Underlying Lifelong Learning in the Technological Future

What are the trends supporting this context of the technological future and the move from distribution to access, and the change in role for the teacher/educator in terms of lifelong learning? Certainly the demographic shifts, economic crises leading to job retraining, societal diversity, changes in our social structure, personal questions of one's worth and self-esteem, and the need for the human interaction and confirmation will impact the learner of the 21st century. For example, part-time students are the fastest growing population in higher education; at the same time, composition of the U.S. civilian labor force will change dramatically by the year 2005, although the number of new entrants will be insufficient for the needs of the economy. More Americans are college-educated while continuing education provides increased economic security for adults as they retrain. Virtually every American home has access to some form of instructional technology, i.e., audio, video, data (Lifelong Learning Trends, 1994).

At the same time, the urbanization of America is increasing as is the access to resources within the urban area.. This urban concentration of resources has significant impact on rural America as off-campus learning centers are developed to accommodate the lifelong learning needs of rural areas not linked to urban resources. In addition, state systems are increasing to meet the needs of learners "at a distance" with new approaches in the design and delivery of educational offerings.

Rural America

Rural America is a prime recipient of efforts targeting access and distance education. One-fifth of our population live on 83 percent of our land, what we call rural America. American agriculture makes up over 15 percent of our gross domestic product and generates \$1 trillion in economic activity every year. One of six working men and women owe their jobs to the food and fiber economy, although 65 million Americans live and work in communities that, on average, are more isolated, have higher poverty rates, and lower income levels than urban communities (Rominger, 1995).

The telecommunications network and access to information will provide lifelong education opportunities and be key factors

in rural America's resiliency. An example of the application of technology to enable rural community access can be noted in the recent participation by Marshall County, Indiana in a project called "Access Indiana." The goal is to make local information from government, libraries, schools, and business available locally in an electronic format. The plans for a community Home Page sponsored by the Marshall County Extension Office will facilitate this connectivity. Increasing numbers of educational service providers share the vision of access to information and education any time and any place, and to a quality education and/or training tailored to their individual learning and workplace needs. Accomplishing this vision requires new environments for lifelong learning that use technology to support new models of learning and teaching. These models extend beyond the traditional school-age population and the confines of classroom walls to include the home and community (e.g., museums, libraries, County Extension Offices, community centers, and the workplace).

COOPERATIVE EXTENSION SYSTEM

The Cooperative Extension System (CES) is a national model that has been in place over 80 years. CES demonstrates the

cooperation, collaboration, and partnering among/between local community resources. The locus-of-control for community access to information and education is based on shared leadership, resources, and capabilities within the community, with the expected outcome capacity building within the community to improve quality of life. This model represents a publicly funded, nonformal, lifelong educational system designed as a partnership between the U.S. Department of Agriculture (USDA) and the Land-grant universities, authorized by the Federal Morrill Acts of 1862 and 1890. State legislation enabled local governments or organized groups in the nation's counties to become the third legal partner in this endeavor.

CES serves as the local link to our nation's vast Land-grant university system. In a practical sense, the System links the education and research resources and activities of 74 land-grant institutions, 3,150 counties, and (USDA). CES includes 32,000 employees and 2.8 million volunteers. The institutions include the Land-grant universities; institutions of the territories (American Samoa, the District of Columbia, Guam, Micronesia, Northern Marianas, Puerto Rico, and the Virgin Islands); and Tuskegee University.

The partners in CES are interdependent, yet each has

considerable autonomy in funding, staffing, and programming.

Each component partner performs distinctive functions essential to operation of the total system described as follows:

- * Cooperative State Research, Education, & Extension Service: represents the Federal partnership and provides national leadership in arriving at national objectives and priorities in addition to performing administrative, coordination, and accountability functions.
- * State Land-Grant Universities: serve as the coordinators of Cooperative Extension in all states working with both the Federal and local partners; state institutions have responsibility for initiation, implementation, and evaluation of programs and for cooperation with the Federal partner in national program development. They are also responsible for securing adequate state and county funding and developing budgets for the expenditure of funds received from all partners.
- * Local Partner: ensures that Cooperative Extension remains relevant to local needs and that the priorities set are those that, in fact, best serve the people;

serve as the link to the university system from the local level in meeting outreach mission of the Land-grant community.
- * Private Sector Partners: fully as important are less formal relationships including its volunteers and private funding sources (national foundations, corporations, and individuals).
- * Research Partner: Extension educational programs are in large part research-based, including production and applied research.

