



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

# Quality Assurance of Experiential Education

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**University of Niš**  
June, 2017

Co-funded by the  
Erasmus+ Programme  
of the European Union



# Quality Assurance

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*...the maintenance of a desired level of quality, by means of attention to every stage of the process.*

## Continuous Quality Improvement

*CQI is a philosophy that encourages all health care team members to continuously ask: “How are we doing?” and “Can we do it better?”*

*(Edwards,2008)*

# Contexts

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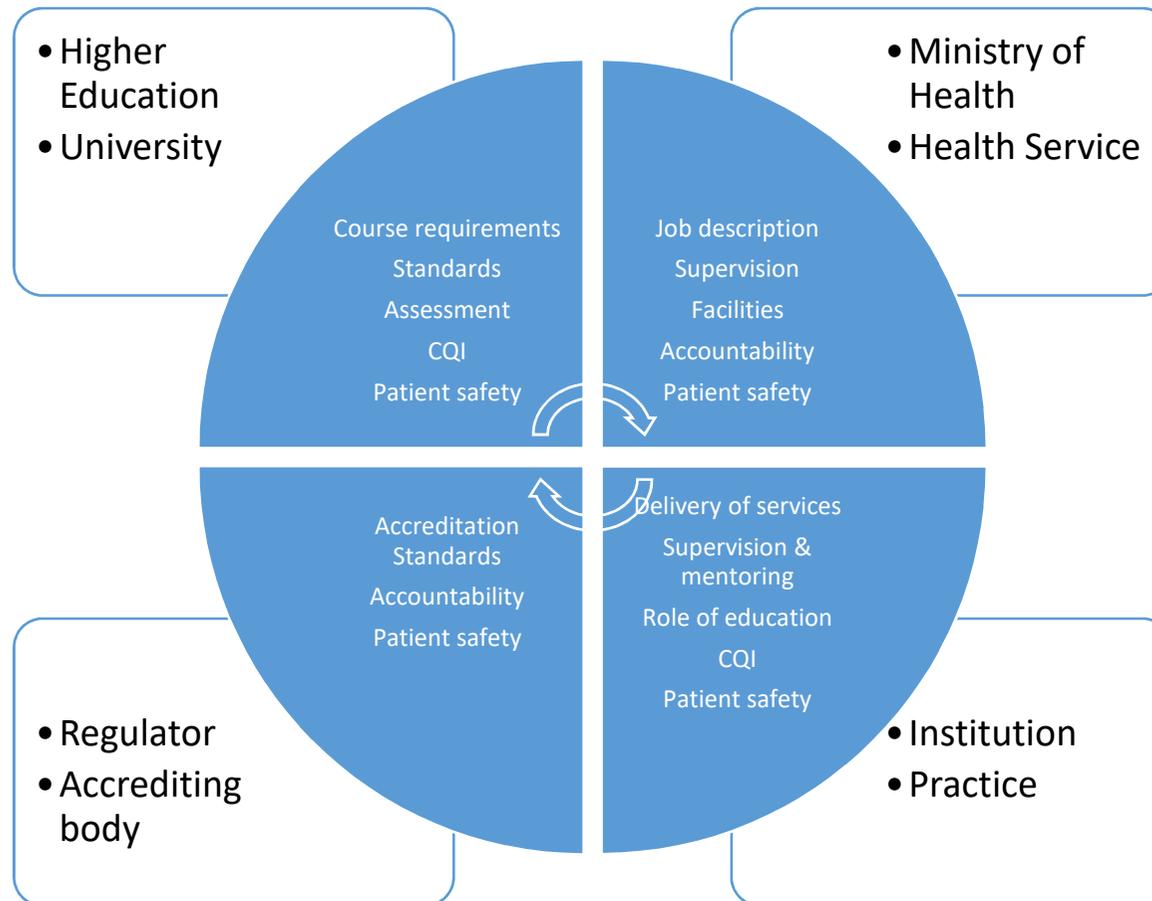
## University

To ensure alignment with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and nationally with the Qualifications and Quality Assurance (Education and Training) Act 2012 and the requirements by QQI (Quality and Qualifications Ireland) of Higher Education Providers.

## Profession

A programme must comply with the requirement in Article 24 of EU Directive 2005/36/EC for programmes of basic medical education. That Directive's specification that programmes of basic medical education must include suitable clinical experience in hospitals under appropriate supervision will, at the discretion of the Medical Council, include suitable clinical experience in other clinical training sites under appropriate supervision.

