



# University of HUDDERSFIELD

## University of Huddersfield Repository

Ousey, Karen

Real World Or Out Of This World? An Evaluation Of The Effectiveness Of SiRe

### Original Citation

Ousey, Karen (2010) Real World Or Out Of This World? An Evaluation Of The Effectiveness Of SiRe. In: 2010 UK Simulation in Nursing Education Conference, 9-10 June 2010, University of Huddersfield. (Unpublished)

This version is available at <http://eprints.hud.ac.uk/8101/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: [E.mailbox@hud.ac.uk](mailto:E.mailbox@hud.ac.uk).

<http://eprints.hud.ac.uk/>

# Real World Or Out Of This World? An Evaluation Of The Effectiveness Of Simulation In Teaching Blood Pressure Measurement

Karen Ousey, RN, PhD  
University of  
Huddersfield, UK

Marian Bland, RN, PhD  
UCOL, NZ



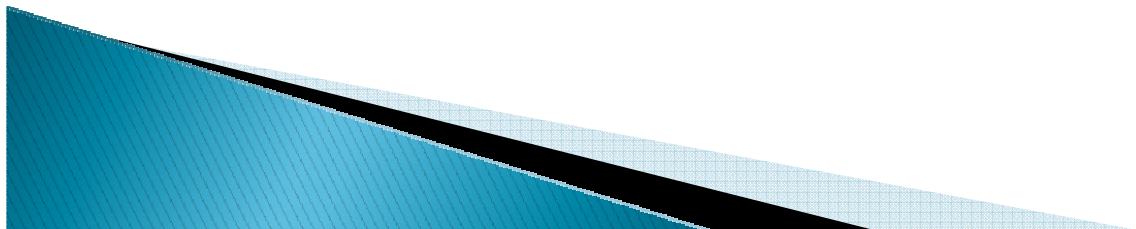
# Simulation research overview

## Collaborative pilot study involving

- Department of Nursing and Health Studies, University of Huddersfield, UK
- School of Nursing, UCOL, NZ

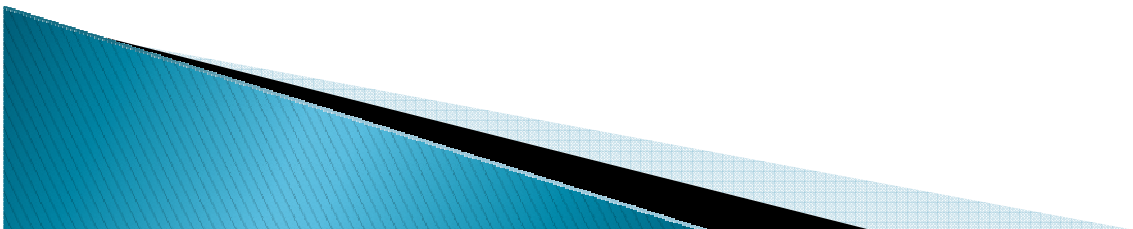
## Funding from

- Yorkshire & Humber Strategic Health Authority, UK
- Ako Aotearoa, NZ



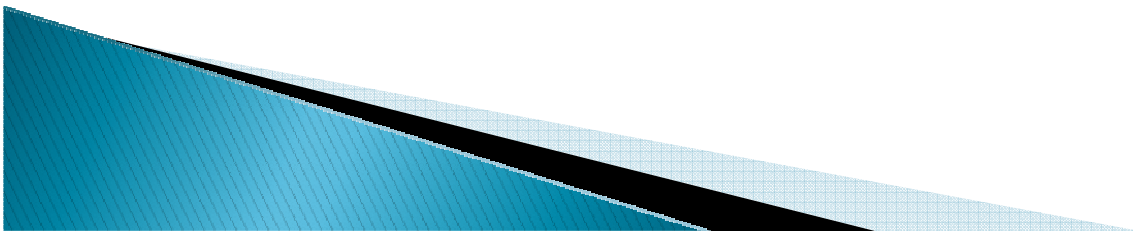
# Simulation

- ▶ Widely used teaching and learning strategy for a variety of clinical skills
- ▶ About practising the skill, the doing
- ▶ Reviewing the effectiveness of our teaching strategies



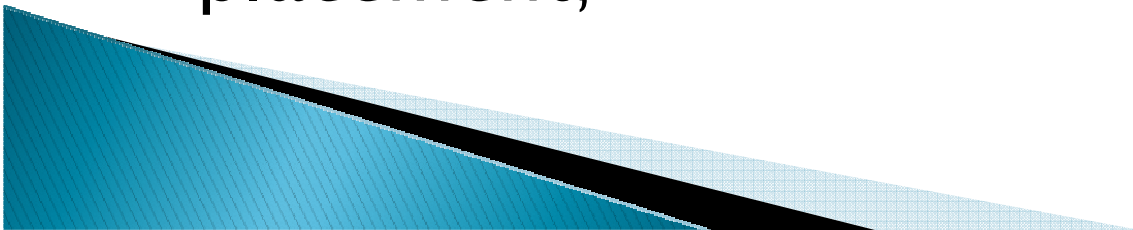
# Research question

*How effective is simulation in preparing student nurses to competently measure blood pressure in the real-world environment?*



