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# Prevalence's and practices of Simulation use in the undergraduate Nursing Curricula

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# Background to the study:

Part of a larger study

Literature suggests a possible underuse of simulators in nursing education.

Situational analysis



**Aim:** assess the prevalence and practices of simulation in the 4 year degree or diploma

# Data Collection

- The validated *Prevalence's and Practices of Simulation* survey (Hayden, 2010) used with permission.
- Surveys were e-mailed to a representative sample of educators using simulation at NEIs (University and Colleges)
- **Sampling Issues**
- **Final Sample**
- 

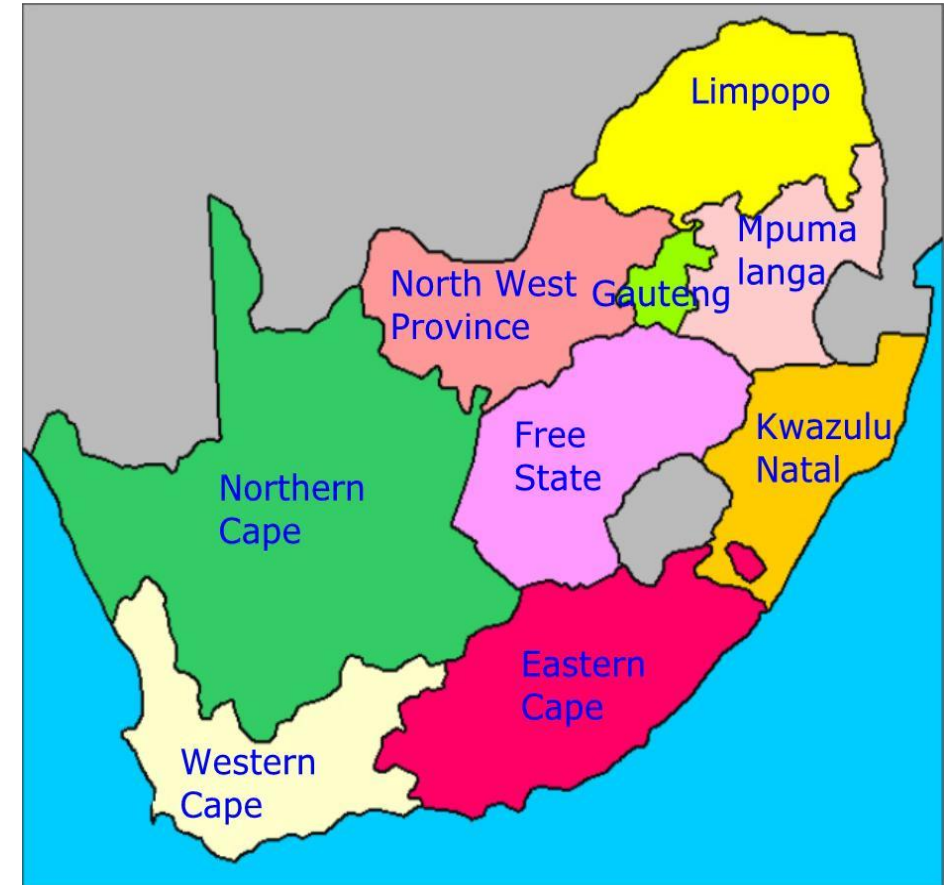


## Distribution of sent surveys

<b>Province</b>	<b>University</b>	<b>College</b>	<b>Other</b>	<b>Total</b>
<b>Gauteng</b>	<b>25</b>	<b>10</b>		<b>35</b>
<b>Western province</b>	<b>4</b>	<b>6</b>		<b>10</b>
<b>Eastern province</b>	<b>11</b>	<b>3</b>		<b>14</b>
<b>Limpopo</b>	<b>8</b>	<b>4</b>		<b>12</b>
<b>Kwa Zulu Natal</b>	<b>9</b>	<b>7</b>		<b>16</b>
<b>Northern Cape</b>	<b>0</b>	<b>2</b>		<b>2</b>
<b>Mpumalanga</b>	<b>0</b>	<b>5</b>		<b>5</b>
<b>Free State</b>	<b>9</b>	<b>8</b>		<b>17</b>
<b>Northwest province</b>	<b>9</b>	<b>2</b>		<b>11</b>
<b>Not delivered - returned</b>			<b>16</b>	<b>16</b>
<b>Sample Total</b>				<b>138</b>

