



ERASMUS+ Programme  
Capacity Building  
in Higher Education



# The Importance of Experiential Education

Martin Henman – Trinity College Dublin, Ireland

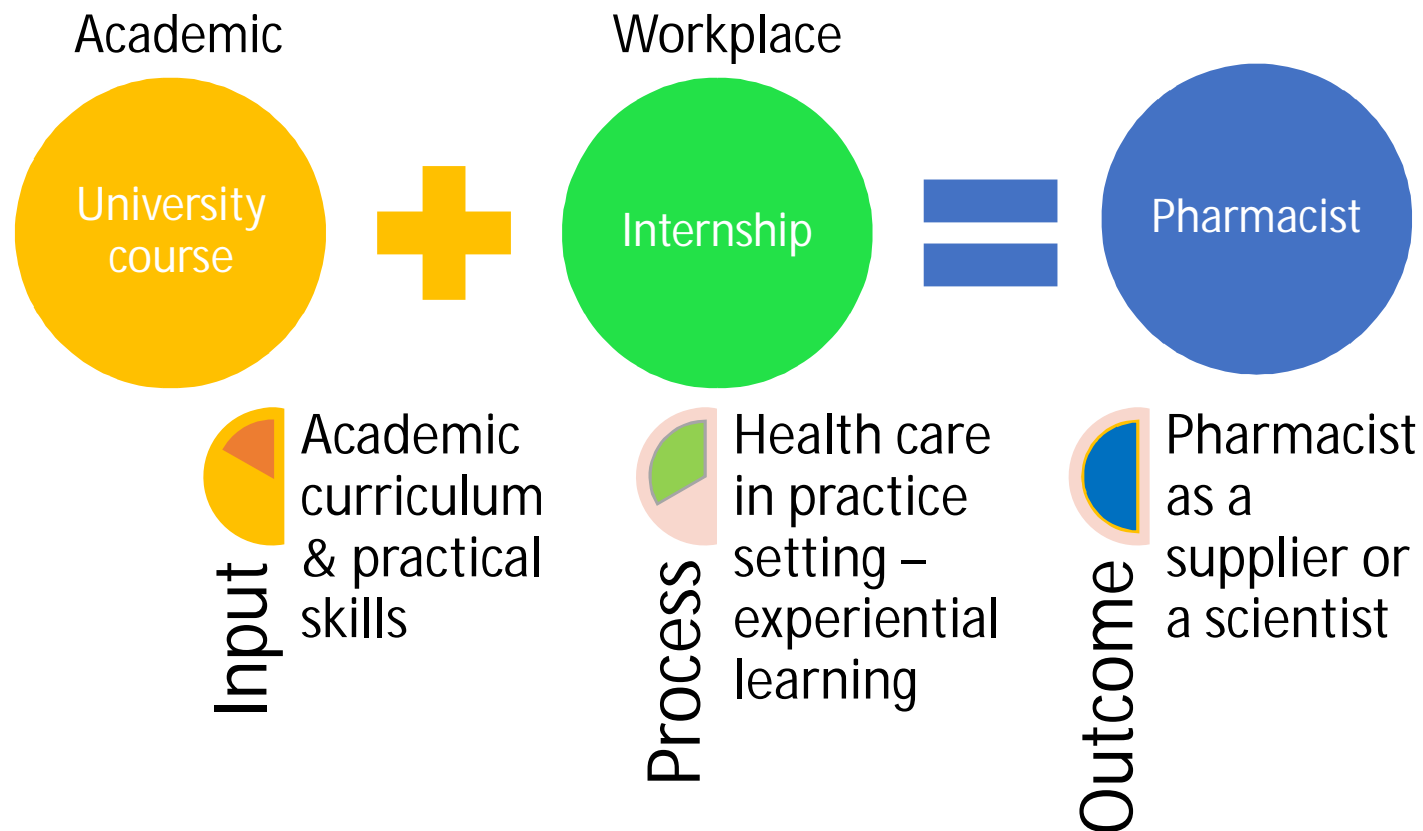
SEE Quality in Pharmacy Initiative  
1st Invitational Summit, Belgrade, Serbia  
October 23rd-25th 2015



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin

# Pharmacy Education – separate worlds

- *No other Health Care Profession allows such separation*



- *Because it is the enemy of learning, of high quality health care & of quality research in health sciences*



# Experiential education is important because it stimulates/drives

- Student development
- Re-configuration of the curriculum
- Review of learning
- Re-envisioning of pharmacy



