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Simulation – The next generation

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Simulation – The next generation

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Strategic changes in healthcare

- Economic and political climate
- Drivers
- IPL
- Advances in technology
- Climate for innovation and creativity

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Current position at Huddersfield

- Solid financial footing
- Grasp the opportunity to look at creative and innovative ways of working
- Utilisation of the nursing model of simulation

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Underpinning Theory

Simulated Practice

Manikin

Supervised
Practice

Teaching

Directed
Learning

'Real' patient

Peer review

Unsupervised
Practice

Computer/web based

Assessment

Communication

Assessment, nursing
care and management
of patients/clients

Critical
thinking

Simulation: The Huddersfield Umbrella

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Interprofessional Learning

IPL versus IPW – important to distinguish between the two,
Although one may assume a casual relationship
between the two.

Complex Government directive (DH 2010)

“Creating an interprofessional workforce” (DH 2007)

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“breadth of technical skilling”. (Dunphy D, Bryant B. 1996)

“modern day e- learner being confronted with boring poorly constructed learning materials and where the process is focussed on replication of facts and data rather than challenging the learner and enabling active interaction with knowledge” (Pivic M. 2007)

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Background:

- Pre-registration Nursing Students learning through Simulated Practice
- Personal observations supported by peers
- Examination of attendance figures in theory and simulation teaching
- Lack of ability around numeracy and literacy
- Evaluation studies

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Background

Studies have shown that students learning through Simulation teaching strategies:

- show reluctance to leave at the end of the session
- State that it's fun!
- State that they learn more in two hours in the labs than in 4 hours theory
- It is about applying the theory in practice

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Student Interviews dvd

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Why? Development of underpinning theoretical base

- What is it about the strategy/learning environment that stimulates the students?
- Learning through play? Fun element
- How much learning takes place?
- What do the theorists say?



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Maria Montessori (1870-1952)

The first female physician in Italy (1896)

Developed a method of learning based upon self direction

Initially observed children with Learning Disabilities from
the age of 3-6 years

Recreated a house for children which focussed as a
learning environment



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Maria Montessori

- Children are encouraged to learn through exploration
- Learning takes place through 'experience'
- Use of actual implements (i.e. Sharp knives)
- Deep learning occurs when they learn through using their hands
- Development nurtured as an individual at their own pace

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Maria Montessori- 8 insights

1. Movement and cognition
2. Choice
3. Interest
4. Extrinsic awards avoided
5. Learning with and from peers
6. Learning in context
7. Teacher ways and wild ways
8. Order in mind and education

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Implications for Clinical Skills:

- Deep learning through working with their hands (the doing)
- Learning with and from peers
- Learning in context
- Order in environment and mind
- Learning through experience

Intervention becomes less and less as development occurs

Montessori Method is a 'guided philosophy for life'

Lillard (2005)

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Five Critical Attributes of Simulation in Practice

1. Creating a hypothetical opportunity
2. Authentic representation
3. Active participation
4. Integration
5. Repetition, evaluation and reflection

Bland 2010 (publication pending)

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- Underpinnings-theoretical base currently being explored through Doctoral studies
- Researcher - Angela Hope
- Methodology - Grounded Theory
- Methods - Participant observation, Interviews, Digital recordings
- Explores simulation and social theory

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Study focus

Research Question:

“What is the learning that takes place in Simulation?”

Students & educators

Qualitative methods

- Participant observation
- Interviews

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The Future

PG/Cert Simulation

Newsletter

Publications

Centre of Excellence in Simulation

Interprofessional Graduate Curriculum

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- Distance learning/opportunities (meti technology)
- Touch screens- (access dvd)
- Assessment
- Debriefing using technology
- The role of the technician

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'New Frontier'

- Formal assessment
- Student reflection
- Peer assessment
- Focus on debriefing



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Video

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References:

- Belenky M.F, Clinchy B.M, Goldberger N.R., Tarule J.M. (1986) Woman's ways of knowing Basic Books, New York.
- Benner P. (1984) From novice to expert. Addison-Wesley, California.
- Dewey J. (1910). How we think.
- Habermas J. (1987) Knowledge and human interests. Heineman. London UK.
- Johns C. (1995) Framing learning through reflection within Carper's fundamental ways of knowing in nursing. Journal of Advanced Nursing, 22,226-234.
- Kuiper R.A., Pesut D.J. (2004) Promoting cognitive and metacognitive reflective reasoning skills in nursing practice: self regulated learning theory. Journal of Advanced Nursing,45(4),381-391.
- Lillard (2005) Montessori
- Mezirow J.(1981). A critical theory of adult learning and education, 32,3-24.
- Polanyi M. (1962) Personal Knowledge towards a post critical philosophy. Harper & Row New York.
- Taylor E.W. (2001) Transformative learning theory: a neurobiological perspective of the role of emotions and unconscious ways of knowing. International Journal of Lifelong Education, 20:3, 218-236

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Any questions ?

