Shared Leadership for A Stronger Economy MONTANA STYLE
Today’s Challenge for Dave

- Three disparate themes
  - Expanding access
  - Enhancing Economic Development
  - Distance Learning

- One Story

- And not obvious connective tissue

- But, alas, perhaps there is
Transforming the Challenge into an Opportunity

- Expanding Access – *What* You Must Do
- Enhancing Economic Development – *Why* You Must Do So
- Distance Learning – *How* (at least in part) You Can Do This.
WHAT TO DO -- Montana’s Access Challenges:

The Demand Dilemma

The Leaky Pipeline

Constrained Finances
The 1st Access Challenge – The Demand Dilemma

- Precipitous Projected drop in college enrollment

WHY?
U.S. is very diverse, but growth will be significant

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

A couple of neighbors face growth that is off the charts.
Others will see substantial growth

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

Some will see manageable growth
Some will see modest growth

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

Some states will see manageable declines

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

Some of you will face significant declines

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

Projections of High School Graduates to 2018 by race/ethnicity – Montana

- American Indian/Alaska Native (689 to 732)
- Asian/Pacific Islander (108 to 177)
- Black (33 to 60)
- Hispanic (169 to 299)
- White (9,629 to 7,216)

The Second Challenge – the Leaky Pipeline

Two Dimensions of High School completion

The Good News

- *Measuring Up 2004: B+ on preparation*
- In Montana, 78.1% of 9th graders earned high school diplomas
- In the WICHE West – it’s 69.8%
- In the U.S. – it’s 68.1%
Leaks continued – high school completion

The Bad News

- B+ down from an A- in *Measuring Up 2002*
- Averages mask the two Montanas
18 to 24 year olds with a high school diploma or equivalent – Montana

Source: U.S. Census Bureau
Leaks Continued – Post-secondary participation

Measuring Up 2004 gives a C

- WICHE data looks better
  - Montana – 53.8%
  - WICHE West – 48%
  - U.S. – 56.1%
Leaks continued -- Completing college

- *Measuring Up 2004: C on Completion*
First-year retention rates at four-year institutions, 2002

- Wisconsin: 80.9%
- Wyoming: 78.0%
- Nebraska: 76.2%
- United States: 73.6%
- North Dakota: 71.5%
- New Mexico: 70.9%
- South Dakota: 69.7%
- Kansas: 69.5%
- Montana: 67.3%

Source: ACT Institutional Survey
First-year retention rates at two-year institutions, 2002

South Dakota: 57.0%
Wyoming: 55.0%
United States: 54.8%
New Mexico: 51.6%
Nebraska: 51.5%
Kansas: 51.0%
Wisconsin: 48.7%
Montana: 43.9%
North Dakota: NA

Source: ACT Institutional Survey
Graduation rates for research institutions, 2002

- Wisconsin: 67.1%
- United States: 62.2%
- Nebraska: 54.4%
- Wyoming: 54.3%
- Kansas: 53.8%
- South Dakota: 51.0%
- North Dakota: 48.8%
- New Mexico: 45.7%
- Montana: 43.1%

Source: NCES, IPEDS 2002 Graduation Rates
Graduation rates for other four-year institutions, 2002

- Wisconsin: 52.1%
- United States: 48.2%
- Nebraska: 47.2%
- Kansas: 44.3%
- South Dakota: 42.0%
- Montana: 39.7%
- North Dakota: 37.0%
- New Mexico: 31.1%
- Wyoming: No Other Four-Year Institutions

Source: NCES, IPEDS 2002 Graduation Rates
Graduation rates for two-year institutions, 2002

- South Dakota: 60.6%
- Wyoming: 52.2%
- North Dakota: 44.0%
- Nebraska: 43.2%
- Wisconsin: 39.6%
- Kansas: 37.7%
- Montana: 30.2%
- United States: 29.1%
- New Mexico: 12.9%

Source: NCES, IPEDS 2002 Graduation Rates
So What?

- World leaders in higher education attainment:
  - Canada, Finland, Ireland, Japan, Korea

- Second Tier:
  - U.S., Australia, Belgium, France, Norway, Spain, Sweden, U.K.

Source: OECD Statistics, Annex 3 – Table 2.5
Leaks continued – We serve certain populations poorly

Increasing share of population from communities that higher education traditionally has not served well.

