



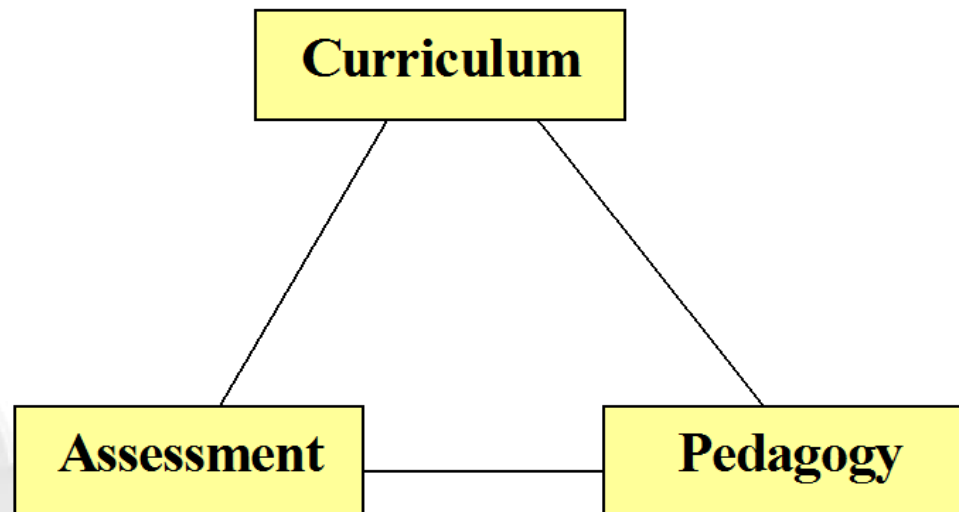
Assessing science informed competency in the first year of the Bachelor of Nursing.

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The initiative/practice

NCNZ competencies incorporated into the science modules



Bernstein, B. (1973)

Research Team



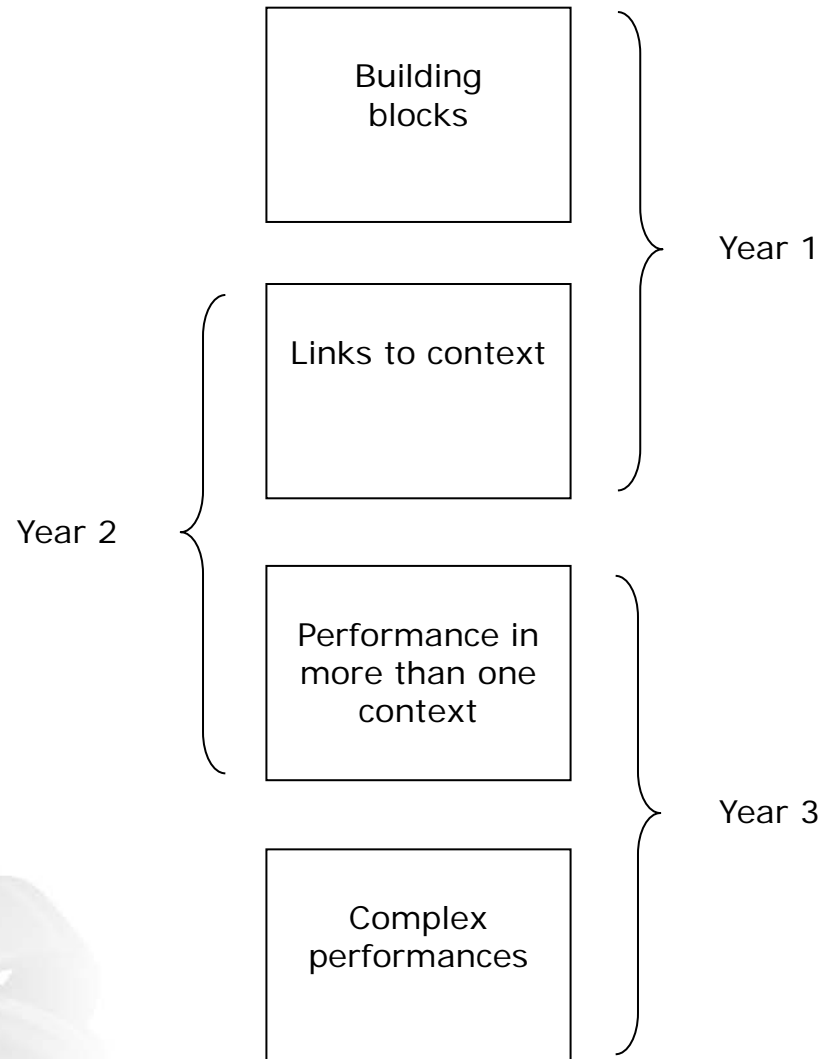
Acknowledging funding support from Ako Aotearoa Northern Hub