# Student's perspective



- Study to pass assessments
- Think subjects are what you find in books & books are not real life, i.e. they are not found on YouTube or Facebook
- Have no experience of most health service settings or of serious or chronic disease or of caring for a patient
- Suspect that putting pharmacy knowledge into practice is not straightforward
- Are looking for role models and for models of what they do not what to be (even if they will not admit it)
- Are trying not to think about the day when they will be expected to practice Pharmacy and organise their work in response to patient demand
  - *And there can not be any extension of the submission deadline*



# Experiential – Workplace based learning

- *Learning undertaken by students who are given a chance to acquire and apply knowledge, skills and feelings in an immediate and relevant setting.*
- Experience can be a poor teacher, unless
- You know what to expect
- You look for & create opportunities to learn
- Explicit awareness of the types knowledge & learning
- Systematic, structured approach to processing, recording & using what is learned
- Unique patients, consultations & settings create unanticipated
- *But practising on patients requires supervision & is not risk-free*



# Clinical settings for Experiential

- Community pharmacies
- Hospitals
- Nursing/residential homes
- Governed by specific rules & norms
- Clinical staff – hierarchy & teams
  - Setting specific
  - Variable range of responsibilities
- Teacher-practitioners
- Preceptors & Tutors



TCD



USA



Krk



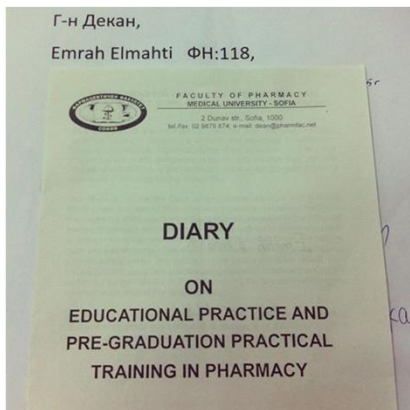
# Learning by doing: Skills

## Skills

1. Developed through repetition
2. *Structured feedback & reflection*

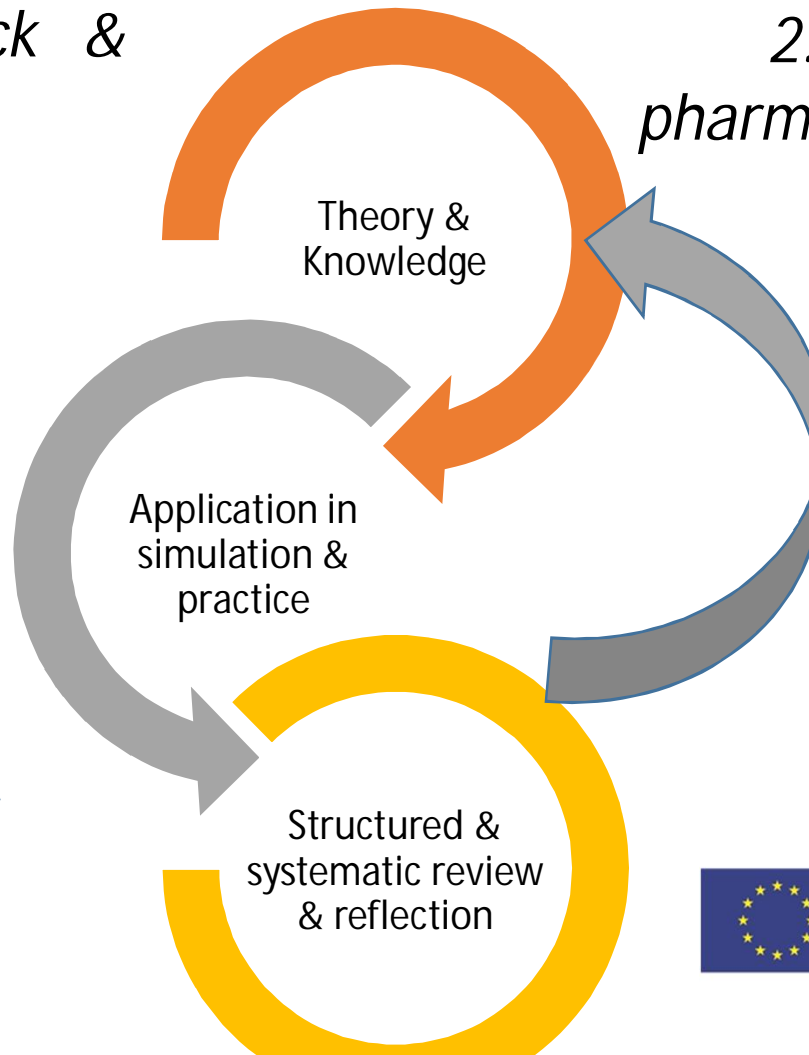
## Potential problems

1. Time & resource intensive
2. *Exposes patients & pharmacy professionals to 'new' type of risk*



Sofia

Lack of proficiency,  
Mistakes



Lack of knowledge,  
Mis-understanding



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin



ERASMUS+ Programme  
Capacity Building  
in Higher Education

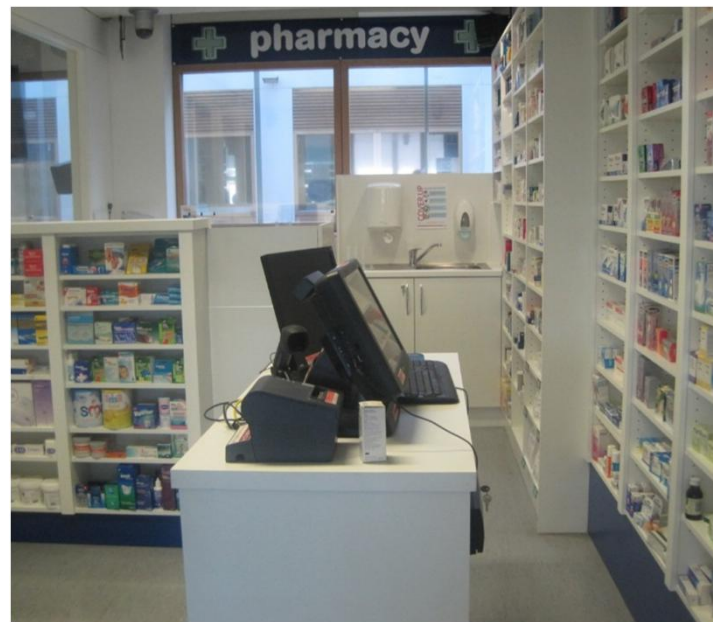


# Simulation Tools

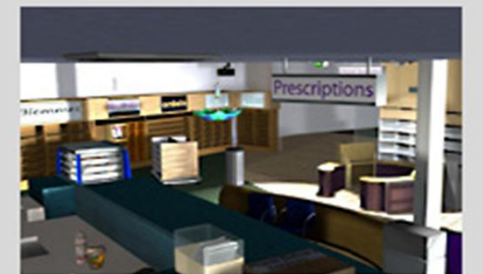
- Model pharmacies
- Aseptic manufacturing
- Standardized patients
- Model hospital wards