# Stakeholders in Experiential Education



In Health Sciences, the technicalities of assuring the quality of the education are overshadowed by one primary objective, patient safety

# Two parallel processes of Quality Assurance

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Educational Institution

Health Service Provider

Status: *Student or Student employee*

Based upon;

- Agreement
- Alignment
- Process
- Data
- Communication
- Remediation

# Educational Institution components



- Course & Module Evaluation
  - Including student evaluations
- External Examiners
- Accreditation cycle
- Quality Review cycle

FACULTY OF HEALTH SCIENCES AT A GLANCE	
<b>656 STAFF</b> 281 academics 217 researchers 158 admin/tech	<b>SITES</b> D'Olier Street, TBSI, IPH Tallaght, Hamilton, DDUH, St James' & Tallaght Hospitals.
<b>MODULES EVALUATED</b> 402 UG (100%) 46 PG (100%)	<b>4424 STUDENTS</b> 3786 EU (86%) 638 NEU (14%)
<b>Linked Service Providers</b>	
<ul style="list-style-type: none"><li>• St James's</li><li>• Tallaght</li><li>• St Patrick's</li><li>• Naas General</li><li>• St Anne's Moore Abbey</li><li>• HSE East Coast</li><li>• HSE South West</li></ul>	<ul style="list-style-type: none"><li>• Rotunda</li><li>• Coombe</li><li>• Our Lady's Children's Hsp</li><li>• Naas General</li><li>• Stewarts</li><li>• Dublin Dental University Hsp</li></ul>

# Quality Assurance tools

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## Governance

- Roles, responsibilities, process (flow, management hierarchy)
- External vs Internal accountability

