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NN21 White Papers

Philosophy and Purposes of Distance Education

NN21 Invited Issues Paper

- Draft –

By

Dr. Janet K. Poley
President, ADEC Distance Education Consortium

Mr. Erik France
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INTRODUCTION

In considering how best to tackle this topic, I ultimately decided that in Nebraska the "best" approach is usually the "most straight forward" one. Given that much of the conversation about distance education is filled with myth and marketing hype, I decided what we could best contribute to the conversation would be the facts. While some of the other authors may have a better in-depth grasp of distance education opportunities and realities in Nebraska, Erik and I come as native Nebraskans with a good understanding of the history, economy, communities and cultures in our home state.

My early faculty career here at UNL included producing thousands of radio and television programs in home economics and agricultural areas including a weekly educational television program in consumer affairs. I spent approximately 20 years of my career outside Nebraska in the U.S. Department of Agriculture in international training and development positions and as head of Communication, Information and Technology for the USDA Extension Service. Six of those 20 years were spent in Tanzania, East Africa, establishing a large human resource development

program. My academic degrees are in journalism, nutrition and adult and continuing education - all from UNL. My current position as president of the ADEC distance education consortium which includes approximately 55 state university and land grant college members provides a unique perspective on the field of distance education locally, nationally and internationally.

Erik France, who is assisting me in this work, is a journalism and business graduate from UNL and is currently doing his masters degree in the Department of Agricultural Leadership, Education and Communication. Erik conducted a series of Nebraska interviews related to the issues we were asked to cover. I also think he provides a youthful, up and coming perspective that is important for us to hear.

We also consider this paper to be a draft, a document to stimulate those of you attending this conference and others who may want to contribute ideas following this conference on our ADEC website. We posted the paper to the website - http://www.adec.edu and would welcome additional insights that will assist us in completing the document by November 15.

We have chosen to organize the document around five propositions - for each of these, I will provide rationale and discussion material, Erik will then provide perspectives from his interviews that relate and then we will ask for reactions from those of you in this room.

I. PURPOSES FOR OFFERING DISTANCE EDUCATION IN NEBRASKA

A. PROPOSITION ONE: Nebraska citizens want access to more educational programs than they are currently receiving and that distance education can provide educational opportunities to citizens unable to physically go to a campus location where these programs are offered face to face. It is the mainstream responsibility of the University of Nebraska as the land grant institution in collaboration with other institutions to extend the university to the people. It is the responsibility of the citizens of the state to publicly support lifelong educational programs.

B. DISCUSSION: Studies of state demand for distance education are somewhat fragmented. The issue of assessing need versus creating de-

mand further complicates the picture. The concentration of the population in the eastern part of the state generates major concern on the part of the population scattered over the remaining large land base of the state that they will not have the educational opportunities essential for their communities and children. Thus distance education is perhaps first and foremost a political issue in Nebraska. This state has a long history of using telecommunications as a major vehicle for tieing the state together and the culture places a high value on education as critical to upward mobility and good citizenship. Nebraska culture is also very populist/independent and is usually characterized as fiscally conservative, even "tight". Using "other people's money" is good if it isn't too obvious. To date education has remained a highly valued item and people are willing to pay to gain access and assure quality. The current 413 initiative may be an important test to see if the state will hold fast on its commitment to education of all types, including expanding and redirecting some current programs through distance education.

In addition to meeting the demands of Nebraska citizens for education with new technologies, the question always arises - "what can we sell to other people?" Can we meet the needs of people in our state with its small, aging population AND make money by selling to people beyond our borders. The new technology does not respect borders and boundaries and there are possibilities to establish niche markets in areas where Nebraska can deliver programs people will buy. The state has done well in certain areas as a "first mover." The Ph.D. in education, the masters degree in Human Resources and Family Sciences are two examples that can guide future efforts. There is an excellent Harvard Business Review article titled "Winners and Losers" which you can find linked to the ADEC webpage. This study as well as others show that those first into the market have a greater possibility of staking territory. This discourages competitors from entering that market and if the offering meets a market demand, is relevant, priced correctly, convenient and pays off for the customer long term market share might be expected. I argue that Nebraska has little possibility for making large amounts of money in this area. Every major institution in the United States and increasingly institutions around the world are playing in this game. Also the private sector is moving rapidly to try to grab content and hope to make large sums of money in specific cherry picked - clean skimming areas.

