

# Transforming a BPharm into a PharmD: **A PARADIGM SHIFT**

FACULTY OF PHARMACY - KUWAIT UNIVERSITY

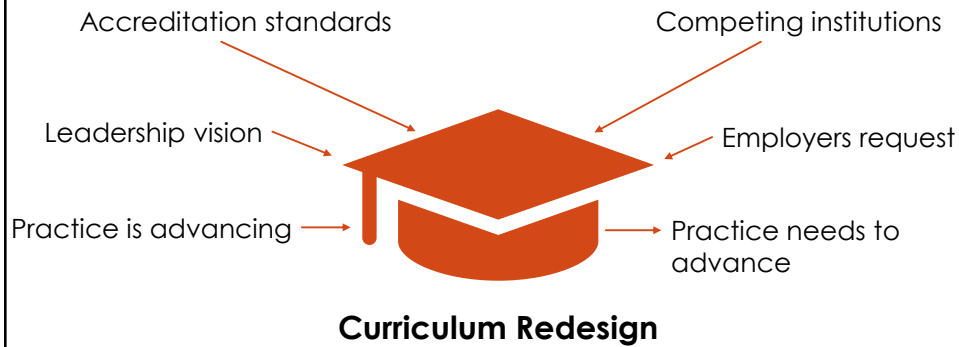


## CURRICULAR REFORM

### A STEPWISE APPROACH

- ▶ **Driving Forces**
- ▶ Needs Assessment
- ▶ Guiding Principles
- ▶ Professional Activities
- ▶ Competency-Based Education
- ▶ Active Learning
- ▶ Experiential Learning
- ▶ Assessment
- ▶ Discipline Integration
- ▶ Implementation Support

## DRIVING FORCES



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## WHAT IS A PharmD (Doctor of pharmacy)?

- ▶ Used to be a post-graduate degree aimed at improving preparedness for clinical professional activities in pharmacy
- ▶ It is now a professional undergraduate doctorate degree in pharmacy
  - ▶ The objective is to have better prepared graduates to offer a wide-range of professional activities (scope of practice)
  - ▶ In its simplest form, the PharmD is a BPharm with much more(1 year) practice experience (clinical rotations)

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## IS THIS WHAT IS NEEDED?

*American Journal of Pharmaceutical Education* 2011; 75 (1) Article 13.

### LETTERS

#### Curriculum for Uncertainty: Certainty May Not Be the Answer

Christy Noble, MEd,<sup>a</sup> P. Nicholas Shaw, PhD,<sup>a</sup>  
 Lisa Nissen, PhD, Ian Coombes, PhD,<sup>ac</sup> Mia O'Brien, PhD<sup>b</sup>  
 Schools of Pharmacy<sup>a</sup> and Education,<sup>b</sup> The University of  
 Queensland, Australia  
<sup>c</sup>Medication Services Queensland, Queensland Health, Australia

Hence, we propose, as others have done in the past,<sup>5,10</sup> that for an uncertain and ever-changing world, the pharmacy curriculum needs to be reconsidered. Social learning theory offers a potentially useful framework through which to do so. With this view, the curriculum aims to develop pharmacists who are a "certain kind of person," a person who will think, act, and do things in a way that shows they are truly patient-centered pharmacists. Perhaps then we can stop *tinkering* with knowledge and skills and truly *transform* the pharmacy curriculum.