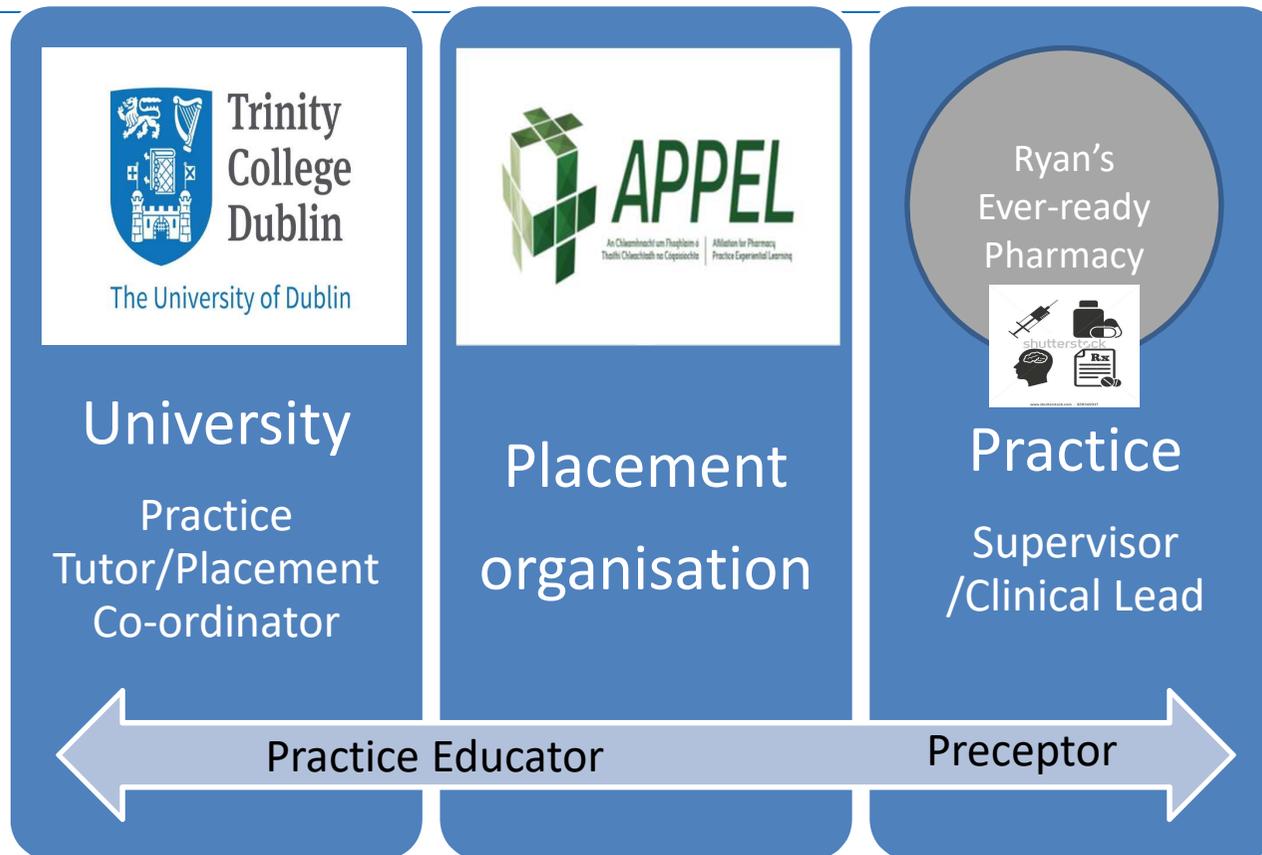
## Process

- Responsibilities (Code of Conduct), rules, rubrics, eligibility, remediation

## Data

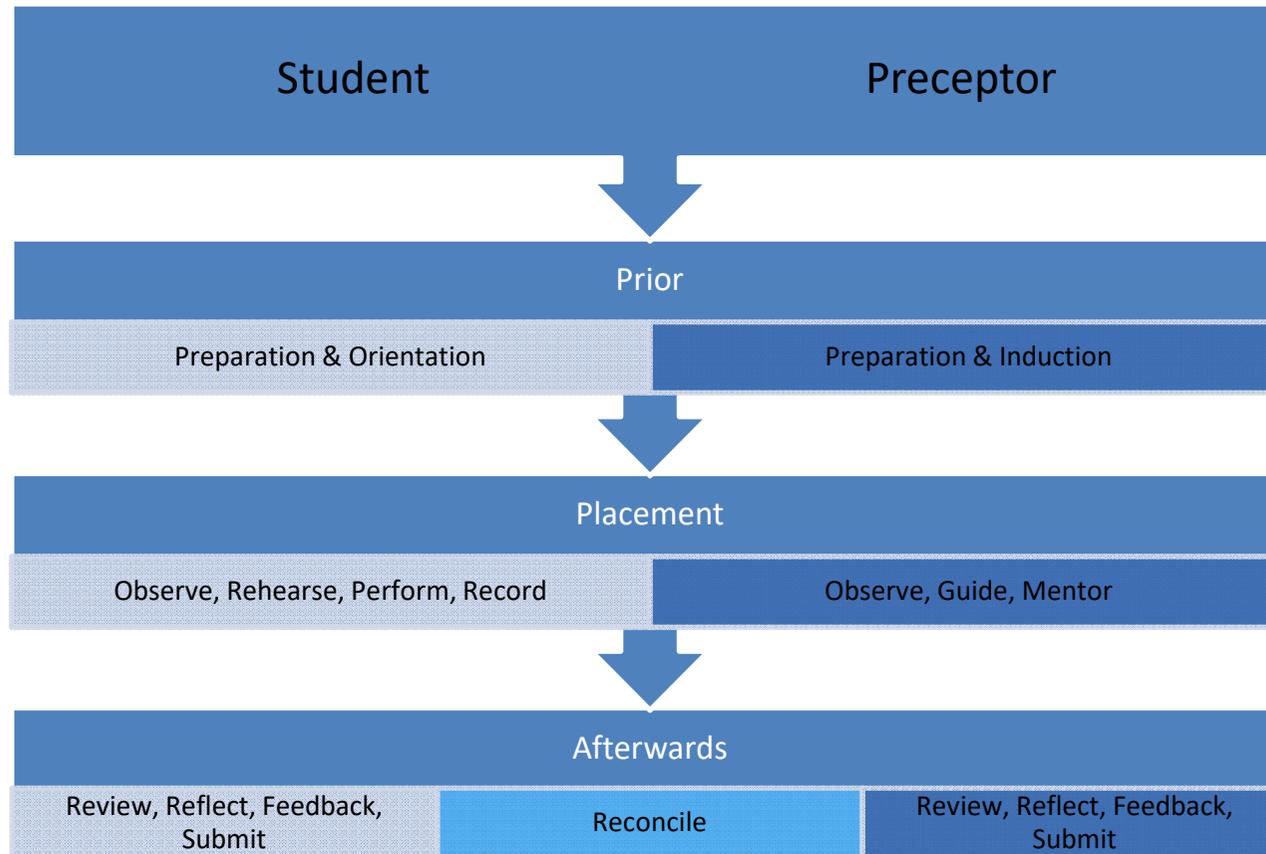
- Student numbers, status
- Placement type, setting, preceptor
- Learning Outcomes & Assessments
  - Component marks/grades/ratings/comments
  - Categories of non-progression – failure (academic/professional), reasons, consequences
- Evaluation

# Placement process



# Sequence of events

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# Five main components

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1. Practice site
2. Student & Preceptor
3. Practice activities
4. Processes of education
5. Evaluation of the experience

# Practice site

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## Registered/Authorised Health Service Provider

- ‘Good Standing’

## Statutory body or Recognised organisation associated with the Health Service

- E.g. Medicines Regulator, Professional Regulatory body

## Database of sites & records of assessment of sites

### Elements

- People
- Facilities
- Processes & Activities
- Commitment to provide education
- *Inspection & contact*

### Criteria

- Qualifications & experience
- Numbers – student: preceptor ratio
- Clinical Governance
  
- Observe, Guide, Mentor, Feedback
- QA and CQI procedures
- Culture of the Practice team
- *Schedule – agreed & ad hoc*

# Site Audit

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## 2.5 Faculty Projects / Initiatives

### **Review of Clinical Placements**

In 2016 a pilot review of clinical placements was undertaken, using the undergraduate Nursing programme (BSc (Cur)) in the School of Nursing & Midwifery as the pilot.