The System is characterized by two-way communication between those who work for Extension and those who utilize the system.

thus ensuring researchers and educators of an early awareness from the local community of problems and issues of concern. In addition, this 'grass roots' approach provides direction for research and education efforts and speeds the application of research-born information and discovery.

The infrastructure represents a tri-partnership between the Federal government, the state, and the local community, the latter being the focus of today's comments. County Extension Offices are conveniently located for most citizens, usually housed in courthouses, post offices, or other government buildings in the county. A variety of communication technologies (electronic networks/Internet, electronic mail/ bulletin boards, satellite communications, audio conferencing, FAX) link the counties with state and Federal counterparts and provide program delivery mechanisms. Professionals nationwide continue to use these technologies to enable targeted audiences access to information and education more efficiently and effectively.

Strategic Planning

Throughout its history, the Cooperative Extension System has engaged in strategic planning with significant change resulting from these efforts. The most recent effort (1995). Framing the

Future: Strategic Framework for a System of Partnerships,

advocates a balance between institutional autonomy and System-wide leadership. It also articulates the Mission, Values, and Vision necessary for the 21st century. The document references environment, leadership, and support enabling Extension to create and respond to opportunities within the community.

The Mission is to enable people to improve their lives and communities through learning partnerships. As a community-based/"grass roots" model, the values of the organization are central to the support of the Mission and Vision of the system, including:

- a) Collaboration--optimize resources and enhance program outcomes through partnerships with others outside CES;
- b) Credibility--build on individual competence, excellence, integrity, and objectivity;
- c) Democracy--believe that people, when given facts they understand, will act not only in their self-interest but also in the interest of society;
- d) Diversity--recognize that all people have dignity and worth; CES draws strength from differences;
- e) Learner-centered, lifelong education--engage and empower learners through the programs offered;
- f) Scholarship--discover, integrate, apply, disseminate, and provide access to knowledge;
- g) Self-reliance--encourage learners to take responsibility

for their decisions and actions; and

h) Teamwork--address complex issues by working in teams of individuals contributing our expertise and ideas to create new and different approaches.

The Vision clearly articulates the recognition of CES as the national lifelong educational network of the Land-grant universities. This network depends on the strong, continuing support of local, state, and federal governments. Expected outcomes of the vision are to:

- a) connect research and knowledge from all parts of the land-grant universities;
- b) provide access to global information in anticipation of and response to emerging issues and critical local needs;
- c) form partnerships;
- d) establish cooperative ventures with private and public institutions and agencies; and
- e) practice scholarship leading to improvement of organization, methods, and outcomes.

Core Program Efforts

The Congressional charge to Cooperative Extension, through the Smith-Lever Act of 1914, as amended, is far ranging and extremely broad. The Act specifies audiences, general subject areas, and educational approaches for this unique public partnership. The System was established as an entity that would modify its programs and outreach in response to such factors as

new knowledge, changes in client needs, and alterations in the socio-economic landscape.

The initial desire to help people help themselves, particularly people in rural areas where educational opportunities were scarce, served as the basis for the Cooperative Extension System. The goal was to transmit/provide access to rural people for Land-grant university and USDA-generated knowledge and experience. In the Food and Agriculture Act of 1977 (Public Act 95-113), amended in 1981, Congress set forth a broadened scope for CES programs.

The new law mandated that states and counties retain flexibility for scope of programs and definitions of Extension clientele. In looking at the function of CES in the Land-grant community, Congress committed administrators and faculty to place lifelong learning on a plane equal to that of research and preparatory education.

Extension's Base Programs support the community-based issue concept and represent the major educational efforts that are central to the mission of most Extension organizations. Base Programs are the dynamic, result-oriented educational efforts that receive significant resources throughout the System from national, state, and county partners. These programs can be

thought of as a foundation, and include:

- * Agriculture,
- * Community Resources and Economic Development,
- * Family Development and Resource Management,
- * 4-H and Youth Development,
- * Leadership and Volunteer Development,
- * Natural Resources and Environmental Management, and
- * Nutrition, Diet, and Health.