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## A PARADIGM SHIFT



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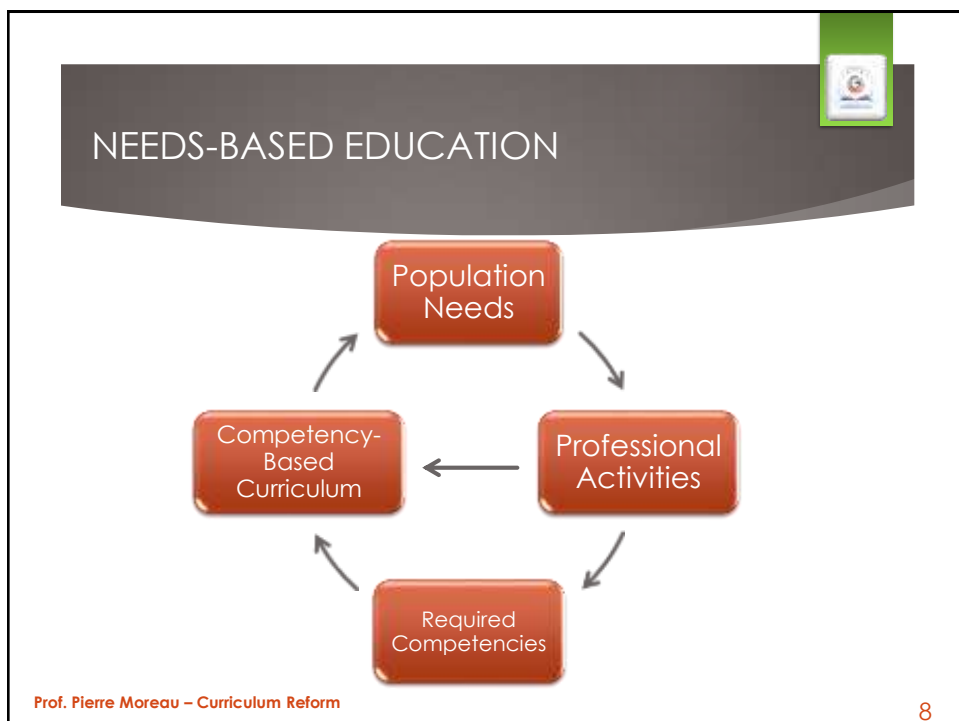
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## GUIDING PRINCIPLES – WHAT TO CONSIDER?



The diagram features a central orange graduation cap icon. Six orange arrows point towards this icon from the following text labels: 'Active Learning' (top left), 'Professional Activities' (middle left), 'Competency-based Education' (bottom left), 'Experiential Learning' (top right), 'Assessment Modalities' (middle right), and 'Discipline Integration' (bottom right).

### Curriculum Redesign

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## A PharmD GRADUATE SHOULD BE A...



Patient-centered, collaborative healthcare provider



Self-guided, life-long learner using evidence to support decisions and practice



Accountable practitioner with reputable professionalism and ethical behaviour



Community-oriented professional, conceiving value-added services and public health promotion activities



Engaged professional leader and advocate with significant mentoring and communication skills

## GUIDING PRINCIPLES FOR THE PharmD

- ▶ Curriculum characteristics
  - ▶ Competency-based
  - ▶ Emphasis on labs (hands-on) and practice experience
- ▶ Course creation and delivery
  - ▶ Context has to be relevant to pharmacy practice and delivered with active learning methods
  - ▶ Focus on critical thinking and problem resolution (grey zone)
- ▶ Assessment strategy
  - ▶ Focus on deep learning and measure competency level

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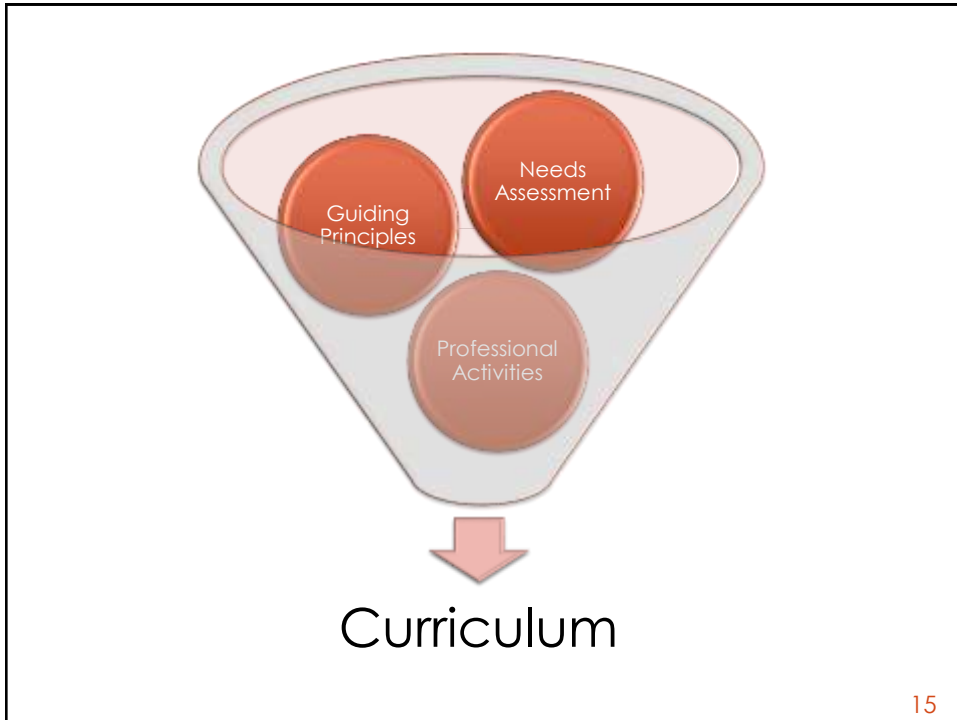
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## PROFESSIONAL ACTIVITIES (Pharmaceutical Services)