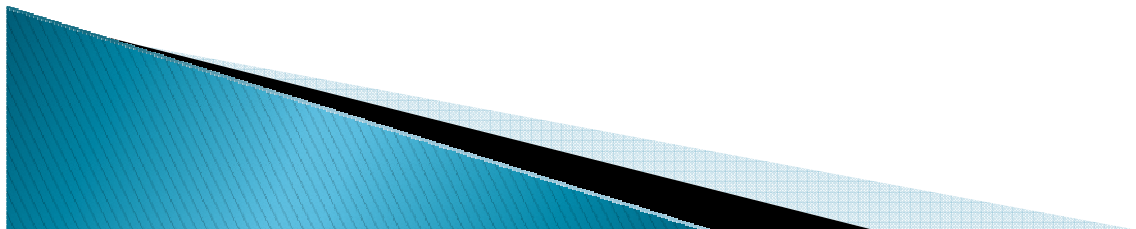
# Research aims

- ▶ Compare and contrast teaching and learning strategies used by the two Departments/Schools in the teaching of blood pressure measurement [BPM];
- ▶ Identify students' experiences of teaching and learning in relation to BPM prior to, and then immediately after their first clinical placement;



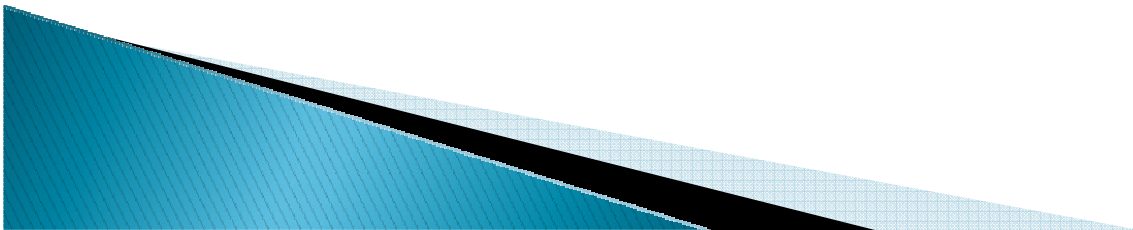
# Research aims

- ▶ Identify clinical mentors and nurse teachers' perceptions of whether students on their first clinical placement were able to competently measure blood pressure,
- ▶ To explore the implications of the research findings for other clinical simulation teaching.



# Student questionnaires

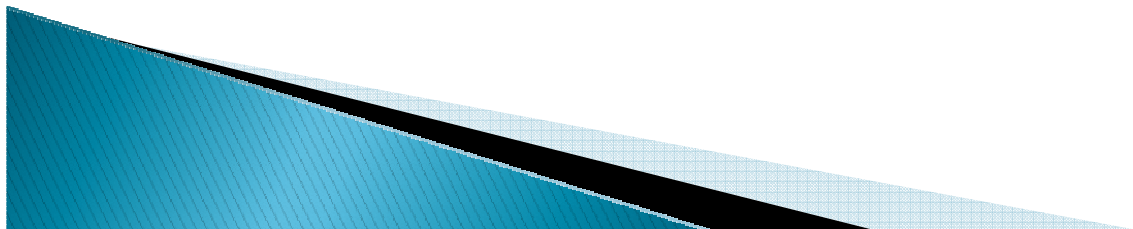
- ▶ Relevant ethics and institutional approvals obtained
- ▶ Independent people distributed surveys