Description of NEI	
University	34
College	17
<b>TOTAL</b>	<b>51</b>
Type of program	
4 year degree	34
4 year Diploma	15
Skipped question	2
<b>TOTAL</b>	<b>51</b>
Geographical location	
Rural	2
Suburban	3
Urban	37
Skipped question	9
<b>TOTAL</b>	<b>51</b>

## Demographic data



For this study simulation was defined according to the level of fidelity of the manikin or scenario.

*High-fidelity simulation: programmed to respond to affective or psychomotor changes*

*Medium fidelity: manikins with installed human qualities that don't respond to students actions*


*Task trainers: part of a manikin designed for a specific psychomotor skill.*

# Type of simulation used per year group

	<b>High-fidelity Simulation</b>	<b>Medium-fidelity Simulation</b>	<b>Task trainers</b>	<b>Total respondents</b>
<b>First year</b>	<b>11.11% (4)</b>	<b>47.22% (17)</b>	<b>83.33% (30)</b>	<b>(36)</b>
<b>Second year</b>	<b>21.88% (7)</b>	<b>50.00% (16)</b>	<b>65.63% (21)</b>	<b>(32)</b>
<b>Third year</b>	<b>38.71% (12)</b>	<b>51.61% (16)</b>	<b>70.97% (22)</b>	<b>(31)</b>
<b>Fourth year</b>	<b>39.29% (13)</b>	<b>45.45% (15)</b>	<b>60.61% (20)</b>	<b>(33)</b>



# Scenario Information

	Yes	No	Total respondents	
<b>Are scenarios commercially purchased?</b>	<b>43.48%</b>	<b>75.67%</b>	<b>41</b>	
<b>Educators that write their own scenarios</b>	<b>95.0%</b>	<b>5.0%</b>	<b>40</b>	
<b>Educators that share their scenarios with other NEIs</b>	<b>17.50%</b>	<b>82.50%</b>	<b>40</b>	
				
	<b>Colleague evaluation</b>	<b>Pilot testing</b>	<b>Student review</b>	<b>None</b>
<b>Quality of simulation session/scenario</b> <b>Multiple choices could be selected.</b>	<b>25.64%</b>	<b>7.69%</b>	<b>61.54%</b>	<b>25.64%</b>

# Types of learning opportunities offered by simulation in the NEIs

<b>Practice procedures such as suctioning, Foley's catheter insertion, medication administration</b>	<b>90.70%</b>
<b>Practice routine assessments such as health and lung sounds expected in clinical normal and abnormal findings</b>	<b>46.51%</b>
<b>Practice patient scenarios discussed in class</b>	<b>72.09%</b>
<b>Practice rare scenarios that students may not see in clinical facilities</b>	<b>46.51%</b>
<b>Practice high risk patient scenarios</b>	<b>34.88%</b>

# Debriefing practices

Educators debrief students routinely after simulation	43.59%
Debriefing does not occur after simulation	56.41%



# Educator training in Simulation

Formal training in simulation i.e attended a workshop	12.2%
Introductory course in simulation	78.02%
No training	8.76%

# Perceptions about the amount of simulation

Should be using more simulation in their programmes	95.23%
Using just enough simulation	4.77%

# Discussion of Findings

- Use of Simulation in NEIs
- Types of simulation
- Areas of concern
- Debriefing
  
- Limitations of the study
- Recommendations