Ethically what are the responsibilities of publicly financed institutions that are non-profit corporations? Is it appropriate to shuffle something as

important as access to educational opportunities through technology to the periphery as a new for profit company? What will be the long term outcomes vis-a-vis public support for education? It is also a high risk strategy that is very likely to fail. The possibility for "making money" on distance education depends in large measure on how students get the money to attend the programs and the possibility for getting money from other sources. Let me explain: The Apollo Group (the owners of Phoenix University) has been making money. Apollo followed the terms of the Higher Education Act religiously. They established physical campuses in urban areas, niched their markets with focused attention to populations that would be able to get student aid and set their prices high. More than 60% of their funds/profits are really federal dollars and as most of you know at present their stock is falling because of questions raised in a Department of Education audit. Let me turn to the Western Governors University. To date they have spent the majority of their money on marketing and start-up including attorney's fees. They've purchased shirts in many fabrics and colors. While they may have plans to become a competency based institution and they have been accepted to be reviewed for accreditation which obviously doesn't happen overnight - they are simply at present a web-based broker. Without passing judgement on whether a Western Governors University is ultimately something positive, it is important for everyone to recognize that this is not an accredited institution, it may or may not become accredited and that it is attempting to use political clout to get advantages that are unavailable to competitors. They have asked for special favors in the reauthorization of the Higher Education Act and if they are granted exemptions that are not available to other institutions of higher education they are likely to try to follow the path of Phoenix. Why would Nebraska institutions get involved with something like Western Governors University or consider establishing a for-profit company? One of the driving forces is the non-rational ways money gets appropriated and used in our institutions. Money to develop distance education programs is in short supply since most of our institutions have nearly all funds obligated to meet personnel costs. Faculty are required to find "grants that go" or devise "creative schemes" to get support services and development funds that further damage reasonable business operations. Add to this a top heavy administrative structure and there is little potential for strategically moving forward in a sustainable fashion. We have also underinvested in Nebraska in the technological infrastructure that we need to meet the expectations of the citizens of the state and to have any chance for developing and sustaining long-run comprehensive distance education programs in the national and international mar-

ket. In the name of cooperation and interoperability we have probably slowed down innovation and distance education potential by the recent implementation work done on LB 924. While the original vision for LB924 was positive, the state is about to put in place a cumbersome, bureaucratic system that will certainly slow down expenditures on technology. One could predict this will result in less capacity for institutions of higher education to participate in technology based activities such as distance education. It is also important to realize that alliances, partnerships and reciprocity are critical to developing marketshare. Regional organizational structures and being number one are more appropriate to football than to distance education.

The last purpose and perhaps one of the most important to the future development of this state is to establish systems to bring in educational programs. This is a very small state and one of the least diverse in the nation. We certainly have comparative advantages in human resource development and excellence in particular areas that are appropriate for exporting. But we should be able to expand the quality and diversity of our programs and reduce costs by bringing in more offerings. Even our organizational and administrative structures are largely set-up for exporting rather than importing. We could greatly enrich our offerings on and off campus by carefully studying options available from other institutions, organizations and even other countries and cultures. Also participation in the design and development of multi-institutional offerings could improve instruction. Using technologies to augment and add to what we have to offer can be important.

We are very proud that the University of Nebraska-Lincoln's Department of Mathematics and Statistics received a Presidential award for their mentoring program last month. Perhaps this offers a distance education exporting opportunity - UNL might share with other institutions what they are doing. The Los Angeles Times reported in September that the nation must face up to the fact that women are leaving or avoiding computer careers in droves, citing discrimination by male co-workers, few role models, family-unfriendly work environments and a general sense that the field is irrelevant to their interests. This is also a pipeline issue. According to the Bureau of Labor Statistics the percentage of female computer professionals has dropped from 35.4% to 29.1% in the 1990s and for purposes of this discussion the share of women in the academic pipeline has stuck at much the same rate. The outlook is no better in high schools. The Educational Testing Service reports that last year only 17%

of high school students taking Advanced Placement tests in computer science were girls, the lowest percentage of any subject. Given the major role of computer science and information technology in the economy of today and tomorrow - we are facing a serious problem. The report identifies major differences in the way men and women approach the field - women are more interested in applications and the wider social agenda and men more interested in focusing on faster, better technology for its own sake. How can we import distance education and mentoring opportunities to address this issue?