All clinical placement sites used are approved by the Nursing & Midwifery Board of Ireland (NMBI) and are subject to a three-year audit process. The audit process is agreed by the health service providers (HSPs) and by Trinity College and is managed by the LEAP Group (Linking Education and Practice).

Each site conducts a self-audit, which is submitted to the School of Nursing & Midwifery. The audit tool used is directly linked to the NMBI standards document. A Partnership meeting takes place each year to review the audit outcomes.

# Emergencies & Site Facilities: Dental Nurses

## 4. MEDICAL EMERGENCIES POLICIES AND EQUIPMENT

Under the Scope of Practice of the Dental Council of Ireland, all DHPs are required to support the patient and colleagues if there is a medical emergency in the dental surgery. "It is essential that ALL DHPs in direct contact with the public should be trained in dealing with medical emergencies and be competent to carry out resuscitation" Dental Nurses are responsible for the care of patients including assistance in medical emergencies.

	Y/N	Comments
Is there a Medical Emergency Policy/ Protocol/ SOP?		
Medical emergency equipment: <ul style="list-style-type: none"> <li>• Portable supply of oxygen</li> <li>• Emergency airways</li> <li>• Syringes (2ml) and needles (23g)</li> </ul>		
Basic Life Support Training Policy CPR training records		
Emergency drugs available: (as per IDA Emergency Drugs Audit) <ul style="list-style-type: none"> <li>• Adrenaline (1:1000,) - Epi-pen or Anapen</li> <li>• Hydrocortisone 100mg/1ml ampoule</li> <li>• Chlorpheniramine:               <ul style="list-style-type: none"> <li>• 4mg tablet (Piriton)</li> <li>• 10mg/1ml injection</li> </ul> </li> <li>• Midazolam: 5mg/ml or 2mg/ml</li> <li>• Oral glucose solution: tablets, gel and/or powder</li> <li>• Glucagon 1mg/1ml injection</li> <li>• Glyceryl trinitrate (GTN) spray (0.4 mg /dose)</li> <li>• Salbutamol aerosol inhaler (0.1mg /actuation)</li> <li>• Aspirin chewable (300mg)</li> </ul>		
Protocol for checking expiry dates of drugs		
Drug storage		

# Student requirements before any placement

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Required learning

Assessment by simulation

Prior experience

- Work experience, Elective practice, Preceding level of Placement

Verification

Student in 'Good Standing'

Declaration of Connections

Placement agreement/Learning contract

# Preceptor requirements before any placement

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Required training including,

- Orientation to systems ... dealing with serious student problems and/or unprofessional student behaviours
- Review of the performance assessment and grading systems, and policies to address behavioural problems or misconduct
- Quality Assurance procedures of Education process
- Prior experience

Verification

Qualifications

Preceptor in 'Good Standing'

Declaration of Connections

Placement agreement/Learning contract

## ***USA - Pharmacists***

### **Assessment of preceptors**

**(1) facilitate learning**

**(2) communicate effectively**

**(3) serve as a professional role model and mentor**

**(4) positively represent and advance the profession**

# Orientation

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## Key to successful Experiential Education

- Students, Preceptors & Academics understand each other
- Expectations are shared & responsibilities clear

*Students who undergo an orientation when first arriving at the site learn quicker, perform better & report more favourable experiences*

***Preceptors are oriented to the program's mission, the specific learning expectations for the experience outlined in the syllabus, and effective performance evaluation techniques before accepting students.***

***Accreditation Council for Pharmacy Education, USA***

# Practice activities: Physiotherapy

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Clinical placements are an essential component of the physiotherapy course providing

- the focus for the integration of theory and practical skills
- and development of the clinical reasoning process

Clinical placements are undertaken in a variety of settings reflecting the diversity of work settings available to a qualified physiotherapist.

## **Core Placements**

- Respiratory
- Neurology or Age Related Healthcare
- Musculoskeletal

# Practice activities: Medicine

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## **Interns must:**

Participate in practice-based training, at an appropriate level, in the services and responsibilities of patient-care activity in the training institution

Be exposed to a broad range of clinical cases appropriate to the rotation

Participate in all appropriate medical activities relevant to their training, including on-call duties at an appropriate level

Exercise the degree of responsibility and clinical decision-making appropriate to their growing competency, skills, knowledge and experience

Work as an integral part of a multidisciplinary team.

Formal training must include instruction in;

The development of clinical judgement

Elements of safe practice, including but not limited to, infection control, prescribing, awareness of pregnancy when prescribing and informed consent.

