CURRICULAR CHANGE IN THE HEALTH PROFESSIONS

India Lane, DVM, MS, EdD
Why Curricular Change is So Hard

Outline

- Features of “Change”
- Change in Academia
- Common Issues in Curricular Change
- Strategies to Facilitate Curricular Change
Objectives

- Increase your awareness of challenges in change
- Share experiences and tips
- Help provide ideas for generating vision and momentum for curricular enhancement
Perceptions of Change

- LOSS

- ANXIETY AND INSTABILITY

Morris (1975)
Fuller’s Concerns Theory

- Self
- Task
- Impact
SELF

What about me?

Experience
Coping skills
Personal impact
Stress level
Risk-taker?
Early adopter?
TASK

What will it take?

- Type of change
- Time required
- Cost
- Implementation
IMPACT

Will it be worth it?

- Perceived value of change
- Perceived degree of change
- “Power” of the idea
Resistance to Change

Imposed change
Individual characteristics
Lack of perceived value or need
Lack of time to process change
Very low or very high stress environment

Participatory change
Individual characteristics
High perceived value
Appropriate timeline
Moderate stress level
Evidence available
Change in Academia

- Independent, autonomous
- Isolated in the classroom
- Busy, pressed
- Conservative
- Skeptical
- Views of “soft science”
- Entrenched departments/disciplines
- Entrenched reward systems
Change in Academic Medicine

- Independent
- Isolated in the classroom
- **Busy, pressed**
  - Information and change overload
  - Income pressure
- Conservative
- Skeptical
  - Reward predictability not creativity
- Views of “soft science”
- Entrenched departments/disciplines
  - Professional identity
- Entrenched reward systems
Curricular change

- Also creates feelings of loss and anxiety
- Implies something is wrong
- Includes perceived “winners” and “losers”
- Curricular time = importance = power
- Requires time, work, energy
Barriers to Curricular Reform in Medicine

- Pedagogical disagreements
- Territorial or departmental protection
- Interpretation of “Academic Freedom”
- Resource allocation
- Lack of time to consider innovations
- Concerns about timing or timeline
- Vague plan for perceiving
- Concerns about reward for efforts
- Concerns about effect on students

Curricular Challenges in Veterinary Medicine

- Time
- Tradition
- Multiple Species
- Licensing requirements
- Faculty/staff numbers
- Student numbers
- Space
- Cost
- Teaching Hospital
WHY CHANGE?
“Change for the sake of change”

- New dean, new director, etc
- New report, just like the old report
- It’s been 5…. 10… 15 years
Why fix it if it ain’t broke?

- Faculty were trained traditionally and made the connections themselves and did OK in the end.
- Our students have graduated and passed boards for decades.
WHY TRY NEW METHODS?
Educational trends are passing “fads”

Scientific method
- Observation
- Question
- Hypothesis
- Experiment
- Analysis
- Repeat

Educational research
- Observation
- Question
- Goals
- Strategy
- Assessment
- Repeat
The traditional method is “efficient”

- One lecturer, 50 minutes, 100 students and a multiple choice quiz = >100 hours of learning

- Inefficiency is revealed later, when retention, application and transfer suffer
Even the students want to be “spoon fed”

- Prior experience
- Prior socialization
- Learning styles vary
- Learning curve for students too
- Want to be challenged but struggle with uncertainty
The Devil is in the Details...

“I can’t support this concept until I see more details”

“I can’t support this concept because of the details”
"I need more time to teach!"

"Don’t increase my teaching load!"
Just tell me the “best” way..

- What is the best educational method?
  - Learners differ
  - Content differs
  - Institutions differ
WHY CHANGE? REALLY
National Curricular Goals

- Public Health and Food Safety
- Foreign Animal Diseases
- Human-Animal Bond
- Skills, Values and Attitudes
- Diversity of educational paths

AVMA Accreditation Policies
AAVMC
NAVMEC
Drivers of Curriculum Development

- National “calls for reform”
- Admissions or changes in student population
- Accrediting and related agencies
- Changes in institutional structure or leadership
- Outcomes Assessment needs or results
- Contemporary Educational Models or evidence
- Information Abundance
- Review and Relevance
- Student Debt or Instructional Cost
- Renewal
- Ongoing ability to meet needs of graduates and profession
Drivers of Curriculum Development

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- Renewal

- Ongoing ability to meet needs of graduates and profession
But we’ve been doing OK for years...