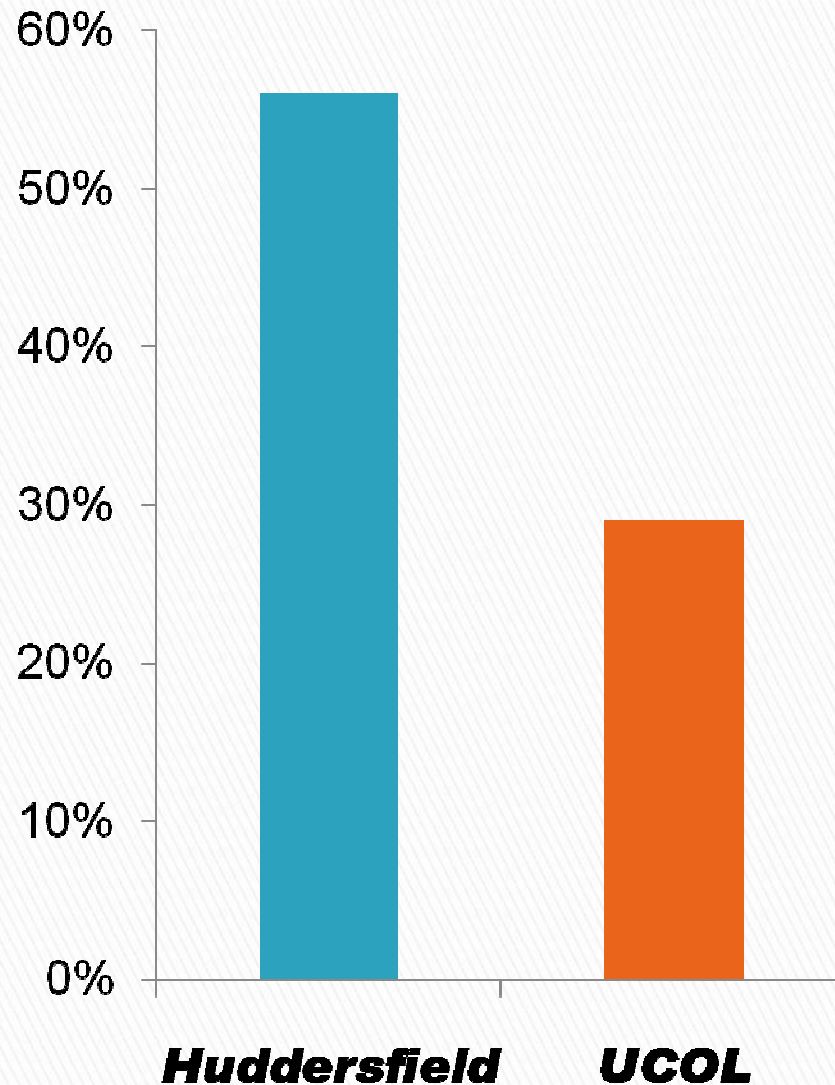


# Response rates, student questionnaires

	Questionnaires distributed	Completed questionnaires returned	Response rate
<b>UH</b>			
Questionnaire #1	55	36	65%
Questionnaire #2	55	51	92%
<b>UCOL</b>			
Questionnaire #1	60	52	86%
Questionnaire #2	75	65	86%



# Previous health care experience



Twice as many of the Huddersfield students (56%) had worked in health care settings prior to starting their nursing programme as UCOL students (29%) .

# Previous experience of taking blood pressure

62%

11%

Huddersfield

UCOL





# Understanding of theory



Slightly higher levels of confidence at Huddersfield  
but majority of students with poor level of understanding before  
simulation sessions

# Understanding before simulation

Poor level of understanding of *theory* requirements

62%

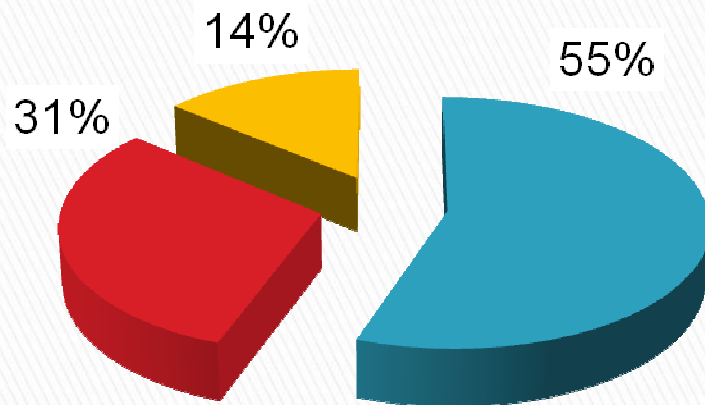
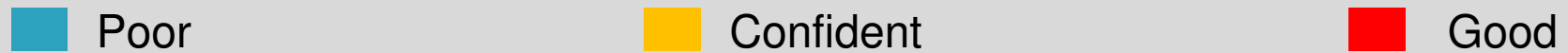
Poor level of understanding of *practical* requirements

