The University of Iowa
PFF: Assessing Student Learning

John C. Keller
Associate Provost & Dean
Graduate College
### Career Trajectories Towards Professoriate

#### Sciences:

- 2 years coursework & exams + 3-4 years research → 5-6 years to PhD
  - + 2-3 yr postdoc = 10-12 years

- RA, fellowship vs TA support; FY appointments

#### Non-sciences:

- 3-4 years courses + exams + 4 years research → 8 years to PhD
  - + various non-tenure track positions = 10-12 years

- TA vs RA, fellowship support; AY appointments
Discipline specificity for PFF / professional development?

Sciences : research, grants

Non-sciences: teaching skills, research

Common: personal growth issues
Pre-2000: PFF followed a decentralized vs centralized model

Post-2000: Evolution of thinking:

• too much emphasis on specificity; not enough commonality

• Graduate College (other administrative offices) taking greater role

• Centralized vs decentralized model
Example: RCR → Scholarly Integrity

**RCR:**
- 1 semester course
- many topics
- inability to meet all expectations (Federal guidelines)

**Scholarly Integrity:**
- 4 semester sequence; faculty involvement
- 1 x 4 hr orientation, monthly topical seminars
- individual programs embellish discussions
- creates Community of Scholars, meets Federal guidelines

**Others:**
- Graduate Teaching Certificate (GC – College of Ed)
- Scholarly Inquiry Certificate (GC – POROI)
Graduate College: “the Network”

| Research                      | • External funding opportunities  
|                               | • Human subjects research       
|                               | • Animal subject research       
|                               | • Grant writing basics          
|                               | • Writing productivity          
|                              |                                 |
| Dissertation                  | • Prospectus writing            
|                               | • Dissertation writing          
|                               | • ETD basics                    
|                              |                                 |
| Teaching                      | • Science teaching              
|                              |                                 |
| Personal Growth               | • Time management               
|                               | • Conflict management           
|                               | • Difficult conversations       
|                               | • Understanding job market      
|                               | • Understanding job interview   
|                               | • Work-life balance             |
Assessing Student Learning

**teach ↔ learn ↔ know/understand**

Best way to learn a subject is to teach it

- how to teach?
- how do students learn?
- assessment of learning?
- mechanisms to demonstrate what you know
  - exams – what kind?
  - projects – labs, papers, portfolios
Assessing Student Learning

How will a student be different because of a learning experience?

Undergrad → Grad
exams → exams (different type)
projects → projects
applications of what you know

Skills to acquire:
- learn disciplinary content
- critical thinking
- intellectual reasoning

refs: Univ. of Oregon, Iowa
Assessing Student Learning

Learn ➔ courses to become current in the field

Comprehend ➔ develop hypothesis and how to design a research project

Apply ➔ gather, analyze, synthesize, interpret

communicate through thesis/dissertation, creative work