C. COMMENTS FROM INTERVIEWS ON PURPOSE OF DISTANCE EDUCATION IN NEBRASKA

Erik France found in his interviews with Distance Education policy makers, practioners and researchers that most respondents gave a rather traditional response to the question of purpose. Most said that distance education provided educational opportunities to those who could not come to campus and it provides lifelong learning opportunities to those who are not interested in credit i.e. extension and outreach. John Allen, UNL professor, well known for his studies of Nebraska communities in the information age said that he believes that one of the major purposes of distance education from the land grant institution is to enhance people's interaction with education and government. It provides a more "on demand" style going beyond simply receiving a course.

D. DISCUSSION OF PROPOSITION ONE WITH AUDIENCE

II. PHILOSOPHY/ MODELS FOR DISTANCE EDUCATION

A. PROPOSITION TWO: The Philosophy/Models most appropriate to Nebraska in distance education include orchestrating congruence, creative collaborations and partnerships and identifying appropriate imports and exports in a growing knowledge marketplace.

B. DISCUSSION: While we often pretend that we take on new challenges like distance education in a rational, strategic and planned fashion, I contend that what is happening here and elsewhere is more like the poem titled "Toadstool" from Kathryn Jackson's Golden Book - A Story A Day.

Toadstool

There it was
And nobody grew it,
Nobody I know
Even knew it
Was growing there
In a dampish spot,
That little white toadstool;
And I forgot
To ask how it got there,
Sudden and white
When nothing at all
Was there last night.

For many institutions in Nebraska I think this whole business of distance education like the toadstool is just sort of happening. Where did it come from? How did it get here? And now what do we do about it? Will more grow the same way? Is it poison or is it sweet? What environmental factors caused it to spring up?

And yet when we think about it many of the forces nourishing this distance education movement have been at play for quite sometime. The need for lifelong learning and just in time learning at new levels of depth, continue to push all public educational institutions toward thinking about teaching and learning as more of a knowledge marketplace than an ivory tower. Many of these fundamental structural adjustments are mature and are related to some of the following change drivers:

- End of the industrial era and cold war
- Rapid knowledge development
- Importance of integration and synthesis - crossing disciplines
- Elimination of Lock-Step approach to learning
- Global Economy
- Greater understanding of how people learn
- Public impatience with costs of education and lack of accountability
- Diversity of the population
- Natural resource and environmental challenges
- Food security issues
- Aging population
- Technological change including digital and Internet

- Taxation and who pays
- New questions of ethics and responsibility
- Flattening of the hierarchy
- Greater concern with global and local
- Geographic boundaries disintegrate

This is not a picture of what might be - it is a picture of what is. Is it the Monster Under the Bed.....or the poison Toadstool....permanent whitewater...or are they simply the challenges that our institutions and faculty must address strategically?

Henry Mintzberg ("The Pitfalls of Strategic Planning; California Management Review, Fall 1993), the well known management strategist, wrote that to talk about any environment as permanently turbulent is silly. He says that all environments have aspects that are changing and aspects that remain stable. He said that we are trying to glorify ourselves and our era by describing it in such hyperactive terms. He said this is the result of overinflated egos.

Mintzberg posits that strategies need not be deliberate - they can also emerge. Strategies can form as well as be formulated. Strategies cannot be planned because planning is about analysis and strategy is about synthesis.

He says in The Rise and Fall of Strategic Planning that planning by its very nature, defines and preserves categories. Creativity by its very nature creates categories or rearranges established ones. This is why strategic planning can neither provide creativity nor deal with it when it emerges by other means.

Rather than a linear planning model, I suggest that Nebraska embrace the idea of "Orchestrating Congruence", a more dynamic and fluid approach suggested by Sam Paul, long time international development consultant. It is a model or way thinking strategically that is particularly appropriate to the educational setting. In many senses this approach combines what we have learned about visioning the future, strategy and organization development.

It is neither top-down, nor bottom-up, but rather requires people to be committed members of the community and to be good citizens in the sense of becoming increasingly knowledgeable actors. Full implementation of this model requires members of the community to "buy-in" to the

vision and mission, develop an understanding of their environment and culture and strategically orchestrate structures, people, money and technologies so as to accomplish the work at hand.

Distance Education is clearly part of the work at hand. While distance education, extension, outreach and service are not new to Nebraska in recent times the research aspect of education took priority and gained more funding, recognition and visibility. Today any publicly funded university would forget at their peril that they are entities of their respective states (John Campbell, 1998, "Empowering Land-Grant Colleges and Universities for the Twenty-First Century") and that citizens now expect that high quality, affordable education can increasingly be available conveniently on a lifelong basis.

