The Future of Higher Education: A Survival Guide

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Today’s Roadmap

- What does the future look like?
  - Globally
  - Higher Education
  - Are trends for women different?
- Some discussion with you
- A survival guide
  - Anticipating the future
  - Dealing with uncertainty and change
7 Trends Changing the World

- Global – more interdependency
- Demographic – big and fundamental changes
- Financial – harder to get, more debt
- Technological – continuing rapid change
- Education – multiple approaches
- Resources – energy, water, climate
- Infrastructure – the glue that hold it together
Snapshot of Arizona People

- AZ High school graduates growth rate was highest 1998-2003 and is highest projected 2003-2015
- AZ population growth rate second behind Nevada
- Fastest growing population segment is Hispanic, 29%
- Slightly more >65 (12.6% vs 12.1%) than U.S.
- Slightly more <5 (7.9% vs 7%) than U.S.
- Slightly less female (50.2% vs 52.0%) than U.S.
- State of greatest migration: California is >half
- Arizona (and U.S) can be thought of as partly developed and partly developing “countries” (good on some factors poor on others)
Impact of World Population Growth
Arizona Age Distribution
(from Arizona’s Economy – UA)
Arizona Population 2000 and 2030 (U.S. Census)
Increasing High School Graduates (in Arizona)

Second Challenge: Enhancing Diversity

Figure 4. Arizona Public High School Graduates by Race/Ethnicity
1992-93 through 2001-02 (actual), 2002-03 through 2017-18 (projected)
Non-population Challenges for Higher Education

- Constrained budget times – more competition for fewer funds
- Incoming students are technologically competent for e-learning and have certain expectations – anyplace becomes a learning space
- Curricular reform – streamline, innovate, partner
- Increased roles (community/state problem solver)
Implications of a Changing World

- World demographic trends will cause big changes
  - Population ratio of developing to developed countries
  - Aging of much of developed world
  - Rich and poor gap, haves and have nots

- Higher Education will change too
  - More diversity (ethnicity, culture)
  - Educational assistance increases (aid, mentoring)
  - Role in society – depends on type of university
  - Women as majority in most disciplines, most universities, and most degrees levels.

- New technologies will change learning
Continuing Studies on Arizona Higher Education Keeps the Future Unclear

- ABOR
  - Changing Directions Initiative, 2002
  - Arizona Universities Redesign Study, 2004
  - Enterprise Model, 2006
- ABOR Collaborative Efforts
  - Arizona Universities Network
  - Phoenix Biomedical Campus (ASU, UA)
- Legislature – 4-year community colleges
- Lots of other studies - state and national
Women in Higher Education

Some Trends
Share of Bachelor Degrees to Males
1870-2002 (from Postsecondary Education Opportunity)
Share of Bachelor's Degrees by Type of University (Males), 1970-2002

(from Postsecondary Education Opportunity)
Share of Bachelor Degrees by Ethnicity (Males), 1977-2002
(from Postsecondary Education Opportunity)
Share of Degrees to Males by Degree Level, 1960-2002 (from Postsecondary Education Opportunity)
Degrees by Gender
(from Postsecondary Education Opportunity)

Bachelor’s Degrees Awarded to Males by Field of Study
1970 and 2002

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>1970</th>
<th>2002</th>
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</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>72.3</td>
<td>66.4</td>
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<tr>
<td>Computer/Info Sci</td>
<td>72.4</td>
<td>66.4</td>
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<tr>
<td>Physical Sciences</td>
<td>57.8</td>
<td></td>
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<tr>
<td>Architecture</td>
<td>58.3</td>
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<tr>
<td>Agriculture</td>
<td>63.8</td>
<td>95.8</td>
</tr>
<tr>
<td>Mathematics</td>
<td>50.3</td>
<td>62.6</td>
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<tr>
<td>Social Sci/History</td>
<td>49.3</td>
<td>43.2</td>
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<tr>
<td>Business</td>
<td>45.1</td>
<td>91.3</td>
</tr>
<tr>
<td>Bio/Life Sciences</td>
<td>36.8</td>
<td>70.3</td>
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<tr>
<td>Communications</td>
<td>38.3</td>
<td>84.7</td>
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<tr>
<td>Visual/Perform Arts</td>
<td>32.4</td>
<td>43.3</td>
</tr>
<tr>
<td>English</td>
<td>31.4</td>
<td>45.8</td>
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<tr>
<td>Foreign Lang/Lit</td>
<td>8.5</td>
<td>58.8</td>
</tr>
<tr>
<td>Psychology</td>
<td>2.4</td>
<td>58.6</td>
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<tr>
<td>Education</td>
<td>1.1</td>
<td>31.6</td>
</tr>
<tr>
<td>Public Admin</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Health Professions</td>
<td>14.8</td>
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</tr>
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</table>
### UA Colleges, Percent Women, Undergrad and Grad, Fall 2006