- Communities of Color: Will supply a larger percentage of Montana’s high school grads by 2012: Up from 11% today to 14% in ten years
- Native American high school grads will make up 8% of the total
- Hispanics only growing population – from 2% to 3.3%
Historic success, or lack thereof, of Native American students in higher education

Another challenge for Montana: In 2000, Native Americans represented

- 6.4% of the Montana population
- 4.3% of full-time first-time freshmen
- 2.2% of those awarded associate degrees*
- 2.8% of those awarded bachelor’s degrees

*92% from tribal colleges
Historic Success, or lack thereof, of low-income students

- In the U.S.: Participation dropped from 27.5% to 23.1% between 1999 and 2001.
- In Montana: 27.9% of low income participation.
Percentage of 1992 high school graduates attending college in 1994

<table>
<thead>
<tr>
<th>Achievement Quartile</th>
<th>SES Quartile</th>
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<tbody>
<tr>
<td></td>
<td>Lowest</td>
<td>Highest</td>
</tr>
<tr>
<td>Highest</td>
<td>78%</td>
<td>97%</td>
</tr>
<tr>
<td>Lowest</td>
<td>36%</td>
<td>77%</td>
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</tbody>
</table>

Source: Access Denied, Department of Education, February 2001
The 3rd Challenge – Limited Resources

- State appropriations make up 33.1% of funding for Montana’s baccalaureate institutions. The WICHE average: 42.9%

- Montana funds its two-year institutions at a rate of 18.9%. The WICHE average: 36.6%
State and local surplus or shortfall as a percent of baseline revenues

Source: National Center for Higher Education Management Systems (NCHEMS)
Access is at risk

- Montana trails the West and the rest in need-based financial assistance.
- State need-based aid
  - Montana - $62
  - WICHE average - $238
  - U.S. average - $316
The Makings of A Serious Access Challenge

Declining demand

Increasingly difficult-to-serve clientele

Limited finances
WHY DO IT – Montana’s Workforce Challenge

- The Leaky Pipeline Continues
- Financially, Montana has no choice
- To Work, or Not To Work, that is the question
Workforce Development – Montana’s leaky pipeline

  - Total = -6,600
- Could Be Worse: You trailed Pennsylvania, Iowa, West Virginia, North Dakota, & South Dakota
- But, it is who you are losing
  - Less than High School: +383
  - High School Grads: -475
  - Some College Folk: -788
  - Associate Degrees: -240
  - Bachelor’s Degrees: -4,886
  - Grad & Professional: -644

(Source: Census Public Use Files via NCHEMS, HigherEdInfo.Org)
Financial Consequences of Inaction – The Chicken/Egg Thing

Returns on Educational Investment

Median Income – High School Graduate:
- Montana: $16,000 (50th Nationally)
- U.S.: $20,800

Median Income – Baccalaureate Degree Grad:
- Montana: $25,000 (50th Nationally)
- U.S.: $36,000

Difference – High School to College Earning Gap:
- Montana: $9,000 (49th Nationally)
- U.S.: $15,200

(Source: U.S. Census Public Files via NCHEMS, HigherEdInfo.Org)
To work, or not to work – Montana’s Future Workforce
Projected Growth of Working Age Population – 2000 to 2025

Source: US Census Bureau via NCHEMS Higheredinfo.org
To work, or not to work – Montana’s Future Workforce
National Unemployment rates -- 2002

To work, or not to work – Montana’s Future Workforce
Montana’s Unemployment rate -- 2002

**HOW to respond**

Using distance learning as one tool

- The Caveat – Technology is *a* tool; not *the* tool. “Students Rule”

- Technology Mediated Distance Learning Today
  - As a unique resource
  - Most appropriate audience
    - Geographically bound
  - Clearly established requirement
- Examples
  - Library Media Specialist
  - In Mt and N.D. – maybe in Id
  - Northern Plains Transition to Teaching
Technology Mediated Learning Today (continued)

- As a *Complementary* resource:
  - Most appropriate venue:
    - Where resource sharing makes sense
    - Where audience is place bound
  - Examples in Montana
    - NEON PhD in Nursing
    - Great Plains MA in Human Services
    - Arabic Studies for undergraduates
Technology Mediated Learning Today (continued)

- The *This and That Model*
  - Where Appropriate:
    - Where One venue alone won’t work.
    - Where geographic delivery is convenient but not essential.
  - Example"
    - Pharm D at University of Montana
Technology Mediated Learning Today (continued)

- Redundant resource:
  - Where Most Appropriate
    - Where economies of scale work
    - Where convenience is demanded
  - Examples
    - Standard undergraduate curriculum
    - Nearly ubiquitous in higher education today
  - Standard model today:
    - All institutions sell intentionally
    - Few institutions buy intentionally
Technology Mediated Learning: Where to From Here

- Blending – a natural but non-exclusive mode of instruction.
  - De facto occurring today – intentional model for tomorrow.
  - Washington State Master Plan – 10% for all
- The Broker Model
- Buying and Selling Best in Business (NEON)
- Open Source Learning
- Deriving your curriculum from others
It’s A Bold New World

- The Access Challenge
- More Going On To College
- More Succeeding In College
- More of College Education Staying in Montana
More of that Bold New World

- The Workforce Dilemma
  - Education Pays
  - But More There Than Here
  - So – the Exodus
- The Choice
  - High skill/high wage economy
  - Low skill/low wage economy
Even more – but the last, I promise

- Distance Learning as a tool
  - From Distance Learning to LAAP Learning
  - Where technology mediated is a natural part of the whole, not an “add on” for “them”.
- Therein lies your charge -- go forth and
  - Increase access (to success)
  - Enhance workforce development
  - And improve the learning environment through technology

- Because, that’s what Montana needs