51%

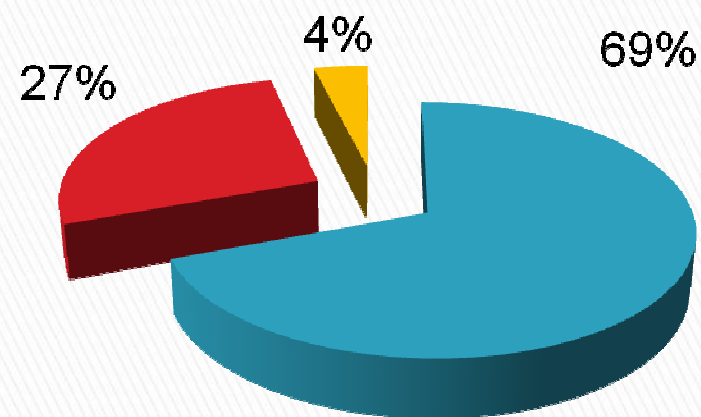
Combined responses



# Understanding of theory



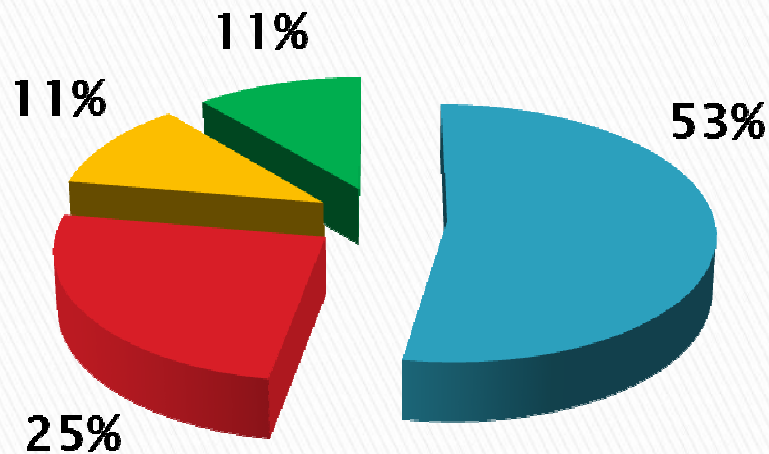
**HUDDERSFIELD**



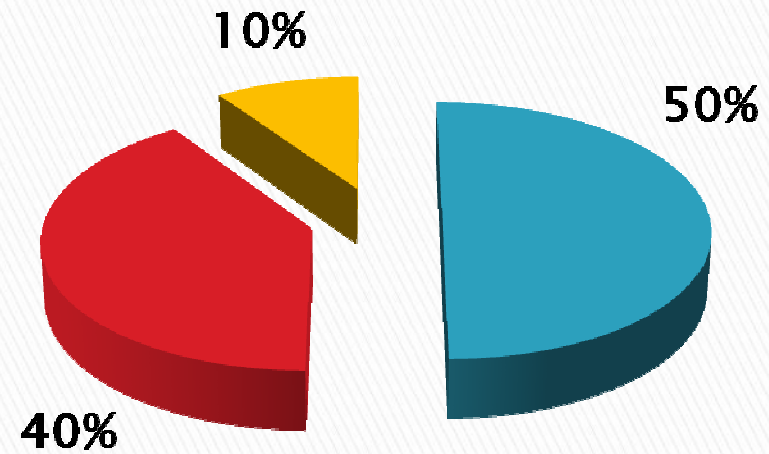
**UCOL**

# Understanding of practical requirements

■ Poor   ■ Good   ■ Competent   ■ Confident and competent



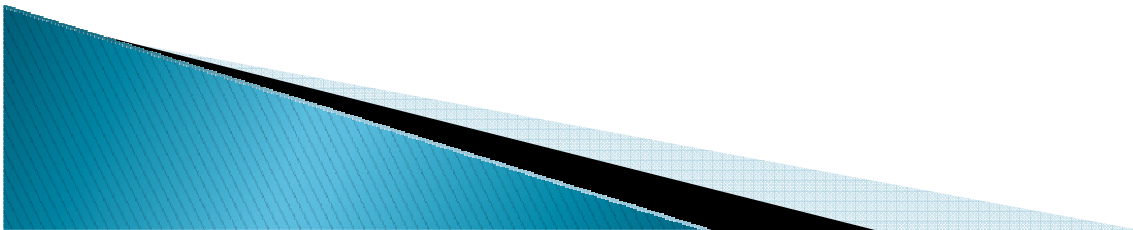
Huddersfield



UCOL

# Confidence Levels

▶ **Post Simulation**





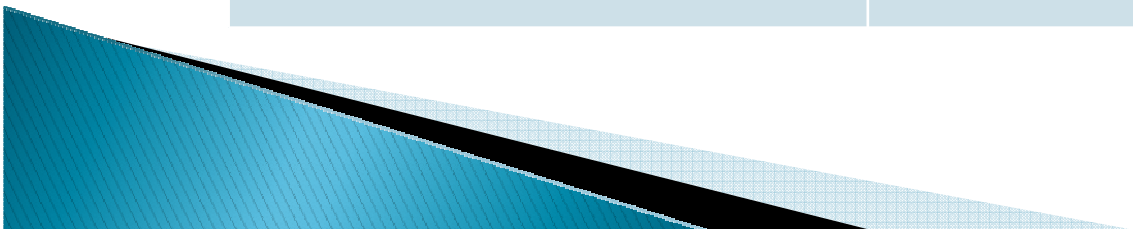
# Confidence levels after simulation

Despite the fact that students at Huddersfield rated their understanding and confidence more highly than the UCOL students **prior** to the simulation, **after** the simulation they had lower confidence levels compared with UCOL students.