Abraham Lincoln said that "The land-grant university system is being built on behalf of the people who have invested in these public universities their hopes, their support, and their confidence." As John Campbell stated in his paper, when institutions fail to respond to public concerns, needs, and problems, they cannot reasonably expect to continue receiving the same level of support. The unique and most lasting legacy of the land-grant college and university system has been service to the public. Campbell says that knowledge must be brought into intimate relationships with the real problems and concerns of people: connecting theories and thoughts to actions and practices.

For some of us this seems to be a "no brainer." Why is it so difficult to continue to carry-out our extended education responsibilities in new ways? For answers to help us with strategies we must examine our cultures, structures, faculty capacity and support systems and, most importantly, the money flows.

William Bergquist's book The Four Cultures of the Academy written in 1992 is filled with insights and strategies for improving leadership in academic organizations. He carefully describes the four cultures - academic, managerial, developmental and negotiating and provides suggestions for engaging the four cultures in organizational improvement. The first step is understanding the cultures and then ask faculty to identify where they fit and how their cultural orientation within the academy can affect a perspective on distance education. Cross-cultural discussion within the academy - talking about it in structured conversations - may also contribute to improved strategic development.

Orchestrating Congruence requires clear vision and faculty who take pride in the common enterprise. Today it really does matter if people learn and we know a great deal more about how to help people learn. We have an obligation to level the playing field. Our institutions are blessed with faculty who discover, critically examine, organize, preserve, advance, and transmit knowledge, information, and values through teaching, research and public service. (John Campbell ibid)

Along with creativity a critical dimension of stepping up to the possibilities inherent in distance education is the importance of collaboration. We need to critically examine whether our current structures and processes foster collaboration on all fronts!

Michael Schrage (1996, No More Teams! Mastering the Dynamics of Creative Collaboration) notes that at the heart of collaboration is a desire or need to solve a problem, create, or discover something within a set of constraints which include expertise, time, money, competition and conventional wisdom" As we think strategically about fostering our distance education programs we can ask whether our structures, worktools and reward systems support our efforts.

The Internet with electronic mail and WorldWideWeb have entered the departments, schools and colleges - but I wonder whether they may be currently used to better network "communities of interest" in discipline and professional areas among campuses and even globally than they may be working to foster more open relationships and collaborations inside the university in Nebraska or to collaborate between K-12 and higher-ed institutions.

Schrage offers the idea that the "Web would be entirely different if it had been based on a more dynamic metaphor than the publishing metaphor. How would the WWW be different if we talked about designing things to support conversations rather than designing to support posting." He goes on to say that he thinks that higher education represents the best blend of age, diversity, technological resources, sophisticated designers and consumers of design. He thinks that the potential for higher education to be the source of idea-explosions that create a lifelong learning fabric are great that can greatly impact K-12 education. But developing high quality distance education programs and products on a sustainable basis requires as many of you know different approaches.

This is not an individual activity, different structural arrangements are required, learning oriented software is yet to be developed and questions of cost, scale and productivity must be addressed.

Paul Saffo, well known futurist, notes that "The model to replace industrial age education isn't clear yet. But the idea that a person stands in front of a room stuffing information into students like grain into a duck is changing to the idea that teaching is about being a wise companion and advisor. Information technology can be done right to make that possible. It is a device where mentors can have influence and interaction with large numbers of learners."

Orchestrating Congruence to achieve the possibilities in distance education require all of us in Nebraska to invest more heavily in appropriate technology. But strategically we must also consciously and intentionally create new patterns of relationships and interaction that defy barriers of history, separations of geography, language and culture. To realize the possibilities - the sheer joy of creative collaboration to quote Richard Hargrove (Creative Collaboration, 1998)-demands a strategic committment to organizational change that not just allows, but fosters this type of creative collaboration.

Strategically this means we must have the attitudes and collaborative processes leading to:

- shared and understood goals
- creative and entrepreneurial results
- collaborative networks, new patterns of relationships and interactions, learning how to show authenticity and vulnerability
- attitude of learning and equate success with questions
- ability to balance advocacy of views with inquiry into one's own and other's thinking and listening deeply to understand others
- ways to empower others on the job by acknowledging talents and gifts, providing an enabling environment.

Strategies, timetables and rewards should be established for reducing hierarchy, reducing unnecessary bureaucracy and creating greater efficiencies while reducing costs. Administrative costs at all institutions of higher education should be carefully examined and wherever possible outmoded systems for communicating, for example too much top-down hierarchy, too many meetings, and secrecy should be questioned.