In addition, CES has developed strategic plans for Diversity and for Communications, Technology, and Distance Education. These plans provide leadership and support to the Base Programs and the System's capacity to meet the needs of customers.

Originating from the CES Base Programs are National Initiatives that receive special emphasis for a relatively short time. These initiatives represent the System's commitment to respond to important societal problems of broad national concern. Current National Initiatives include:

- * Communities in Economic Transition,
- * Decisions for Health,
- * Food Safety and Quality,
- * Plight of Young Children,
- * Sustainable Agriculture,
- * Waste Management,
- * Water Quality, and
- * Youth at Risk.

National level leadership provided additional emphasis to describe a conceptual framework for moving toward Issues Programming in Extension. In contrast to more traditional

program planning, Issues Programming broadens the field in which Extension can work, extending beyond existing audiences and problems and thus creates a more comprehensive source of program priorities. Programs flow in response to issues, develop in the context of wide public concern, and are evaluated according to their impact on people affected by the issues.

CONNECTIVITY and ACCESS

Central to the learner-centered/community-based model is the emphasis on the connection to research and knowledge, and the community capability to "access information globally". Both facets of the model bring attention to the value of a system-wide communications network, supportive of customer access to information and education. Changes in educational programs reflect new partners, new clients and a new way of doing business with more expansion, sharing of resources and less concern with turf. Funding sources require demonstrated partnerships and collaboration and expected impact to the community and nation, not only to the individual. The emphasis on access supports the current efforts nationally by educational service providers, both profit and nonprofit, and by the current Administration's initiative to build a National Information Infrastructure (NII).

The Clinton/Gore administration's emphasis on community-based education and decision-making, and the NII initiative creates new possibilities for extending time, place, and access to resources. Vice President Gore (1994) further enhances this concept by emphasizing the potential for simultaneous exchange of information creating "networked communities". This developing global information infrastructure provides a platform for a variety of connections allowing for distance learning to take place, including:

- * Multi-media approach to learning,
- * Links with libraries and other community learning sites,
- * Universal access,
- * Partnerships with private sector,
- * Interconnectivity,
- * Links between learners and faculty/educators,
- * Rural development, and
- * Affordability.

Approximately \$2 billion has been requested by the administration for high performance computing and advanced networking in the U.S. between 1994 and 1997. Four specific areas targeted for change are: education, health care, digital libraries, and government information (NII, 1993).

Unfortunately, many communities lack the awareness and local talent to exploit the benefits of the information highway

which, in turn, could provide improved health, education and communications. In addition, key targets of the administration in meeting the informational and educational needs of the community include front-line concerns such as 'one-stop' shopping, interactive communications, and total customer service. For many, the only 'on and off ramps' to the NII are the electronic mail terminals in Cooperative Extension offices. The County also provides the opportunity for one-stop shopping and total customer service.

County Extension leadership continues to be a critical factor in education as communities reach out for opportunities. However, critical to that leadership is the continued interface with all Federal, state, and local government information providers, in addition to the community resources such as public libraries. The development of databases, information servers, and group collaboration depends on partnerships among/between the local community resources, not a top-down, hierarchical approach.

Access to Community-Based Learning

Using the NII as a platform for the future, with a focus on education, libraries, health care, and government access, what are the challenges that communities will be confront? Before

identifying those issues, however, one must have an understanding of the dynamics of a community, and the role of education within that community. Minzey's (1979, pg 14) suggests that community education is "a concept; a means of solving identified human problems through an educative process, incorporating many groups and individuals." From this perspective, a community becomes involved and learns to work together in a process-oriented format to identify problems and seek solutions. Overt activities designed to resolve issues identified by process format become program/or product results to be experienced by the community.

CES is one of many community agencies focused on helping communities solve problems through education. For the past 80 years, CES has served as a "people to people" organization. Although the priority is still the client/learner, the System is moving away from a single format of dissemination to an approach incorporating multiple formats with greater responsibility placed on the learner for implementing what was learned. The focus is on the engagement and active participation of the clientele through varied learning opportunities.

In support of this active participation by the learner, let me share a few examples as CES reaches out to the community and, in turn, provides opportunities for collaboration and

partnerships within the community.