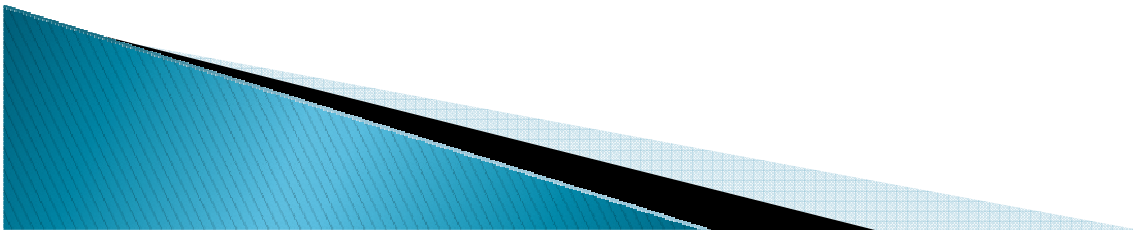
# Confidence levels after simulation

	Huddersfield	UCOL
No confidence	6%	0
Some confidence	64%	27%
Quietly confident	0	13%
I am confident	14%	50%
Confident and competent	8%	10%

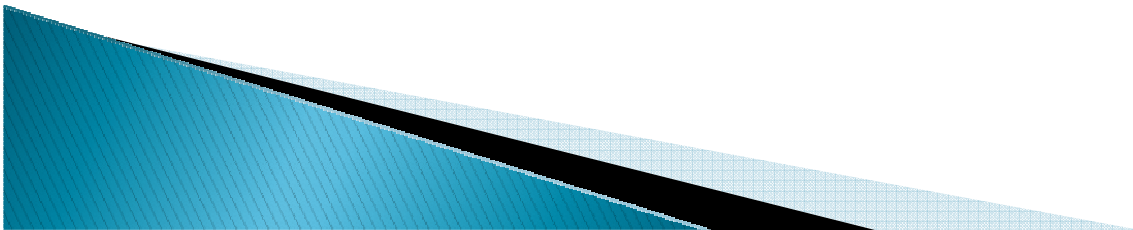


# Lecturer confirmation

- ▶ Majority of students had a manual BP measurement confirmed by a lecturer using a teaching stethoscope
- ▶ This gave most students more confidence

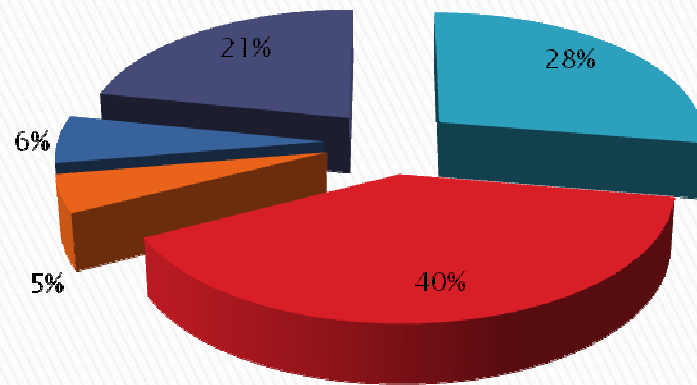


# ▶ Post Clinical Practice



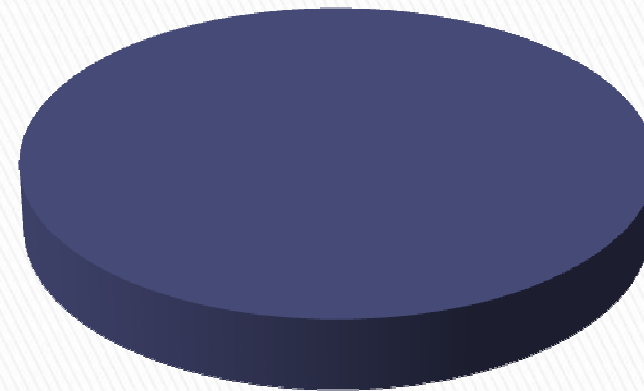
# Experience of undertaking manual BP measurement in clinical placement

■ never    ■ 1-5 times    ■ 6-10 times  
■ 11-15 times    ■ over 15 times



Huddersfield

■ never    ■ 1-5 times    ■ 6-10 times  
■ 11-15 times    ■ over 15 times

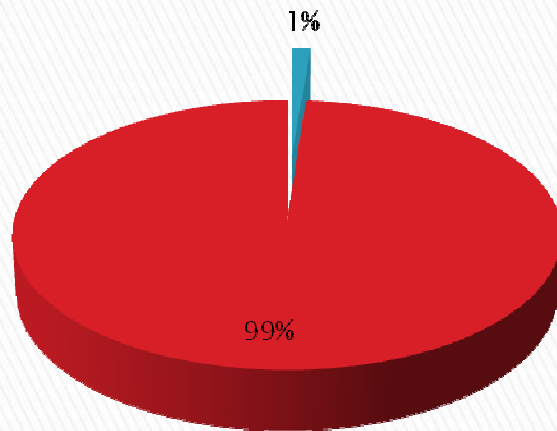


UCOL



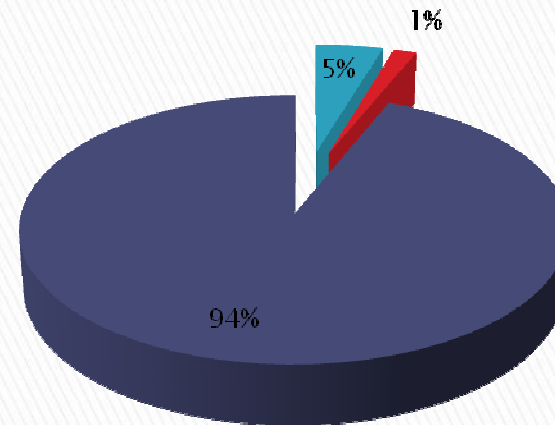
# Experience of undertaking electronic BP measurement in clinical placement