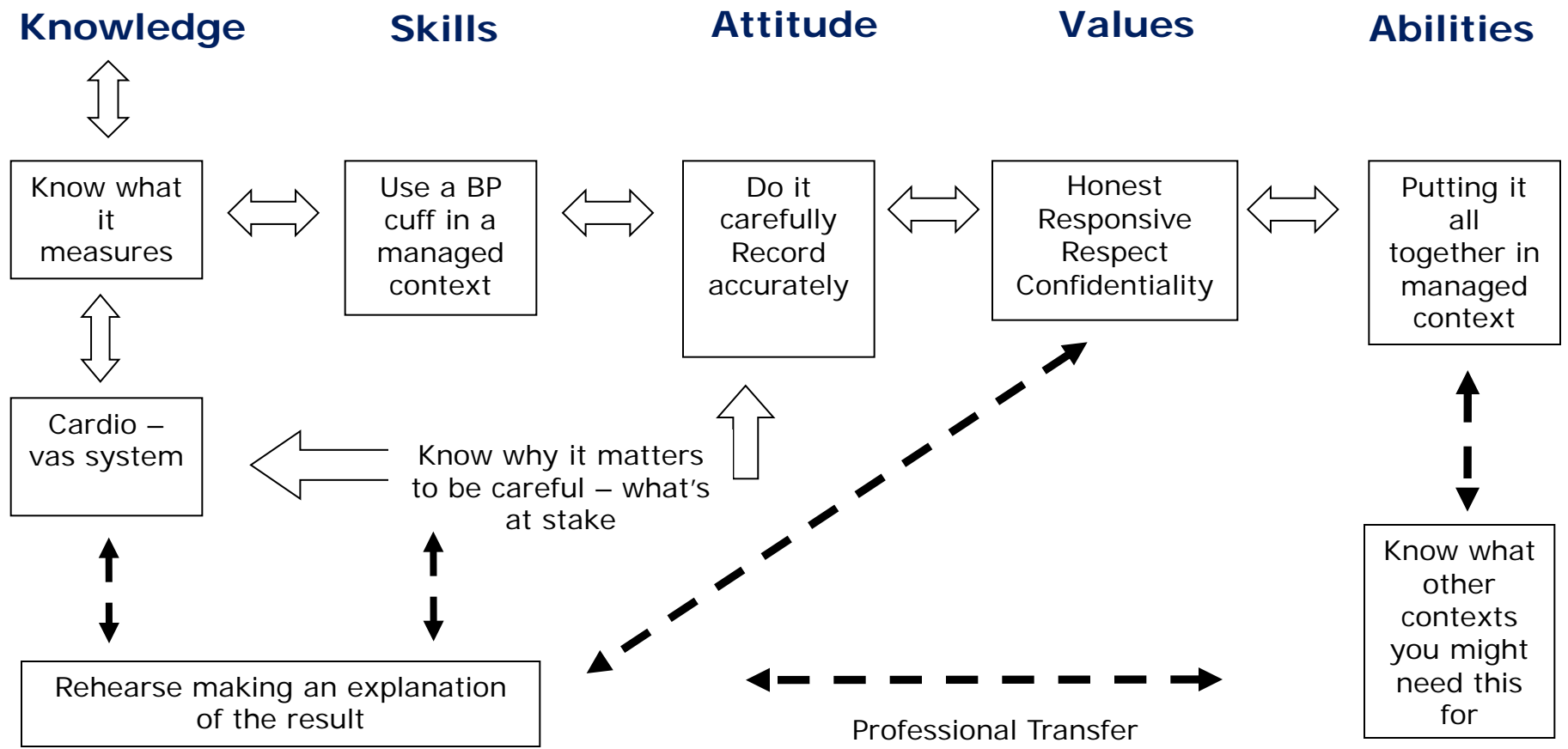


Background literature

- assessing competence in nursing education is controversial and a current world-wide concern (Anderson, 2008; Cowan et al., 2005; Lauder et al., 2008; Pincombe et al., 2007)
- assessment of competence remains under-researched (Rychen, 2004).

Developing competence





Year One Science Competency – safely and accurately measure BP in a managed context and make a basic interpretation of the result

Matrix of competence



Research aim

To evaluate a new assessment tool (science practical test) specifically focusing on the tool's usefulness in assessing all aspects of competence, rather than only knowledge and skills.



Assessment tool

- OSCE (Objective Structured Clinical Examination) – practical test
- 14 stations; 3-4 Qs; 2½ minutes per station
- This is an example of one of the questions we asked: *List two questions you should ask a client prior to drawing a blood sample*



Method

Research Questions

Does the new assessment tool provide evidence that students are making links between science learning and nursing practice?

Does the new assessment tool provide evidence of students' developing science-informed competence?

How do students understand the new assessment tool?

What is their response to the new assessment tool?

Validity

Construct validity

Consequential validity

Data Collection

Science-informed competence matrix map comparison

Analysis of student results on a 4 point scale

Student self completion questionnaire

Student focus group interview

Research participants

- 68 students gave consent to participate (52% of total no. enrolled in the module)
- 50 students completed the questionnaire
- 15 participated in the focus groups





Research findings

- Construct
 - All aspects of competence assessed
- Examples of student responses
 - *“Is it ok for me to take your blood?”*
 - *“Do you mind if I just lift your sleeve up?”*
 - *“If they mind us doing it (religion)”*
 - *“Do you have a known blood disease?”*
 - *“Do you have a history of clotting?”*



Research findings

- Consequential validity
 - Understood purpose of tool
 - Negative response to assessment
- Student responses
 - *“They designed the questions to put us in the nursing frame of mind”*
 - *“... The test was fair but the timeframe [was not]”*
 - *“... I find it hard to link with our nursing perspective as a student as we just start – it is hard for us”*



Conclusion

- Challenges and tensions remain
- New understandings gained
- Future changes to the assessment tool are more likely to be based on students' pedagogical preferences (Boud, 2007)



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