# The processes of education

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## Alignment

Learning Outcomes

Methods of measurement

Types of Assessment

Competency framework

Development framework

# Measuring

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## Assessment

The systematic process of determining the *merit, value,* and *worth* of someone or something (such as a product, program, policy, procedure, or process).

Evaluation Glossary (n.d.) from Western Michigan University, The Evaluation Center Web site

## Evaluation

The process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand and can do with their knowledge as a result of their educational experiences.

— Huba and Freed, 2000



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# Assessment Types

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Multi-source feedback (MSF) Peer assessment tool – Questionnaire

Direct observation of procedural skill (DOPS)

Trainees assessed in a range of core practical skills  
- prepare & administer IV meds  
Assessor uses a checklist

Mini Clinical Evaluation Exercise (Mini-CEX)

Evaluate trainee's performance with a real patient  
Trainee observed by an experienced practitioner, who assess performance & provides immediate feedback

Case-based discussion (CbD)

Assesses clinical decision making and the application or use of knowledge in the care of the trainees own patients & allows trainees to discuss why they acted as they did

JG Davies, Professor of Clinical Pharmacy & Therapeutics, University of Brighton.

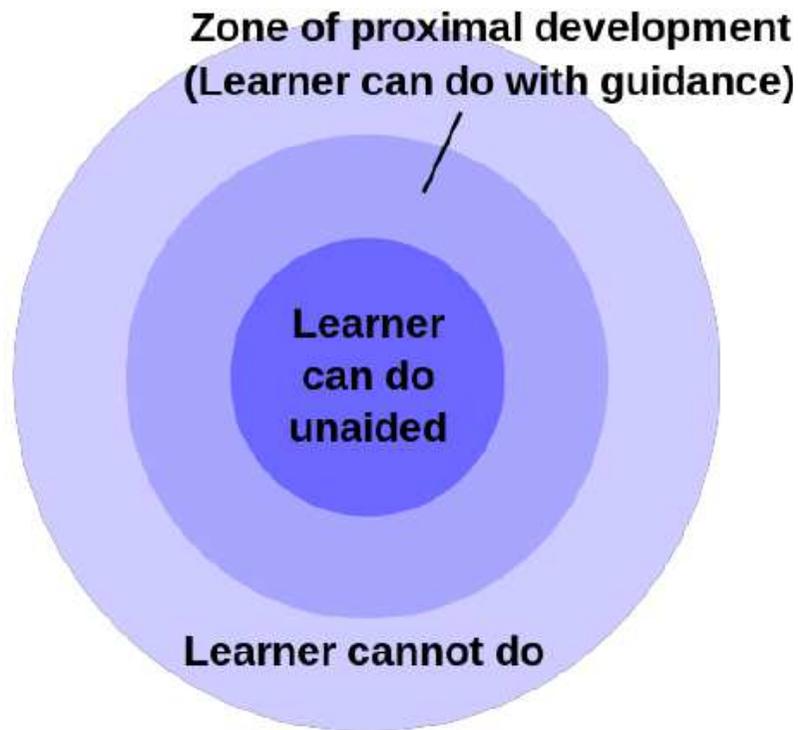
# Medication Related Consultation Framework

<i>Sections of a consultation</i>	<i>Aims of sections</i>
(A) Introduction	<i>“To build a therapeutic relationship with the patient”</i>
(B) Data collection & Problem Identification	<i>“To identify the pharmaceutical needs of the patient”</i>
(C) Actions & Solutions	<i>“To establish an acceptable management plan with the patient”</i>
(D) Closing	<i>“To negotiate safety netting strategies with patient”</i>

*“natural flow of a consultation”*

JG Davies, Professor of Clinical Pharmacy & Therapeutics, University of Brighton.

# Competence & behaviour



Domain	Competency
Professional practice	Practises 'patient-centred' care Practises professionally Practises legally Practises ethically Engages in appropriate continuing professional development
Personal skills	Leadership skills Decision-making skills Team working skills Communication skills
Supply of medicines	Manufactures and compounds medicines Manages the medicines supply chain Reviews and dispenses medicines accurately
Safe and rational use of medicines	Patient consultation skills Patient counselling skills Reviews and manages patient medicines Identifies and manages medication safety issues Provides medicines information and education
Public health	Population health Health promotion Research skills
Organisation and management skills	Self-management skills Workplace management skills Human resources management skills Financial management skills Quality assurance

6 Domains → 25 Competences → **177 Behaviours!**

# Student Development

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## Characteristics associated with each stage...