■ 11-15 times ■ over 15 times



Huddersfield

■ never ■ 1-5 times ■ 6-10 times  
■ 11-15 times ■ over 15 times

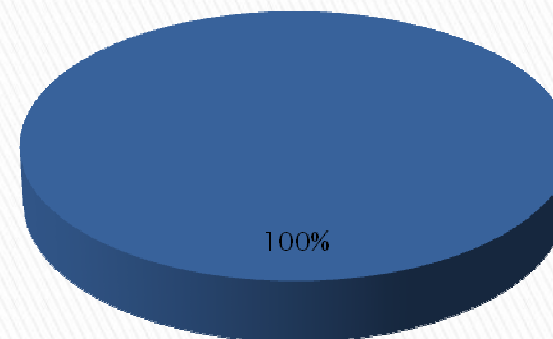
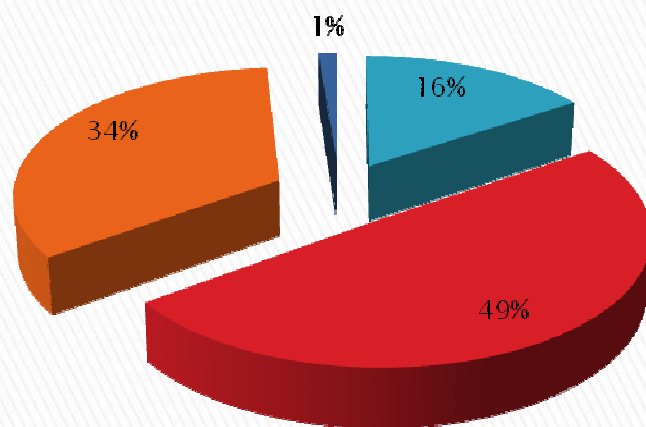


UCOL

# Registered nurse supervision whilst taking & recording blood pressure on first clinical placement

■ Never ■ Once or twice ■ Sometimes ■ Every occasion

■ Never ■ Once or twice ■ Sometimes ■ Every occasion



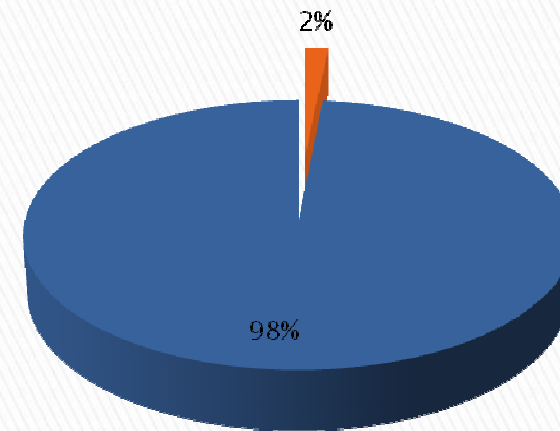
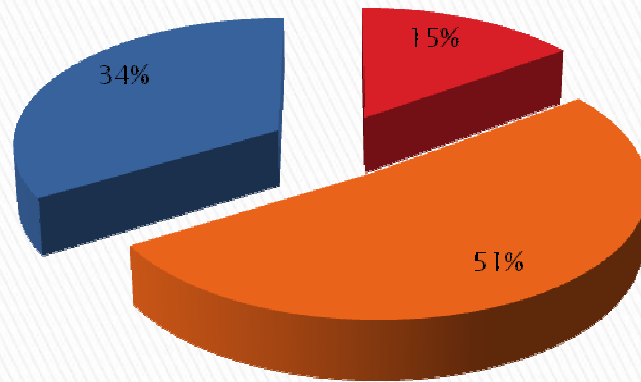
Huddersfield