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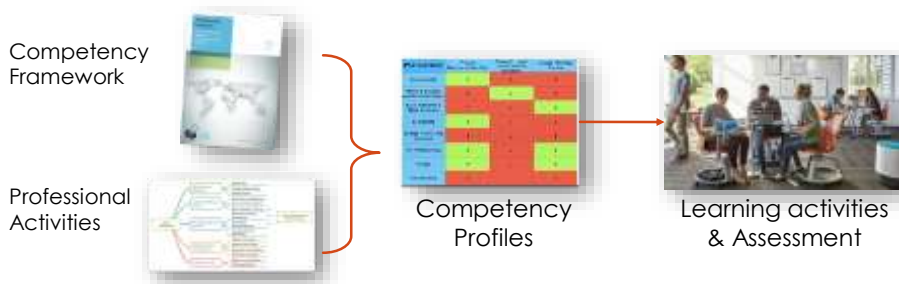
## COMPETENCY-BASED EDUCATION

- ▶ Pharmacy is not only about knowledge anymore, but about how to use the knowledge
  - ▶ Knowledge can be accessed by anyone
  - ▶ Technical activities can be replaced by robots
  - ▶ Cognitive activities cannot be easily replaced
- ▶ Several sources propose that CBE is the way to go to provide work-ready graduates
  - ▶ Lancet Commission (Health Professionals for a New Century)
  - ▶ Accreditations are becoming outcomes-based

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## PROFESSIONAL ACTIVITIES vs COMPETENCIES



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By being spoon-fed? - lecturing      or      by cooking? – active learning

## HOW DO CHEFS BECOME COMPETENT?

## ACTIVE LEARNING

**“AT THIS POINT IT IS  
UNETHICAL TO TEACH  
ANY OTHER WAY.”**

BY M. MITCHELL WALDROP

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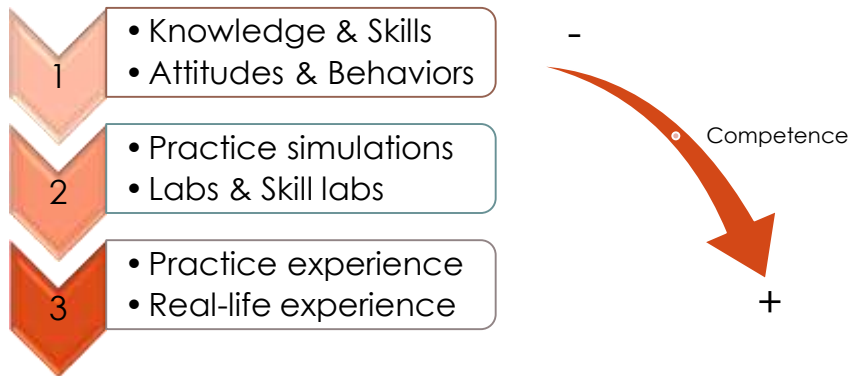
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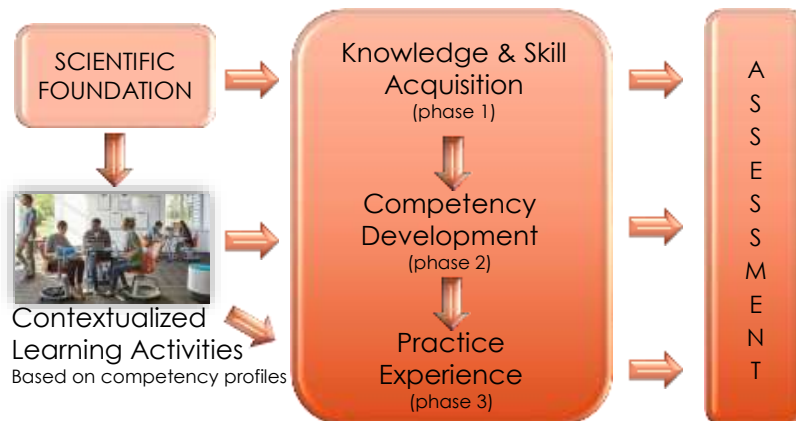
## EXPERIENTIAL LEARNING



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# ASSESSMENT DRIVES LEARNING!