Novice	Apprentice	Practitioner	Expert
<ul style="list-style-type: none"><li>* Concrete</li><li>* Literal</li><li>* Needs constant guidance</li><li>* Seeks affirmation regularly</li></ul>	<ul style="list-style-type: none"><li>* Begins to make connections</li><li>* Begins to apply skills</li><li>* Seeks affirmation after completion</li></ul>	<ul style="list-style-type: none"><li>* Manipulates multiple concepts</li><li>* Able to synthesize and generalize</li><li>* Metacognition</li></ul>	<ul style="list-style-type: none"><li>* Able to evaluate and create</li><li>* Self-directed</li><li>* Looks for new learning opportunities</li></ul>

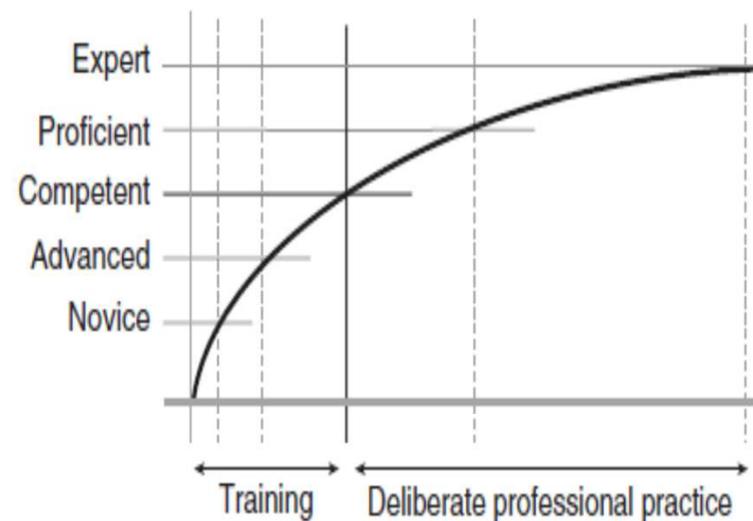
## What students need at each stage...

Novice	Apprentice	Practitioner	Expert
<ul style="list-style-type: none"><li>* Step-by-step directions</li><li>* Scaffolding</li><li>* Frequent feedback</li><li>* Structured practice</li></ul>	<ul style="list-style-type: none"><li>* Group work</li><li>* Application</li><li>* Self-evaluation</li><li>* Inquiry/research</li></ul>	<ul style="list-style-type: none"><li>* More significant concepts</li><li>* Open inquiry</li><li>* More resources</li><li>* More problem solving</li></ul>	<ul style="list-style-type: none"><li>* Transdisciplinary challenges</li><li>* self-directed projects</li><li>* Collaboration</li><li>* Innovation</li></ul>

# Development & Clinical Evaluation Scale – Nursing, TCD (Bondy,1987)

Scale Label	Standard Procedure	Quality of Performance	Assistance
<b>Independent</b>	Safe Accurate Effect} Each time Affect}	Proficient; coordinated; confident Occasional expenditure of excess energy Within an expedient time period	Without supporting cues
<b>Supervised</b>	Safe Accurate Effect} Each time Affect}	Efficient; coordinated; confident Some expenditure of excess energy Within a reasonable time period	Occasional supportive cues
<b>Assisted</b>	Safe Accurate Each time Effect} Most of Affect} the time	Skilful in parts of behaviour Inefficiently and uncoordinated Expend excess energy Within a delayed time period	Frequent verbal and occasional physical directive cues in addition to supportive ones
<b>Marginal</b>	Safe but not alone  Performs at risk  Accurate-not always  Effect}Occasionally Affect}	Unskilled; inefficient Considerable expenditure of excess energy Prolonged time period	Continuous verbal and frequent physical cues
<b>Dependent</b>	Unsafe  Unable to demonstrate behaviour	Unable to demonstrate procedure/ behaviour Lacks confidence, coordination, efficiency	Continuous verbal and physical cues.
<b>X</b>	Not observed		

# Development & Trust



**Figure 1.** General curve of skills acquisition, using the stages of Dreyfus and Dreyfus (1988). Dotted lines signify hypothetical moments at which a trainee reaches a competence threshold level for a given activity.

## Box 1. Levels of entrustment.

- I Resident has knowledge and some skill, but is not allowed to perform the EPA independently.
- II Resident may act under proactive, ongoing, full supervision.
- III Resident may act under reactive supervision, i.e., supervision is readily available on request.
- IV Resident may act independently.
- V Resident may act as a supervisor and instructor.