- Computer simulations
- Virtual reality
- Computer-driven models & mannequins



Laerdal – UDLA, Santiago, Chile



Pharmacy – Trinity College Dublin  
Non-prescription stock shelves (right), EPOS system (centre), General sale stock shelves (left), Dispensary (rear)



Virtual Patient – Keele University





# Simulation: learn skills effectively & without risk

- Simulation is a technique, not a technology
- Replicate elements of practice
- Fully interactive
- Recorded by observation or video
- Allows practice, learning from mistakes
  
- Therefore simulation is a valuable prior requirement to Experiential learning
- At each stage of development
- Peer review
- Assessment - Objective Structured Clinical Examination



# Active involvement helps Remembering

Cone of Learning		
After 2 weeks we tend to remember		Nature of Involvement
90% of what we say and do	Doing the Real Thing	Active
	Simulating the Real Experience	
	Doing a Dramatic Presentation	
70% of what we say	Giving a Talk	
	Participating in a Discussion	
50% of what we hear and see	Seeing it Done on Location	
	Watching a Demonstration	
	Looking at an Exhibit Watching a Demonstration	
	Watching a Movie	
30% of what we see	Looking at Pictures	
20% of what we hear	Hearing Words	
10% of what we read	Reading	



# Experiential or Practice learning

- Active, focussed process in a prepared environment
- Knowledge is 'apprehended' (captured) by student
- Nor is Experiential simply about being there, or being there and doing
- Thinking & talking about experience may also lead to learning
- And the experience of their peers in same/similar setting is credible & useful



Sofia



Ljubljana



# Knowledge in Health Sciences

Professionals use three types of knowledge

- Evidence-based knowledge – external written sources
  - Experiential Knowledge - derived from accumulated experience - Practice
  - Personal/Professional knowledge – synthesis of evidence & experience & intuition – Tacit knowledge
- 
- Need to become aware of these distinctions to be able to use our talents & make the most of opportunities – *learn how we learn*
  - When knowledge is applied in practice it may have to be modified for the situation
  - Reflection & integration to re-structure experience & knowledge