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<thead>
<tr>
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<th>C 1980</th>
<th>2012</th>
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<tbody>
<tr>
<td>Demographics</td>
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<td>Admissions</td>
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<td>Information Available to Students</td>
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<td>Student Development</td>
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<td>Assessment</td>
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<td>Accreditation</td>
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<td>Cost and Consumer Orientation</td>
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Another Driver

- To create a unique, valuable and recognizable WSU “Product” that attracts students and employers
  - Curriculum
  - Graduates
Transformative Change

- The “Power of a Good Idea”!
  - BHAG!
- The Power of a Cluster of Buzzing Mosquitoes!
IMPROVE YOURSELF
Dilemma #1

- Should we train generalists or specialists?
- How do we balance foundational knowledge with applied clinical performance?
Dilemma #2

- How do we prepare diverse individuals for diverse career opportunities?
Dilemma #3

- How do we balance medical skills/ability with business skills?
- How do we balance animal welfare and altruism with good business practices?
Dilemma(s) # 4

- How much should we concentrate training on skills versus content? Facts versus thinking skills? Biomedical skills versus nontechnical skills?
Dilemma #5

- How on earth do we do it in 4 years?

- “Just in time” versus “Just in case”
Dilemma #5, part b

- Do we blow it up and start over??
Strategies for Facilitating Curricular Change
## Strategies
### Change models

<table>
<thead>
<tr>
<th>Kotter</th>
<th>Chauvin</th>
<th>Rogers, Gladwell</th>
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<tbody>
<tr>
<td>Create urgency</td>
<td>Define process</td>
<td>Innovators</td>
</tr>
<tr>
<td>Form a powerful coalition</td>
<td>Educate</td>
<td>Diffusion</td>
</tr>
<tr>
<td>Create vision</td>
<td>Collaborate</td>
<td>Early adopters</td>
</tr>
<tr>
<td>Communicate the vision</td>
<td>Communicate</td>
<td>Diffusion</td>
</tr>
<tr>
<td>Remove obstacles</td>
<td>Reeducate</td>
<td>Early majority</td>
</tr>
<tr>
<td>Create short term wins</td>
<td>Adapt</td>
<td>Late adopters</td>
</tr>
<tr>
<td>Build on the vision</td>
<td>Repeat</td>
<td>Diffusion</td>
</tr>
<tr>
<td>Anchor the changes in the culture</td>
<td></td>
<td>Majority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mavens</td>
</tr>
</tbody>
</table>
Strategies

- Discuss outcomes you desire
- Confirm shared goals
- Acknowledge and maintain the strengths of the current program
- Agree on the general process for revision
- Agree specifically on the “endpoint” – consensus, simple majority, 75% majority
Strategies

- Convey need and shared vision
- Avoid implication of “punishment”
- Use data and evidence as much as possible
- Uncover and manage conflict
- Create a participatory process
- Use demonstrations, pilots
- Use small teams
- Provide consistent leadership
- Seek to understand others
- Provide time and reward for efforts
The Visions

Starting Point, Initial Plan

Potential Vision of the End Result

Critical Boundaries, Principles or Moves
## Forming Teams

<table>
<thead>
<tr>
<th>Change Agents</th>
<th>Balancers</th>
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<tbody>
<tr>
<td>- Respected faculty</td>
<td>- Big picture oriented</td>
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<tr>
<td>- Idea oriented</td>
<td>- Detail and implementation oriented</td>
</tr>
<tr>
<td>- Early adopters</td>
<td>- Assessment oriented</td>
</tr>
<tr>
<td>- Students</td>
<td>- Critic or skeptic</td>
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<tr>
<td>- Stakeholders</td>
<td>- Considered open but “neutral”</td>
</tr>
</tbody>
</table>
Resistance

- Is it a “People” problem or a “Situation” problem?

- The situation has to change..or someone(s) has to start acting differently.

  - Heaths
Resistance

- Is it resistance or a lack of clarity?

- Some clarity has to be in place to avoid exhausting ambiguity.
  
  - Heaths
Assess the Situation...