CASE: Columbia, Missouri "Community Information Network" (COIN) serves as national model for rural communities in combining resources (school board, library, city government, CES) to build home, school, farm, business access to latest information; represents model providing free dial-up access to local, national, and international databases. Through National Research Education Network (NREN), some 12,000 online Extension publications can be accessed through the Internet; COIN provides awareness, training, and technical support to expand community/public access.

CASE: Navajo Reservation, Shiprock, New Mexico, serves as community model for education in food safety and nutrition through interactive video program "Walk-in Beauty"; combines Navajo educators and CES in bilingual educational program effort; program delivered to reservation through food distribution center sites and remote tribal houses.

CASE: National Children, Youth, and Family Network, a partnership between CES, CSREES-USDA, and the National 4-H Council consisting of four National Networks focusing on Child Care, Collaborations, Science and Technology, and Family Resiliency, and a national distributed information infrastructure. The mission is to marshal resources of the Land-grant universities and CES to collaborate with other organizations in developing and delivering educational programs that equip limited resource families and youth who are at risk for not meeting basic human needs; each network includes faculty from Land-grant universities; services of the CYF Network are concentrated at 95 CSREES-USDA funded Youth at Risk local projects and are simultaneously available to all states and counties. A variety of compatible computer information management systems (NAL CYFERNET, Univ of MN Child, Youth and Families Consortium

Electronic Clearinghouse, NC Region QUERPI, Ohio State's PINNET) are included in the initial infrastructure linked via the Internet. Each Network will identify sources of information in its focus area compatible with the needs of communities and facilitate collaborations between those sources and faculty in Extension.

CASE: Monroe County, Georgia, demonstrates community access in the home through the concept of the "Answer Shop", a video information center modeled after the video rental concept; target audience is the limited resource clientele of the community; residents are offered opportunities to become members, and check-out and take home educational video tapes representative of family issues, environment and other areas, to be used at the leisure of the clientele.

CASE: University of Kentucky, "Gee Whiz in Agriculture"; cooperative effort between elementary schools, libraries, and university to enhance and clarify image of Agriculture as a business and mainstay industry of this country; offered via satellite television series to fourth and fifth grade classrooms statewide and nationally. Illustrates that Agriculture is complex, scientific industry involving variety of careers and covers six major areas including insects beef and dairy, fish, hydroponic lettuce production, forestry, and horses; 30 information segments at 15 minutes each are offered with time for question and answers with scientists; offered in 40 states and Canada, with 200 sets of tapes purchased and requests by PBS for rebroadcast.

CASE: Clemson University Online Disaster Assistance provides information on 100 disaster assistance topics via ES-USDA Almanac server and four Land-grant universities; project result of 1989 disaster assistance during Hurricane Hugo by Clemson via Fact Sheets; with advent of Hurricane Andrew in 1992, disaster emergency information

prepared for online community access before Andrew hit with Florida residents having preventive information prior to disaster. Other information accessed during floods in Midwest, drought in Southeast, earthquakes in California, and recent flooding in Georgia.

CASE: Mississippi Community College and Extension Network enables CES specialists to conduct timely workshops that reach multiple audiences simultaneously, communicate interactively using video and audio links at 18 sites. In addition, Mississippi Fibernet 2000 provides avenue for FARMWEEK, produced on the MSU campus and transmitted to Mississippi E-TV every Monday for broadcast, and training opportunities to electronic classrooms housed at seven sites including MSU, MUW, Mississippi E-TV, and high schools in four areas of state.

CASE: National Association of Counties (NACo) and CES partnership targeting 1994 topic focused on children issues in the community, a result of the Children's Initiative Task Force comprised of CES, NACo, and local human resource agencies. Audiences at 300 downlink sites nationally were able to receive the program and discuss local issues in addition to responding to a national survey on-site via e-mail, telephone, and FAX; preliminary results of the on-site survey were presented live before end of national broadcast with local participants able to call in questions to national panel, thus enabling communities to have broader range of information for use in local community.

ISSUES in MEETING the NEEDS of COMMUNITY-BASED LEARNING

Let me return to the quote by Mecklenburger (1994, p.2)

stating:

"the information revolution challenges the ways we school the population--youngsters and adults alike. It challenges what people need to learn, when, and how; it offers up new new ways to educate; and it empowers new people and new institutions to be interested in doing some of the education work long expected only of formal institutions such as schools and colleges."