In distance education most institutions need to examine and decide upon their world class competencies, assure that people are interconnected and integrated -culture, competencies and processes - with others. This is happening here in Nebraska and many other states. The growth and development of the ADEC distance education consortium is an excellent example of more than 50 institutions coming together to work on integrated structures. Nebraska should be proud that this effort started right here. While a few states/organizations may be able to go it alone and provide all distance education offerings on their own, the question becomes why?

Strategically it is important to recognize that collaboration and competition are really two sides of the same coin. Within ADEC we are not attempting to be all things to all people in distance education, but are working on the proposition that within our core mission areas: Food and Agriculture; Natural Resources and Environment; Community and Economic Development; Children, Youth and Families; Nutrition and Health we are much stronger competitively if we collaborate. We are consciously using the Harvard Business School Model. This model works from the idea that communities of interest are emerging and will continue to emerge and to compete it is important to aggregate content (the MTV model); package and market programs together-both breadth and depth is needed; use appropriate transmission - it must be easily and affordably accessible to your customers- this includes campus, homes and workplace; software development is critical and increasingly reception devices or terminals will become appliances like those found in the home. Content is number one and every content provider must understand the critical importance of Intellectual Property.

Today's challenges require that all of our educational organizations learn to play in a knowledge marketplace. On one hand we have discussed that our public institutions have some very rich resources that provide a comparative advantage in working in this marketplace. However, there are a growing number of competitors from Phoenix University to Western Governors University. Wise strategy requires paying lots of attention to the competition. What can you learn from Phoenix University? It has an interesting model, was making money, has niched its market well and like many others in the private sector distance education game is doing a certain amount of cream skimming. Western Governors University is at present gathering considerable support from the private sector, but is primarily a website broker. All publicly financed institutions need to

carefully consider their partnerships and relationships in this environment with particular attention to long-term impact on institutional identity; ownership of intellectual property; impact on the state supporting them; political perception and funding strategies. Distance Education programs are certain to fail if left on the periphery as a marginal enterprize expected to become a cash cow.

The Winners and Losers article mentioned earlier notes that first movers have the potential to gain marketshare and identity. This is currently resulting in a great deal of market hype, smoke and mirrors and various public and private institutions stake territory just in case they want to go that direction. The strategic trick is to get into the marketplace at the right time with programs and products that can be supported and developed in a quality way, can be continuously improved and grow out the market. At present among the land grant institutions there are some areas with a large amount of duplication and a number of other high potential areas with few providers in the market.

Strategic challenges are many, but intellectual property, interinstitutional agreements, electronic commerce and new business systems, faculty and learner support, organizational change and capacity building systems and the cost of the technological infrastructure are major. Time does not permit thorough examination of each of these elements, but most institutions are working through the issues on their own campus and organizations like ADEC have this issues at the top of the list. We believe in ADEC that one of the primary services we can provide in consortium building is to provide the forum for and the intelligence gathering that will keep learning high and repeated mistakes to a minimum. In the area of Intellectual Property I might mention that the University of Missouri and ADEC are going to co-sponsor an indepth conference on this topic May 2-5, 1999 in Kansas City, Missouri.

In using the Orchestrated Congruence model, most institutions will have to shift more resources into this distance education enterprise and support the work of selected faculty in more efficient ways than is currently the case. Comprehensive evaluation systems will be required and we are already seeing this area becoming a rich area for research. We will need mechanisms for aggregating our learnings from research and we will need to use our technology systems to share our findings. Very few universities are planning to sit the distance education movement out. We will undoubtably see large multi-institutional centers of activity, most probably built upon communities of interest where land-grant universi-

ties contribute, but maintain their identities within consortial arrangements. We will also have boutique providers in highly specialized areas. And as we develop strategy we must remember that this movement will rapidly become much for global with respect to both offering distance education programs and taking them. The British Open University is just one example.

Institutions that establish people systems well supported with technology are most likely to succeed. The problem may really be too many possibilities, too little time and too little money. Institutions that are realistic about their strengths and then provide encouragement and support to collaborating faculty and staff on a non-hierarchial basis will reap the benefits.

C. COMMENTS ON PHILOSOPHY AND MODELS FROM NEBRASKA INTERVIEWS

Nebraskans responded very favorably to the idea of participation/collaboration as the model of choice. Most respondents were very positively disposed toward the Cooperative Extension philosophy particularly if it could be opened up to include bringing more products in from outside both for credit and non-credit. Many in the state are not yet very familiar with how the technology really works, nor are teachers fully conversant with how to use new tools. There are some major obstacles to collaboration, including a certain amount of top heaviness and competing systems - the University and the State operation. Considerable resources are wasted and frustration is increased.