*American Journal of Pharmaceutical Education* 2017; 81 (4) Article 77.

**REVIEW**

**A Call for an Integrated Program of Assessment**

David W. Fielding, EdD,<sup>a</sup> Glenn Regehr, PhD<sup>b</sup>

<sup>a</sup> University of British Columbia, Vancouver, British Columbia, Canada

<sup>b</sup> Centre for Health Education Scholarship, University of British Columbia, Vancouver, British Columbia, Canada

Submitted October 29, 2015; accepted March 31, 2016; published May 2017.

An integrated curriculum that does not incorporate equally integrated assessment strategies is likely to prove ineffective in achieving the desired educational outcomes. We suggest it is time for colleges and schools of pharmacy to re-engineer their approach to assessment. To build the case, we first discuss the challenges leading to the need for curricular developments in pharmacy education. We then turn to the

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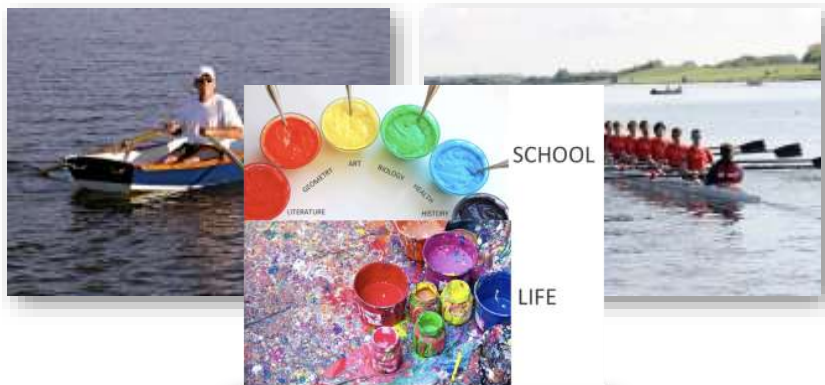
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## DISCIPLINE INTEGRATION



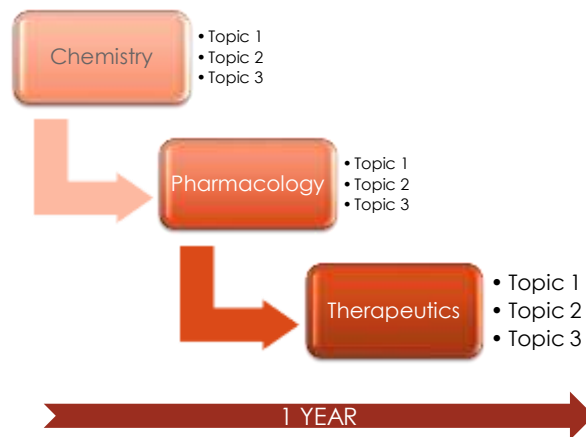
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## DISCIPLINE INTEGRATION ISOLATION - AWARENESS



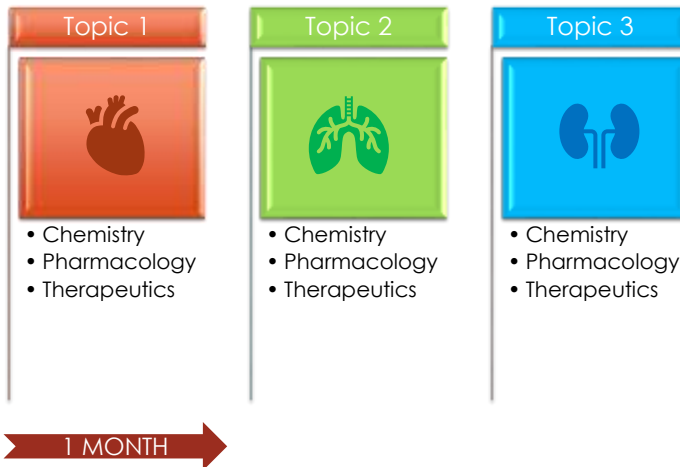
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## DISCIPLINE INTEGRATION TEMPORAL COORDINATION