The quote alludes to challenges, and I would suggest to you that there are any number of issues and challenges confronting us as educational service providers in the 21st century. Let me start with the statement from the quote focusing on the 'new' people, agencies, and institutions and their involvement in community-based education.

"New People" and New Institutions

Gregg (1984) suggests that the process of identifying, mobilizing and utilizing resources in order to provide lifelong learning opportunities for all people may serve as the basis for inter-agency collaboration. A major challenge, therefore, is the development of linkages among/between community agencies and institutions (e.g., K-12, community colleges, higher education, libraries, business/industry, military, government). Issues raised and questions asked include the following:

- 1) Within the community, where are the 'points of access' available to the residents providing affordable, one-stop

access to everyone?

2) What are the strategies that would allow these community entities to combine efforts on behalf of broader community-based program(s)?

3) How can existing programs and resources representative of these various entities be leveraged in designing/developing testbeds for using information technologies as a basis for educational and training access?

4) Where/how is the 'locus of control' for community-based learning assigned? Does there need to be a control center or is it more a matter of coordination? How can resources be shared? What agency within the community is best situated to take the first step to interface with other community organizations, agencies, and support mechanisms? How is this currently being done? How can that dialogue be facilitated?

"New Ways to Learn as well as New Ways to Educate"

A second part of the quote suggests the advent of new ways look at the teaching-learning transaction; for the 21st century, we are moving away from a teacher-centered concept to a focus on student-centered learning with increased responsibility on the

learner. Personnel and funding policies, accreditation standards, and state requirements providing authorization for offerings delivered by nonconventional modes all become factors for discussion. The concept of sharing resources becomes an ever greater reality. And, the continuing evolvement of technologies challenge the educational service provider to target need and audience more decisively, plan more extensively, and form partnerships and collaborative efforts to a greater degree.

A most obvious challenge in enabling this student-centered approach is assessment of local capability to engage in learning activities regardless of time or distance; i.e. a focus on Distance Education. Mechanisms for human resource development including, but not limited to, faculty/staff training, incentives and support for faculty, and resource support are issues to be addressed.

For example, if a community is to examine the human infrastructure at the local, state and national level in support of learning at a distance, and strategically plan for the concept within the community context, the following will need to be addressed:

- 1) What are local examples of distance education that can serve as persuasive means of advancing the

methodology and changing views of teaching/learning environment for the 21st century? Who are the players?

2) What are the existing and future human resources needed for designing and organizing distance education?

3) What administrative and organizational structures exist that enable and facilitate community use and development of distance education? What mechanisms provide for personnel/staff to take advantage of "lead" people throughout the country (e.g., mentoring, faculty exchange, electronic study groups, conferences, training)?

4) What are the key roles and position qualifications necessary within the community to effectively implement distance learning opportunities?

5) How does the community operationalize "working models" targeting issues of design, quality, and evaluation based on work of collaborating agencies/institutions?

'What People Need to Learn, When, and How'

A third part of the Mecklenburger (1994) quote targets the challenges involved in articulating what people need to learn....the when...and the how. Communities expect the creation

of collaborations and partnerships resulting in more comprehensive solutions to issues. The learning community expects immediate access and application, education that is accompanied by guidance in study, communication of up-to-date and authoritative knowledge, an opportunity for feedback, and assistance at a time when unanticipated problems arise from and within the program or course. Key products and services include useful knowledge that is based on research and experience, educational processes that facilitate and develop critical thinking, and the building of skills that enable citizens to resolve issues and foster vital, productive communities.

Key to these expectations, however, is community and personal ownership for the learning. In its program design and delivery, the Cooperative Extension System has recognized the trends reshaping the information landscape and the fact that these trends are driving major changes in society, and creating new information management paradigms for organizations. The System continues to examine how people within the community currently acquire, interpret, generate, access, distribute and store information. And, CES continues in its commitment to systemwide improvement in infrastructure, staffing, training, audience targeting, and support to operate in the new

environment.