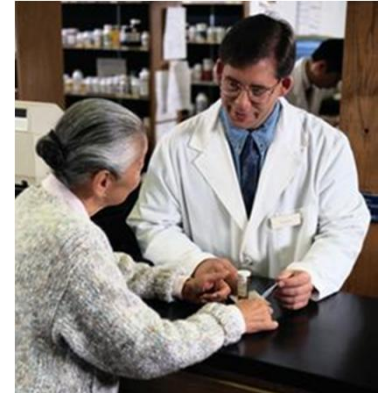
# Learning Opportunities in Experiential Education

- Extended range
- Taking a patient history – patient's attitude to medicines
- Communication skills - from basic to empathy
- Drug-Related Problems – Actual vs Potential
- Concrete situations in which the evidence base is poor, lacking or contradictory
- Making decisions on balance of available information
- Benefits & limitations of guidelines
- Pharmacists' roles (services)
  - *Leading Practitioners*



# Observation

- A crucial skill with people who are unwell
- Observing, noting & integrating all of the sensory & factual information during an encounter, particularly the unusual – useful skill for clinician and scientist
- Observation in acute situation
- *What is going on here?*
- *What is different about this situation?*
- *What can I see, as opposed to what am I supposed to be looking for?* Only in extended periods of research project work do students have this chance



# Responsibility & Accountability

- Responsibility for decision-making in patient care adds a dimension that turns mistakes from something that means a low grade to something that impacts a patient
- And for which I am expected to take responsibility
- And which may be contested by a colleague or a patient/relative
- In academic assessment, mistakes typically result in penalties but in practice assessment, if the error is serious enough, have automatic failure
- And a specified remedial process and re-assessment before progression can resume



# Professional work environment

- Students' must present their knowledge, recommendations to others
- They must work with less qualified but more knowledgeable people
- They must meet not only academic standards, but also professional practice, follow workplace procedures, co-ordinate with others, account for their actions
- Appreciation of the environment & of meeting patients helps students learn from the experience of others
- Working with Professional environments alters Academic practice





# Challenges

- Maintaining alertness during routine work
- Dealing with patients who do not accept/appreciate the pharmacist's role
- Most challenging are those situations in which patient or client preferences may be in conflict with standards or guidelines
- Difficult for students to understand the limitations of guidelines designed to meet general needs and to adapt these for individual cases



# Experiential does not = P/O/C

## Practitioners lecturing in College

- Useful, but it is not practice
- Patients lecturing is more valuable

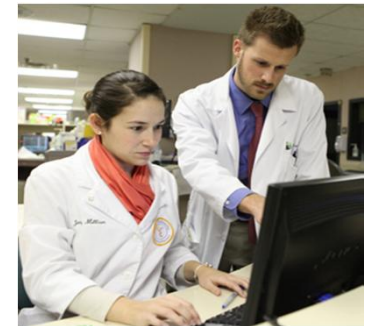


## Observation

- Visiting a pharmacy is a useful precursor but not a substitute
  - aims, objectives & outcomes are required

## Clinical

- Nor is it only about patients
- Can be used to mean any relevant experience
- Settings such as regulatory bodies, health service management or industrial practice
- Providing the scope of activities, required supporting knowledge and skills and the need for professional judgement are clearly evident



# Developing Health Care Professionals

*"Does inadequate education at one level of training affect skills at subsequent levels? If so, then college may be the most critical period for developing important habits, attitudes, and clinical reasoning approaches.....and may influence subsequent clinical competencies"*

Goldstein et al, Acad Med. 2005;80:423-433.