# The processes of education

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Delivery

Triangulation

# Supervision & Questioning aligned to level of student development

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Supervision	Level of development	Questioning
S1 Coaching & directing	Incompetent – unconsciously or consciously	What? What – <i>Remember</i> Why - <i>Understand</i>
S2 Supporting	Consciously competent	So what? Which... - <i>Apply</i> What do you think about... - <i>Analyse</i> How will this affect...
S3 Delegating	Unconsciously competent - Intuitive	Now what? Evaluate... Develop... - <i>Create</i>
Barnum, Guyer, Levy & Graham, 2009	Howell & Fleischman, 1982	Barnum, 2008; <i>Bloom's taxonomy</i>

# Feedback

- assessed against validated criteria

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- Timing
- Specificity
- Content
- Form
- Privacy

## **Confirming/Reinforcing**

- Let student know they are doing something well
- Reinforce appropriate behaviours

## **Corrective**

- Modify or improve behaviour to more appropriate form
- Prevent students developing incorrect techniques or accepting inaccurate evaluations/statements

## **Guiding**

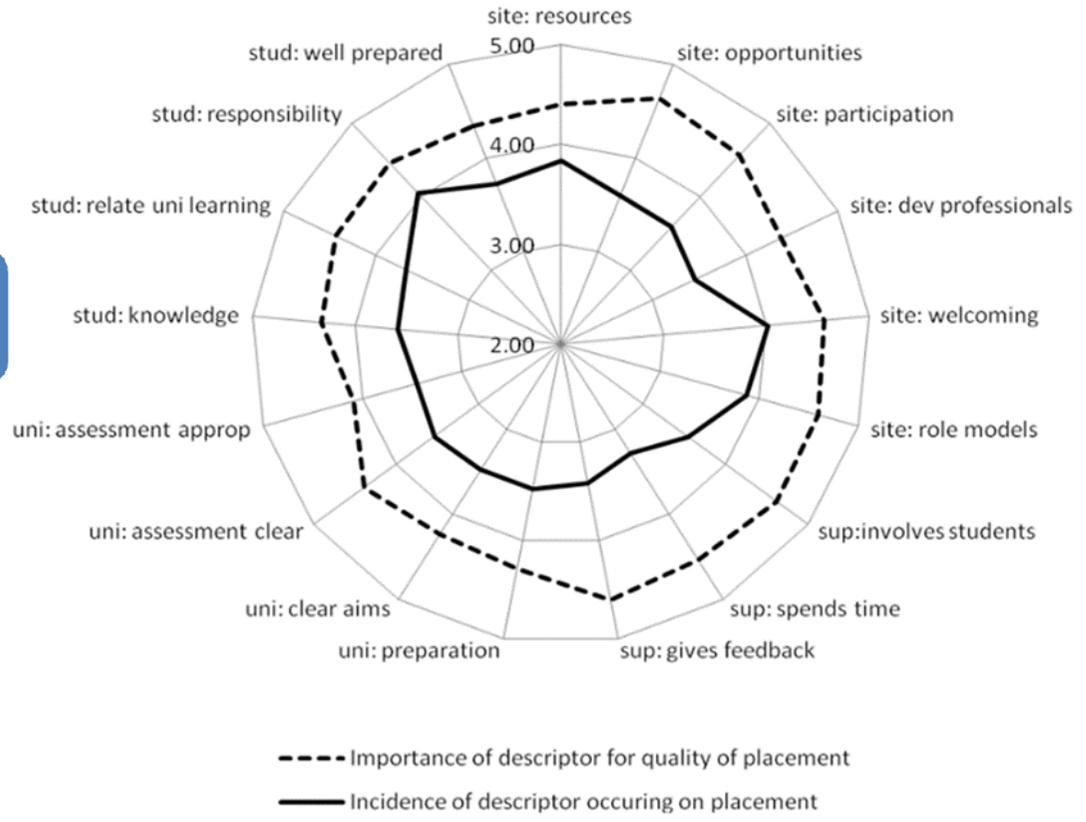
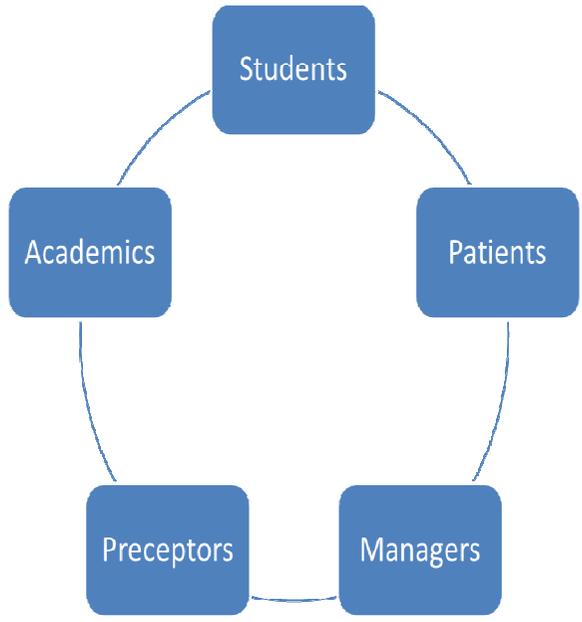
- Help student by making clear, suggesting improvements, refinements