The 'Ways We School the Population'

The final piece of the Mecklenburger quote targets the audience, both children and adults, focused on the unstated concept of lifelong learning. Mecklenburger (1994) suggests that in the world of 1994, learners are not uninformed. In fact, children and young adults have virtually the same access as adults to the world's information, to knowledgeable people, and to each other. At this point in time, for example, over 70 percent of the 3,500 County Extension Offices are linked electronically with leadership in the use of the Internet network and accompanying interface options of Almanac, Gopher, and the World Wide Web providing access to information and education previously unavailable.

As noted earlier, today it is possible to revamp scheduling of learning processes and speed the pace for the individual by providing "just-in-time learning", often through information technologies such as computer systems. To accommodate for this change, educational service providers must:

- 1) Rethink the traditional blocks of time identified for learning, and revisit the concept of the school and library

open 24 hours a day.

2) Consider the calendar year holistically rather than by pieces/specific months.

4) Consider issues of equity and availability of opportunity within community access? How does the community prevent the educational dilemma of the "haves" and the "have-nots"?

4) Recognize diversity in learners and learning style.

Let me add, the consideration of diversity reaches far beyond gender and ethnic differences as we look at lifelong learning in the 21st century. Recognizing and accepting differences and perceiving "being different" as being acceptable is critical. Recognizing diversity requires action in the design/development of programs, recognition that teaching-learning styles differ; multiple languages and variance in learning environment and climate as well as delivery will be necessary. Learners will bring to the experience special needs as well as great diversity in age, entry behavior, background, and expectations.

SUMMARY

As institutions and agencies look at meeting the needs of customers, community, and nation in the 21st century, lessons learned suggest four major components that must be considered: outreach, human capacity building, diversity, and quality.

In terms of outreach, networking, team building, partners, and collaboration are all descriptors of this concept. "Reaching out" requires clarification of roles, cooperation without control, flexibility, and tearing down of boundaries. Human capacity- building will focus on faculty/staff development, access to training, and support. This requires administrative and institutional support in taking risks, as well as recognition for efforts, building of credibility, and assessment of human, fiscal and environmental factors impacting lifelong learning, especially in light of the technological implications.

Can our communities do more toward solving the problems of our society, which are more vast and more complex than at any time in our history? Should they do more? The effort will have to begin with those who are responsible for the educational opportunities within the community, organizations, and management. It means building consensus in direction and in a need for flexibility and change in outcome for the 21st century learner. Community objectives must include identifying existing cost-effective models of learning, moving into areas of research that have the potential to significantly improve learner productivity beyond current capabilities, dramatically increase inter-agency coordination and collaboration, and make information

and existing tools and techniques involving the technological future more widely available. Critical to achieving these objectives will be building working relationship with other agencies/institutions to develop linkages that will assure rapid access to their information assets.

Bibliography

- Barker, J. (1992). Future edge: Discovering the new paradigms of success. New York: William Morrow & Company, Inc.
- Framing the Future: Strategic Framework for a System of Partnerships. (1995). Prepared for Extension Committee on Organization and Policy (ECOP) and Cooperative State Research, Education, and Extension Service (CSREES).
- Gibson, C. (1992). Keynote Address: Annual Conference on Teaching at a Distance. University of Wisconsin-Madison.
- Gore, A. (1994). Keynote Address: Electronic Media Summit, Washington, D.C.
- Gregg, G. (1984). 'Theory of lifelong learning via community education.' Class presentation notes, Community Education, EDAH 555, Montana State University, Summer.
- Lifelong Learning Trends: A Profile of Continuing Higher Education. (1994). 3rd Edition. National University Continuing Education Association. One DuPont Circle. Washington, D.C.
- Mecklenburger, J. (1994). 'Thinking about schooling in the

global village. In: Inventing Tomorrow's Schools,
The Journal of the Global Village Schools Institute.
Alexandria, Va. Special Edition.

Minzey, J. & C. LeTarte. 1979. Community Education: From
Program to Process to Practice. Chap. 11, 'Community
Education: What it is and is not.' Midland, MI: Pendell
Pub. Co.

Rominger, R. (1995). 'Get connected' News Conference. Prepared
remarks for delivery by Acting Secretary of Agriculture,
Washington, D.C., March 9.

The National Information Infrastructure: Agenda for Action.
1993. Information infrastructure Task Force Report,
Washington, D.C.