UCOL

# My mentor made me question what I did

■ Strongly disagree ■ Disagree ■ Agree ■ Strongly agree

■ Strongly disagree ■ Disagree ■ Agree ■ Strongly agree



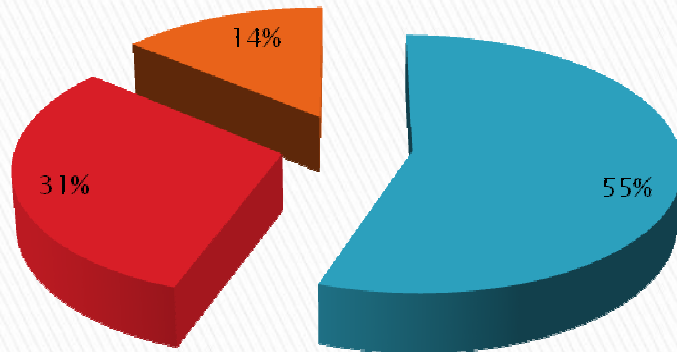
Huddersfield

UCOL



# Level of Understanding (practical) – UH

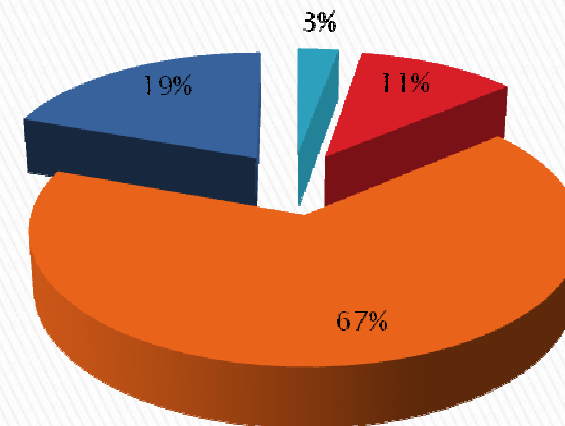
■ Poor ■ Good ■ Confident



Prior to simulation

My knowledge and understanding has increased

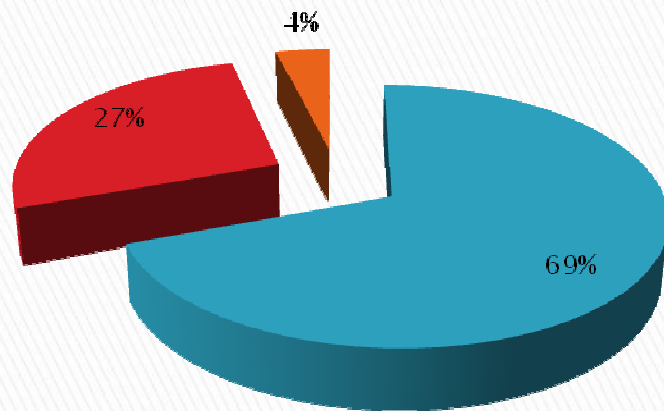
■ SD ■ D ■ A ■ SA



Post simulation

# Level of Understanding (practical)– UCOL

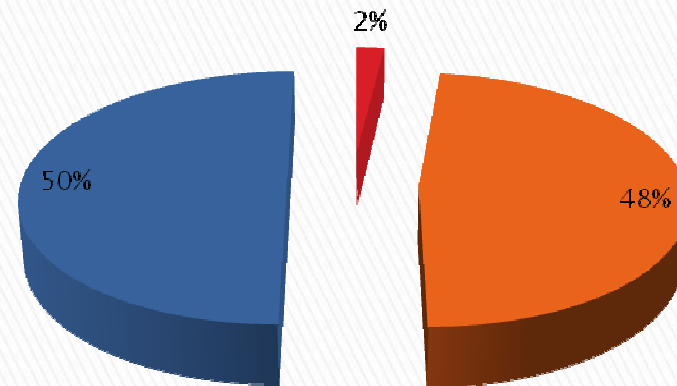
- Poor level of understanding
- Good level of understanding..
- Confident in my understanding



Prior to simulation

My knowledge and understanding has increased

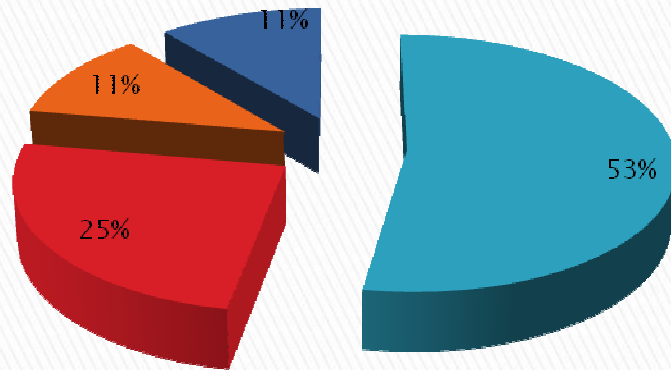
- SD
- D
- A
- SA



Post simulation

# Level of Understanding – UH

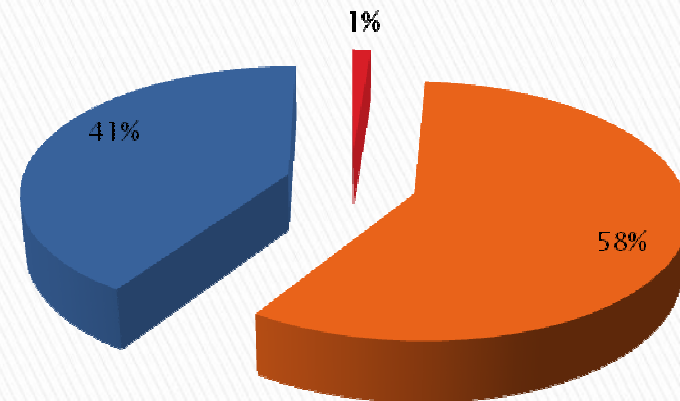
■ Poor ■ Good ■ Competent ■ Confident and competent