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin

Skopje

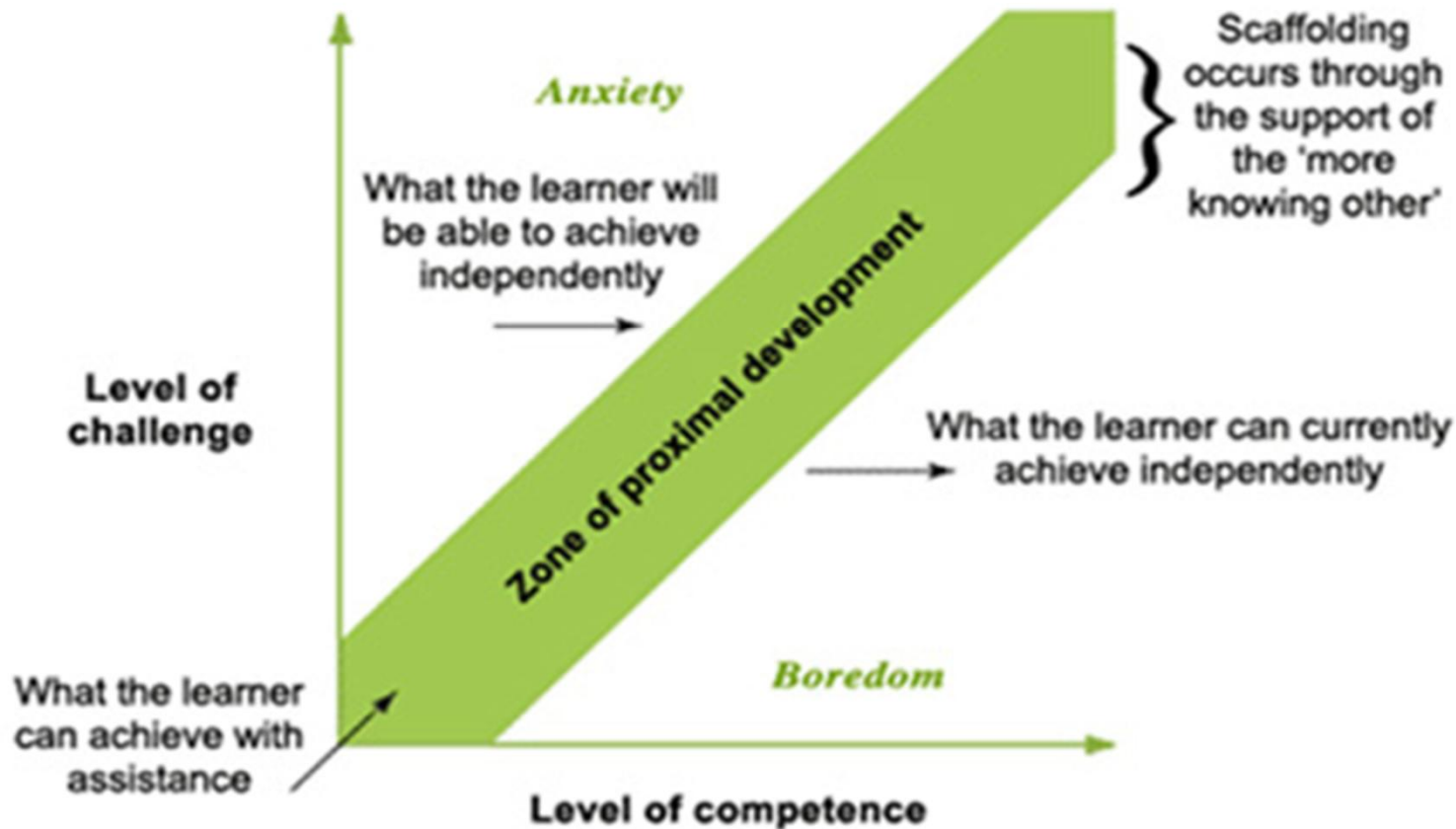


ERASMUS+ Programme  
Capacity Building  
in Higher Education



# Progression

Zone of proximal development  
Focused teaching



*Novice* →→→→ *Proficiency*

- Independent practice in a supervised environment
- Supervised practice
- Patient talks
- Practitioners
- Observation of practice
- Simulation of practice



# Vision & Reverse Engineering of Pharmacy Curricula

## Pharmaceutical Association of Serbia, Hospital Pharmacy Section



### Goals

Pharmaceutical Association of Serbia is a voluntary, independent professional association of pharmacists, organized and regulated under the Act of Pharmaceutical Society. The purposes of the Association are improving professional and scientific work in pharmacy, providing professional information and education for pharmacists and promoting the ethical, responsible and competent professional activities of the members.

## Bulgarian Association of Hospital Pharmacists



### Goals

- Protection of the professional interests of the members
- Establishment of a high level of morals and professionalism for hospital pharmacists and for all activities related to hospital pharmacy
- Raising the prestige of hospital pharmacy in Bulgaria
- Developing of cooperation with similar organisations, mainly in Europe and from EU member countries
- Protection of the interests of the people, related to their health and the rendering of competent pharmaceutical care

- Vision & Health Service Needs → Pharmacists' roles & responsibilities → Competences → Curriculum content & experiential placements → Teaching & Assessment methods



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin

# Experiential education is important

- Re-configuration of the curriculum
  - Via simulation/action, reflection, patient impact, collaboration
- Review of learning
  - Types of knowledge & opportunities for learning
  - Learning outcomes & assessment
  - Reflection & continuous improvement
- Re-envisioning of pharmacy
  - Meeting needs of pharmacists & patients





The quality of Experiential education demonstrates how much educators care for students & care for patients.

*Go Raibh Maith Agaibh.  
Havla Vam*



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin



ERASMUS+ Programme  
Capacity Building  
in Higher Education