Where are we on the continuum?
Individually? Collectively?
Surveys
Periodic Votes
Strategies

- Communicate
- Communicate
- Communicate
- Communicate
All that said

- It’s messy!!

“Change is learning, loaded with uncertainty.”

Michael Fullan
What’s the Emotional Hook?

What about me?
What about me?

What about...?
Tales of Curricular Revision

“The Good, the Bad and the Ugly”
Chapter 1. Once upon a time...
Atlantic Veterinary College, 1992
Curricular Investigation
Problem-based learning

- Multiple Curricular Retreats
- Teams of individuals traveled to Bowman Gray School of Medicine or University of New Mexico
- Consultants visited from McMaster, D
- Progressive faculty, made progress in reform and planning
Deemed not feasible due to costs

However, some elements were incorporated into first year and into elective courses and persist
UTCVM Curricular History

- 1974. Three year, year round program essentially designed by Dr. Armistead
- Late 1980s. University of Tennessee moved from quarter to semester system; opportunity to change to 4 year program. Revised course sequence and length
Steps in Review

- Course Review by Curriculum Committee
  - Content
  - Contact time, including “20% cuts”
  - Needs
  - Feedback
  - Focus groups – students, alumni

- Guiding Principles Developed by ad hoc Curricular Revision Group
Guiding Principles

- Teaching is still “Job #1”
- Encourage student responsibility for education
- Reinforce students’ curiosity and enthusiasm
- Increase integration of basic and applied information
- Increase flexibility to meet different learning styles
- Promote professional behavior
- Enhance verbal and written communication skills
Actualization of Guiding Principles

- Teaching is still “Job #1”
  - Office of Veterinary Medical Education
- Encourage student responsibility for education
- Reinforce students’ curiosity and enthusiasm
  - Limited PBL
  - Early clinical Exposures
- Increase integration of basic and applied information
  - Limited PBL
  - Clinical correlations course
  - Integrated Anatomy and Histology
- Increase flexibility to meet different learning styles
  - Limited PBL
  - Increased Elective opportunities
- Promote professional behavior
- Enhance verbal and written communication skills
  - Limited PBL
Curriculum Committee

- Appointed Course Liaisons
- Prepared 6 questions Met with Educational Consultant
- Director investigated PBL
- Curriculum reviewed by year
Changes

- Added 8 weeks of Applied Learning in PBL mode
- Added Courses
  - Behavior
  - Oncology
  - Infectious Diseases
  - Transition Seminar Series for 3rd year
- Additional Electives in years 2 and 3
The Rubber Meets the Road

- Multiple Models presented to faculty
  - With rationale
  - With weeks outlined for courses and activities
- Almost derailed by premature faculty vote
- Model 17b ultimately presented for vote
<table>
<thead>
<tr>
<th>Week number</th>
<th>SEMESTER TWO - 70 instruction days</th>
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<tr>
<td>1-5</td>
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</tr>
<tr>
<td>12</td>
<td>VET ANAT II</td>
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<tr>
<td>4</td>
<td>PHYSIOLOGY II</td>
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<td>1 &amp; 1 3 (5)</td>
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I & I 3 = Virology, I & I 4 = Parasitology
Change layout

- Faculty vote
- Implemented with entering class in Fall 1999
- Just in time ABLE preparation, elective development, assessment
Curriculum 1999-2006

- Increased student responsibility
- Increased active learning, problem-solving
- Limit number of courses
- Increase elective opportunities
- Longer clinical year
- Fill “gaps”
Regression to the norm

- Loss of integration in first year
- Some changes in course sequencing to balance course load
- Loss of two PBL weeks, continued erosion
- Loss of “short courses” and block system
- Loss of integrated clinical chemistry
## Successful curricular change?

### Successes
- It got done
- Many electives have flourished
- Early clinical exposures and changes of pace well received
- Faculty reorganized content
- Faculty engagement with students increased
- More fun

### Not so much
- “Lightning rod” leader
- Slim majority
- Lack of curricular assessment planning
- Lack of time for implementation
- Vocal critics unchecked
- Goals not sustained
- No rewards for leaders
- No clear plan for ongoing improvement
2000 forward

- New dean with different vision
- Director of OVME resigned, not replaced
- Grumblers and “I told you sos” empowered
- First class of “new” curriculum graduated in 2003 with highest board scores and pass rates ever obtained
2002-2005

- New 5 year UTCVM Strategic Plan calls for major curricular revision
- Office of Educational Enhancement created and tasked with global assessments of curriculum, learning environment, etc.
- Curriculum Task Force and Performance Excellence Efforts started in 2004-06
Tomorrow?