Prior to simulation

**A good understanding of the relationship between theory and practice**

■ Strongly disagree ■ Disagree ■ Agree ■ Strongly agree

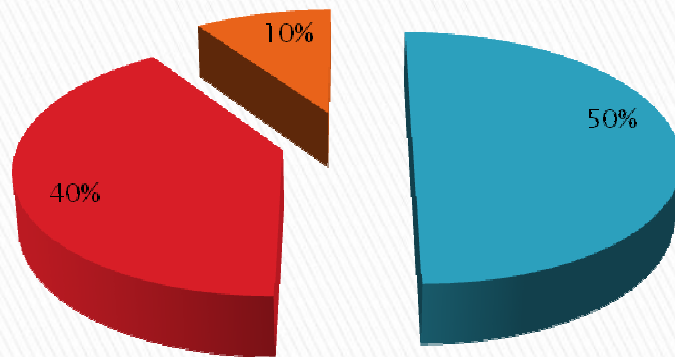


Post simulation and clinical placement



# Level of Understanding –UCOL

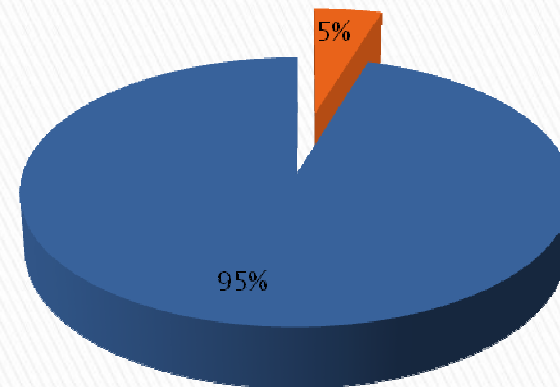
- Poor Level of understanding
- Good level of understanding
- Competent in application
- Confident and competent



Prior to simulation

A good understanding of the relationship between theory & practice

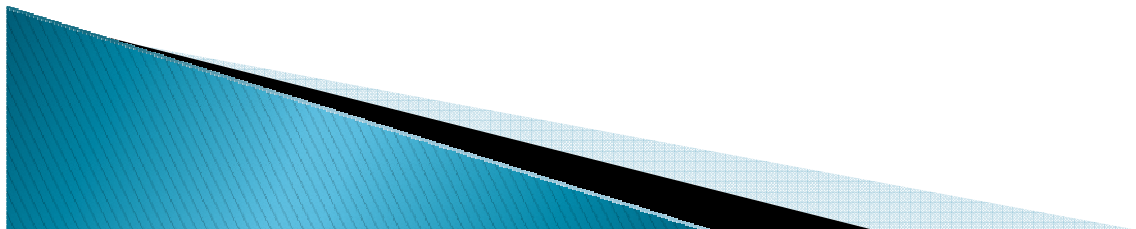
- Strongly disagree
- Disagree
- Agree
- Strongly agree



Post simulation and clinical placement

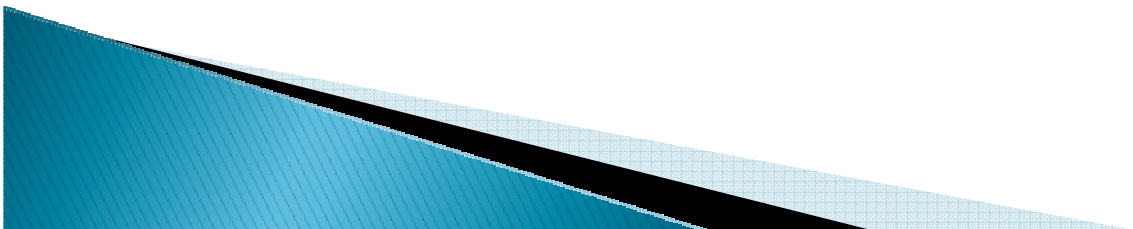
# Summary

- ▶ This pilot study has confirmed that the teaching and learning strategies, including simulation, used to educate Year One nursing skills in BPM are, in the main, generally effective
- ▶ Needs consideration:
  - What are the appropriate expectations of first year nursing students?
  - To what degree can confidence/competence be achievable?



*‘Learning to perform the blood pressure on a patient was fascinating and an empowering experience in the early steps of being a student nurse. I can’t wait to use my new skill in the practicum’.*

(UCOL student)



- ▶ Thank you for listening
- ▶ Any Questions?