Nearly everyone interviewed expressed the view that closer ties between K-14 and the institutions of higher education should be encouraged. One knowledgable rural Nebraska woman said "our biggest problem is we need the legislators to leave us alone. Our K-6 rural school is very good--we have one on one relationships between students and teachers and we don't have some of the big city problems like guns and drugs. But the legislators think we don't need these small schools. People in Lincoln and Omaha just don't understand the distances we're dealing with nor some of the travel conditions we have to endure. All the schools in our county are modernizing. We've only had Internet one year, but the teachers make sure each kids gets computer time every week. I don't know about the grade schools, but the high schools are using some courses from the University delivered via satellite. We are really excited about these courses because they broaden the kids' horizons. We need more

people to take these courses so they look cost effective. We don't want legislators and administrators cutting these important programs due to small numbers."

Some of the positives expressed for blurring the educational lines and adopting the collaborative model included:

- potential for having many more services
- more opportunities for K-12 teachers and students
- increased quality and greater exposure to the larger world
- ability to rise above the lowest common denominator in teaching
- ability to go beyond the outmoded notion of breaking courses by age group. (we can now develop courses based on content area and deliver based on learners needs).
- ability to provide academic enrichment through module development
- learners and the state are the big winners

The obstacles to partnering mentioned over and over again were:

- outmoded business and administrative systems
- territory and turf
- problems with figuring out the money
- politics and priorities
- issues of responsibility and credit
- lack of knowledge
- "old boys" network - same set of people making the rules and administering the rules when it comes to technology and distance education
- LB 924 is flawed and not likely to make the situation better
- partnering takes time - it is easier to just go it alone - however, lone ranger approaches are less sustainable and frequently of lower quality

D. DISCUSSION OF PROPOSITION TWO WITH THE AUDIENCE

III. RELATIONSHIP OF ON CAMPUS AND OFF CAMPUS LEARNING

A. PROPOSITION THREE: Not only will the educational lines blur from kindergarten through high education - lines will increasingly blur between on and off campus education. More and more learners will chose mixed modes. On campus students will more routinely take one or more courses using technology at the same time off-campus students may come to campus or a learning center location for certain programs, activities, testing and counseling.

B. DISCUSSION: We know from the history of mass media in this country that almost never does a medium of communication disappear. Rather as new media forms enter the marketplace we see shifts in how existing media are used. This same phenomenon is already evident in distance education. When television came along, radio did not die. In fact, just a couple of weeks ago we learned that radio is the medium of most frequent use for working women. This is probably because of the ability to listen to the radio while doing other things - including driving. This may have immediate implications for distance education delivery. Peoples' early guesses about technology interaction are frequently wrong - for example ATM machines take off until moved outside banks. Perhaps naively, the ATM deployment led rather poor thinking about disintermediated asynchronous education.

The point I want to make is that in distance education we will just have increasing options available. There is some evidence that the distance education trend has had the most dramatic impact to date inside state boundaries and that more on-campus students are taking one or two credit courses by distance. Other emerging patterns include:

- multi-use module development - these can be used by a variety of audiences alone, face-to-face, on-campus, off-campus, in the workplace and elsewhere.
- unit exchanges where instructors work together and then share the material-this allows specialization and localization - this strategy increases both collaboration and diversity.
- replacement of on-campus bread and butter courses frequently done by large lectures with TAs with technology based programs. This is the area of highest interest in the private sector where pub-

lishers are courting individual faculty members to give away intellectual property. This is also sometimes called the 1% solution.

- increasingly people are looking less at the technology and more at the content and learning methodologies. On and off campus will become less the issue than figuring out what combinations of face-to-face interaction and combinations of learning via technology are successful and satisfying to consumers. Campuses will need to look at the costs associated with maintaining existing buildings and building new structures. While wealthy alums may want to donate buildings with their names affixed (even Bill Gates dis this) institutions must learn to say no and define appropriate gift giving. This issue has more to do with how do you transition from old ways of doing business to new in a financially responsible and responsive manner than it has to do with teaching and learning.

We learned years ago in Cooperative Extension that customers don't care where their information comes from as long as it is relevant to their needs. Nebraskans frequent the Ohio State WorldWideWeb site in horticulture with great regularity. As the quality of design of learning programs and products improves and proliferates campuses may find that they are not only overbuilt - but that the buildings they have are inappropriate to the new active learning methodologies.