Nottingham & Henning, 2014

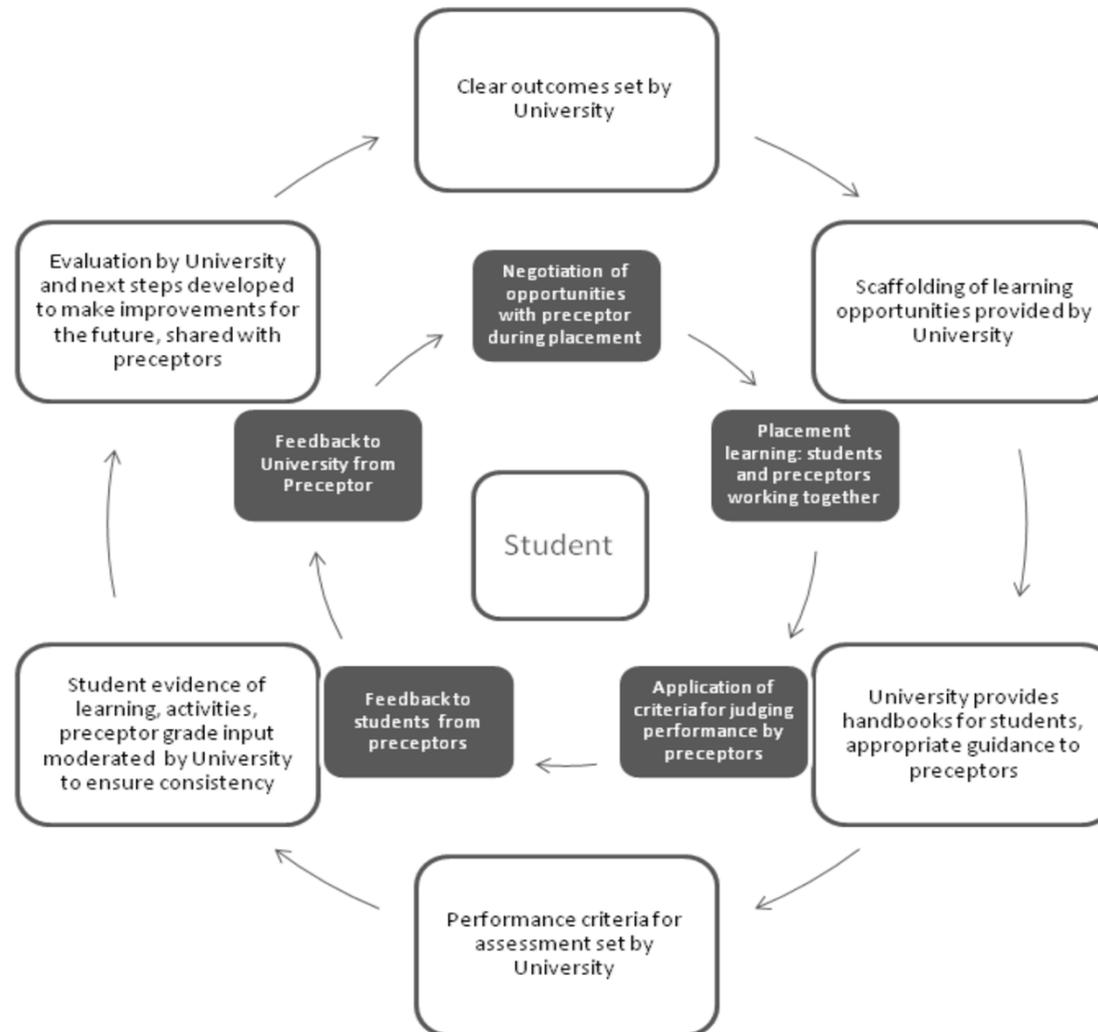
Nottingham & Henning, 2014

# Evaluation of the experience

## Gap Analysis, Student views – Importance vs Incidence



# Australian view



# Conclusion

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Complex multi-step process  
Communication

## *Critical factors*

Training

Orientation

Assessment

Feedback

Rapid reporting of issues



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# Future?

## Quality Enhancement

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‘a deliberate process of change that leads to improvement...QE is an inclusive concept...It involves everyone who teaches, supports and guides students and the managers and administrators of Higher Education Institutions...’

Learning & Teaching Support Network, UK

### Example of shift from QA to QE

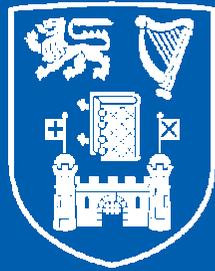
Question: *Why haven't performance measures, indicators or formal quality metrics been used?*

Answer: *We need to assess the learning environment and culture and the overall impact on quality, not prescribe processes for managing and delivering medical education and training.*

Medical Council - UK



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Thank You

*Go Raibh Maith Agaibh.*

*Havla Vam*



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