UTCVM Strategic Goals

- Provide curriculum that meets various career options
- Utilize data from students, alumni, employers to plan and improve curriculum
- Strengthen public health education
- Increase training in communication skills
Curriculum Review Process

1. **Identification of Program Needs**
   - Program Goals
   - Student Segments
   - Specific Objectives

2. **Course Development/ED Strategies**

3. **Implementation**

4. **Assessment**

5. **Curricular Task Force**

6. **Curriculum Committee**
Task Force Mission

- Charged with long term (2025) view
- What do we need to learn? What can UTCVM do best? What will we need to accomplish our goals?
- Investigated societal and student needs
- Discussed tracking/specialization options
- Investigated other professions
Curriculum Task Force
Recommendations

- Creative thinking
- Increased external input
- Strong biomedical foundation
- Additional flexibility and different options or joint programs to meet certain needs
- Focus areas
- Increased attention to nontechnical skills
- Increased advising
- Flexibility and assessment embedded
Examples

- Additional flexibility to meet student needs
  - Summer programs
  - Hot topic courses
  - Intensive electives
  - Distance opportunities
  - Four “plus one” year programs
Tomorrow?

Task Force Observations

- Will need to make choices on focus areas
- Will need to “make room”
- Some faculty roles will change
- Will need increased student advising
Process

- Paralleled Foresight report
- Initial NAVMEC process
Curriculum Task Force Activities

- 2006-07 Preliminary report to Curriculum Committee, Departments, Advisory Board generated conceptual discussion

- Faculty begin proposing models for clinical year
- Educational Enhancement tasked with process oriented projects, student development and teaching development
Curriculum Task Force Activities

- Planned faculty forums went unscheduled
- No clear plan to proceed
- No clear leader
- Mixed messages from deans
- 2008 Dean appoints new curriculum committee chair... then promptly resigns
- Core/Elective clinical year finalized
- New dean hints at importing curriculum from previous school
Chapter 4. UTCVM part 3
Clinical Year Reform

- Individual Faculty had posed models during other curriculum discussions (2006-2008)
- Curriculum Committee chair compared models and identified common goals
- Departments began discussions
- New Dean charged Curriculum Committee to finalize
- “New” core, longer rotations, “more choice” voted and approved 2009, implemented 2010
UTCVM Team

- Dr. James Brace, Academic Affairs
- Dr. Mickey Sims, Instructional Resources
- Dr. Nancy Howell, Assessment
- Dr. Elizabeth Strand, Veterinary Social Work
- Dr. Ed Ramsay, Curriculum Committee Chair
- Ms. Susan Cherry, Student Services
Chapter 5. How does everybody else do this?
Curricula That Work
What can we learn from other professions

- Law
- Business
- Pharmacy
- Nursing
- Medicine
What can we learn from other professions

- Multiple electives within a few major concentrations
- Significant use of advisory boards, job (market) data
- Ability to incorporate hot topics quickly
- Extensive student advising
- National initiatives were effective in meeting major changes in profession
Educating Physicians: A Call for Reform 2010

- Standard competencies and learning outcomes
- Clear representation of core material
- Integration of roles, responsibilities, knowledge and skills – basic to clinical to basic
- Habits of improvement: inquiry, discovery and innovation, especially from clinical cases
  - Motivation and skill to teach oneself
  - Ability to identify gaps
- Development of Professional identity
Trends in Medical Education

Methods

- Conceptual orientation over detail
- Integrated, evidence based approaches
- Patient based approaches
- Early patient contact; longitudinal patient contact
- Special topic exposure/intensive blocks
- Technology based, shared resources
- Decreased “seat time”
- Competency based approaches
- Interprofessional approaches
- Skills and Simulation intensive
Curricula that work

- Integrated
- With a few key themes
- With extensive stakeholder involvement
- With ongoing assessment, revision and future planning
Good luck!!