Also the issue of learner maturity and self-directedness may be more important to pay attention to than whether the learning event takes place on or off campus. Immature learners lacking self direction and discipline are likely to require more structure. Learn at your own pace asynchronous offerings may not be the best choice.

C. COMMENTS ON ON- AND OFF-CAMPUS LEARNING FROM NEBRASKA INTERVIEWS

John Allen talked about the value of combining face to face learning with the benefits of technology. He said since telecommunications can overcome the geographic boundaries it is now possible to get both the "high tech and high touch" in our education programs. "You can personalize while still bringing down the costs." He used as an example a tourism workshop he conducted for citizens along the Niobrara. He conducted face to face workshops and then followed that with an Internet chat room that allowed Nebraska citizens to talk with people from New England about how to market. He noted that trust is easier to build in a

face to face environment, but once this is accomplished the relationship can be continued and supported through use of the Internet.

Allen also hypothesizes that a number of educational institutions will not survive or at least not thrive as the private sector moves in to take over a number of programs currently operating on campuses. He states that some institutions will die while some become very large. He said it is easier to see what is likely to happen and to note how important it is to be entrepreneurial and niche markets than it is to say how exactly to successfully transition at any single institution. He also noted that higher education institutions frequently move to slowly and take too long to reorganize the way products and programs are produced. It is essential that we are able to turn out products in 30 days or less to be able to stay ahead of the market. Obviously, this will require large shifts in support systems, funding and emphasis on campuses in the state.

D. DISCUSSION OF PROPOSITION THREE WITH THE AUDIENCE

IV. CREDIT AND NON-CREDIT OFFERINGS

A. PROPOSITION FOUR: Nebraska's future depends in large measure on the ability of all of our institutions, organizations, agencies and educators to grasp the potential inherent in the concept Lifelong Learning. Many of the issues currently being discussed are middle range and not tied to a more overarching vision and set of goals. Much of current conversation is driven by protecting, maintaining and winning, rather than clear articulation of the challenge to make knowledge the currency for the next century.

B. DISCUSSION: Just as we can expect the blurring of the lines in the lock-step formal educational system, we are already seeing the lines blur with respect to credit and non-credit programs. As already discussed more content will be prepared in units or modules. They will be designed to promote specified learning outcomes. While we have good ability to measure learning in certain areas, we are a far distance from being able to do this well in others, particularly the affective domain. Evaluation and assessment is far easier in testing information transfer than it is in testing for critical thinking, integration and synthesis in the cognitive

domain or attitude and value development in the affective domain. We are getting increasingly sophisticated in the validation approach. In other words we are able to say with some confidence that a particular learning module - whether for credit or not-will reliably facilitate learning among variously defined populations groups. This approach is quite different from some of what we hear about educational standards, learning outcomes and testing. While there is a place for standardized testing, it is important for those of us concerned with quality distance education to pay attention to what is happening in the private sector with respect to testing. Some entrepreneurs think that testing is the place where new businesses can be started and profits made. While testing methodologies will undoubtably improve over time, every serious educator should be concerned about the over-reliance on testing and adding more of it just to make money.

With respect to credit - I think that it is unfortunate that marketing phrases have overtaken serious scholarship in much of what is going on about educational technology and distance education. Take for example the term "seat time" - without question there is a certain amount of truth in the phrase that encapsulates what needs improvement in education - whether face to face or by distance. However, I don't think the case has been made well at all that "seat time" and credit are two evils in a pod. I suggest that we unbundle these complex issues and drop the catchy jingles. In the long-run they will do little to improve education in Nebraska, or anywhere for that matter.

I predict that the current credit system will evolve, rather than be replaced with something radically different. Also the idea of a "learning bank account" that is opened for every child at birth and the individual owns their learning history is very sensible. This bank account might include all types of learning currencies. My many years in working in international education helped me learn how to interpret the meaning of credits from other countries and institutions. This is really not a very difficult problem and I assume that within the next ten years this will be at play. It is very important as educational options become more international and as we mix all types of learning. Certainly employers are increasingly going to want to see evidence that people know what they are expected to know and can do what they are expected to do. However, I am now hearing many in the computer science and information technology areas saying they really want people with backgrounds in philosophy - critical thinkers with creativity- rather than a certain skills set.

Many of the businesses we have talked with in ADEC say they like the idea of this bank account and they would like to see distance education providers such as ADEC think through both their credit and non-credit offerings so that employers could support learner participation in a manner similar to a benefits package. This is a really rich area for study and experimentation, but probably largely out of the control of any single state or small set of institutions. Many of these issues will be worked through in national and international settings. They will clearly affect what happens at state and local level.