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## DISCIPLINE INTEGRATION MULTIDISCIPLINARY



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## IMPLEMENTATION SUPPORT



- ▶ Create core teams to support
  - ▶ Curriculum reform
  - ▶ Active Learning
  - ▶ Assessment
  - ▶ Experiential Learning
- ▶ They will be the ones coaching and supporting other colleagues

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## CONCLUSION




- ▶ **Education is the foundation of professional advancement**
- ▶ **An up-to-date curriculum requires:**
  - ▶ Relevance to the profession... and a push forward (needs assessment)
  - ▶ A focus on outcomes (competency-based education)
  - ▶ Content delivery aligned with competency development
    - ▶ Active learning
    - ▶ Appropriate assessment including performance-based assessment
    - ▶ Structured experiential learning to offer a learning continuum
    - ▶ Integration of disciplines to provide information clusters for students to apply in a laboratory setting, and then in the real-world

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Encyclopedia of Pharmacy Practice and Clinical  
Pharmacy  
2019, Pages 1-14



## Becoming A Pharmacist: Education and Training: A Stepwise Approach to Competency-Based Pharmacy Education

Pierre Moreau, Dalal Al-Taweel, Mohamed Qaddoumi, Maryam Alowayesh

Faculty of Pharmacy, Health Sciences Center, Kuwait University, Jabriya, Kuwait

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*Review*

## Implementation of Competency-Based Pharmacy Education (CBPE)

Andries Koster <sup>1,\*</sup>, Tom Schalekamp <sup>2</sup> and Irma Meijerman <sup>3</sup>

<sup>1</sup> Department of Pharmaceutical Sciences, Utrecht University, The Netherlands and European Association of Faculties of Pharmacy (EAFF), Utrecht 3508 TB, The Netherlands

<sup>2</sup> Department of Pharmaceutical Sciences, Utrecht University, Utrecht 3508 TB, The Netherlands; T.Schalekamp@uu.nl

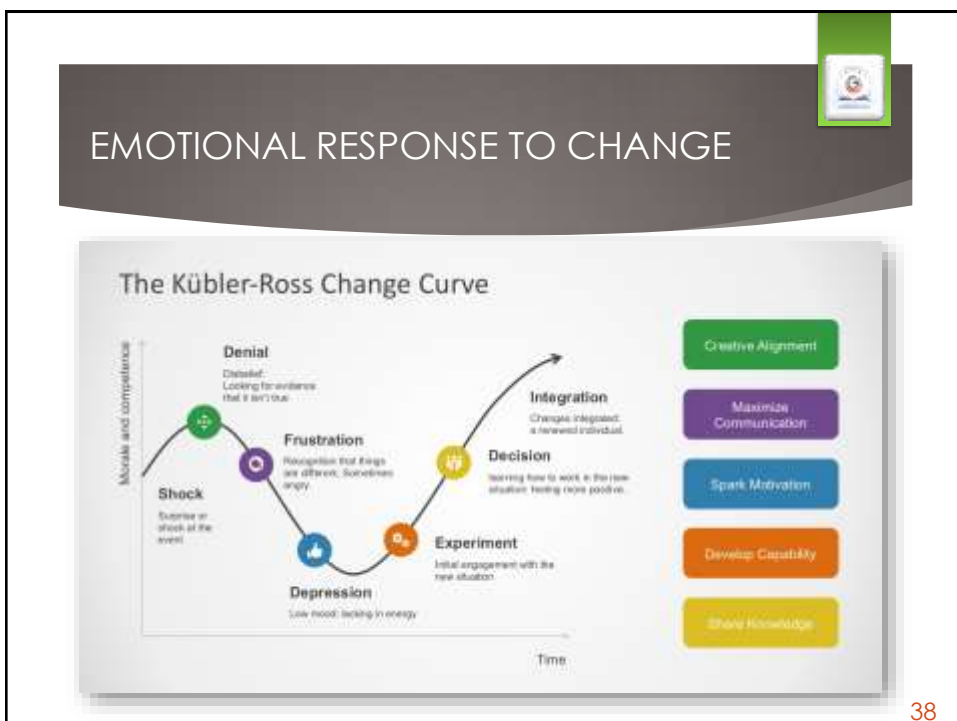
<sup>3</sup> Department of Pharmaceutical Sciences, The Netherlands and Centre for Teaching and Learning, Utrecht University, Utrecht 3508 TB, The Netherlands; I.Meijerman@uu.nl

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