<table>
<thead>
<tr>
<th>College</th>
<th>Undergrad</th>
<th>Grad</th>
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<tbody>
<tr>
<td>Nursing</td>
<td>88.2</td>
<td>90.1</td>
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<tr>
<td>Public Health</td>
<td>75.0</td>
<td>73.5</td>
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<tr>
<td>Education</td>
<td>77.6</td>
<td>72.3</td>
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<tr>
<td>Humanities</td>
<td>61.9</td>
<td>62.9</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>61.2</td>
<td></td>
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<tr>
<td>Social Behav</td>
<td>58.0</td>
<td>60.9</td>
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<tr>
<td>Architecture</td>
<td>40.1</td>
<td>55.1</td>
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<tr>
<td>Fine Arts</td>
<td>58.3</td>
<td>56.5</td>
</tr>
<tr>
<td>Medicine</td>
<td></td>
<td>59.2</td>
</tr>
<tr>
<td>Agric &amp; Life Sci</td>
<td></td>
<td>71.9</td>
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<tr>
<td>Law</td>
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<td>49.4</td>
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<td>Business</td>
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<td>Science</td>
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<td>Engineering</td>
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<td>19.0</td>
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<tr>
<td>Optical Sci</td>
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<td>17.7</td>
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<tr>
<td>Overall</td>
<td>52.5</td>
<td>52.6</td>
</tr>
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</table>
Issues: Women in Higher Education

- Recruitment and Retention are linked – hiring people that are different than current majority requires addressing barriers and nurturing for success.
- Faculty service committees are burdensome when addressing for diversity, especially for minority women.
Issues: Women in Higher Education 2

- Negotiating skills differ by gender and style
- Key departmental decisions, in some cases, may be made by older males with older values systems, who are unaware of today’s management principles
Some change raised by women are now used by men:

- Flex time, or tenure clock delays
- Today’s management style is moving more to listen, collaborate, decide, act (role model?)
Your turn. . .

Get your 3x5 cards ready
Identify the most important FUTURE women’s issues

- Take the 3x5 card, and on one side write 1-3 issues that you think will be important to women faculty or staff in the next 5-10 years.
- We will discuss a few examples and save the card to hand in later.
Identify the Implications of these Implications future Women’s Issues

- Take the 3x5 card, and on the other side write 1-3 of the most important implications for issues we just discussed.
- We will take a few examples, and save the card to hand in (pass to the aisles).
Survival Guide - Contents

Views on the Future
Change
Final Thoughts
Guide: Future Overview

- Understand the future will be more uncertain and complex
- Many things will remain the same, some will be very different
- Keeping your “radar” on while going about daily activities picks up useful information
Guide: Five Suggestions

- Attitude – your mindset and approach is key; make respect your primary value
- Context – understand relationships
- Consistency – not static but still consistent
- Transparency and communication – be honest and communicate often
- Keep relevant culture and traditions when appropriate
Guide: Practice Thinking About the Future - Examples

- How will the character of your institution change if Arizona population doubles in 25 years (that is current estimate)?
- Funding will become more competitive, how will this impact the focus of your institution?
- How would you answer the question “What will your institution do differently in 10 years?”
- How will answering these questions change your discussions with colleagues?
Guide: Dealing with Change

- Unpleasant when confusing or negative impact; Pleasant when understood clearly and fun
- Transitions take time – like a supertanker turning
- Remover barriers and use appropriate incentives and disincentives for fast change
- Deal with change in a positive manner
- See change codes: http://cals.arizona.edu/dean/planning/
Guide: Final Thoughts

- Living with the today’s VUCA world
  - Volatile
  - Uncertain
  - Complex
  - Ambiguous

- Using a FAIR approach to managing
  - Flexible
  - Agile
  - Innovative
  - Responsive