In the non-credit area. This is probably the area where the Internet has already provided its greatest return in "just-in-time" learning. However, it is providing this wonderful resource more abundantly to self-directed learners that already know a great deal about subjects. At the current stage of development there is considerable evidence that we are increasing the knowledge gap - those that know a lot and are now able to learn a lot more quickly and those that know little and don't have any idea about how to seek knowledge. This is why it is so critical that these technology facilitated systems are surrounded with supportive communities. It is becoming more and more clear that the technologies provide certain kinds of power, but that need for different support systems is essential.

Also the workplace expectations and changing demographics have a large impact on non-credit systems. For Nebraska, it is not clear how this might evolve. There are some danger points especially in a small state with a one house legislature.

Nebraska's growing concentration of population in the east - the over-all aging of its population - the low wages and low unemployment rate are all challenges. The 413 initiative outcome should be a barometer - many of the Omaha business interests are not driven by Nebraskans. Watch with care how strategic alliances develop, not only among businesses, but between businesses and educational institutions. Institutions of higher education should focus major research attention toward this whole area of credit and non-credit education as it relates to the needs of the state, the needs of the public and private sectors. We nee a much larger set of researchers looking at this area. We need more John Allens looking at implications of these trends.

Also there remains a need for non-formal, non-credit education that is there because it is pleasurable and entertaining. The aging population of the state may have more interest in this non employment, non lifeskills

type of learning. This population group may also be in a position to pay for it. As we think about the priorities for our public institutions - how do we set the priorities? While there is likely to be more variety in programs, it is essential that a small state like Nebraska get much clearer on the question of education priorities. I recommend that given the tremendous role of knowledge in the decades ahead - the University of Nebraska might call for a statewide year long activity focused particularly on goals and policies for education - much like the highly successful Goals and Policies initiative that stimulated public participation and action in the 1960s. This might also be an excellent initiative for the next governor of the state. This should be a really big deal!

C. COMMENTS ON CREDIT AND NON-CREDIT PROGRAMS FROM NEBRASKA INTERVIEWS

Again John Allen had some of the most interesting comments. He has a tele-learning study available on the Web (http://www.ianr.unl.edu/rural/index.htm) that discussed tele-literacy needs by sector and other factors. He states that in the very basic aspects, people want skills and not credit. The Information Age is based on production and people need skills to produce. He noted that having the degree alone will not help, but that individuals must have the skills in order to succeed. He said that people tell them, "Give it to me in a way that's relevant to me." However, he notes that there will be a continuing need for certification especially in areas like health, medicine, pesticide application, food safety.

He hypothesizes that universities will not be the dominant providers of content in the future, but rather that role will be claimed by the private sector and private institutions. He said that the land grant universities should clearly do this, but they have to move much faster and as noted earlier completely redo the production processes. Support systems today are completely inadequate.

Jim Randall, IANR, has considerable experience in this area. He stated in our interviews that most people don't care about credit and that the biggest audience is in adult professional development. Certificates are more interesting to these people. He thinks that as we get all of these elements better planned from modules through degree programs - people will want to have the credit with a degree awarded at the end of a complete program.

Arnold Bateman who spent a lot of time in the western part of the state said that it was very important to offer both credit and non-credit programs by distance and that they need to be affordable.

D. DISCUSSION OF PROPOSITION FOUR WITH THE AUDIENCE

V. SUMMARY AND CONCLUSION

A. PROPOSITION FIVE: Ironically Nebraska has the greatest opportunity to become really competitive in distance education by being more visionary and more collaborative. We need real Nebraska values applied:

- straight talk
- deep appreciation for education
- full public participation
- flat hierarchy
- fiscally responsible and conservative
- hard work valued

This also includes developing a sophisticated understanding among the many actors of what is really going on in this changing environment, encouraging more sharing and more sunshine on all policies, procedures and money flows; creation of interoperability of technologies and systems without dampening creativity and entrepreneurship; and building on strengths and eliminating some of the well recognized weaknesses in the current fragmented approaches.

Nebraska needs to have a one year open process like the Lincoln/Lancaster county Goals and Policies study done years ago to discuss these issues very clearly with the citizens of the state. As the state's land-grant institution the University of Nebraska should cooperate with the next governor to get this process in place. In addition, a well thought through evaluation and research process should be developed as an element of this initiative. The NN21 task force responsible for these white papers should take the lead to assure that this happens.

B. DISCUSSION OF PROPOSITION FIVE WITH THE AUDIENCE