Using Lt in five Bachelor of Nursing cohorts: How's it going so far?

Ricci Wesselink
Centre for Health and Social Practice
Waikato Institute of Technology
Who are we?

• **WINTEC: Waikato Institute of Technology** (Hamilton – City campus)
  • Centre for Health and Social Practice
    • Bachelor of Nursing – approx. Intake of a total of 200-250 student per year.
    • Bachelor of Midwifery - intake of approx. 45-75 students per year
    • Bachelor of Physiotherapy (starts 2019) – first intake 20 students
Our history with Lt

• Prior to 2017
  o Lab tutor used in some Semester 1, 2 and 3 nursing science labs.

• 2017
  o Year 1 (Semester 1 and 2 Nursing Health science)
    o Lt made the primary source of course content
    o We authored most of our own lessons in Lt
  o Year 2 - Semester 3 +4 – Lt case studies used for pre-learning before some lectures / lectorials.

• 2018 additions
  o Level 4 – Enrolled nursing and health science bridging courses introduced use of Lt for lectures and labs.
Let's focus on.....

- Year 1 (Level 5) Semester 2, Bachelor of Nursing students
  - Health science module
    - Physiology with pharmacology, microbiology and genetics
- Five cohorts
  - 2016 Semester A + B (Pre –Lt)
  - 2017 Semester A + B (Lt)
  - 2018 Semester A (Lt)
What changed?

Our Semester 2 Health Science Classes went from

This to This

2016 2018
Why change?

• November 2016: Brain Trust Event 2016
  o Wintec health science + nursing staff attended
  o Introduced to and inspired by the concept of lectorials by Tony Zaharic

• Education moving toward
  o Blended learning – inclusion of digital media and face to face learning.
  o Flipped classrooms – Contact time used for discussion, application, consolidation
We repositioned our role as tutors from "Sage on the Stage" to "Guide on the Side".
Authoring in Lt was simple and allowed us to provide students with:

- Clarity and focus
- Opportunities to check their understanding
  - Regularly
  - Variety of ways
- Immediate feedback as they learn
Let's look at the details ...

**2016**

- **Lecture**: 2 hrs
  - 100-150 students
  - Power point + computer or paper
- **Lab / Tute**: 2 hrs
  - Up to 20 students
  - Paper-based
- **Homework**: 1 hr
  - Self study
  - Paper based

**2017**

- **Lt Lesson/s**: 2 hrs
- **Self study**
- **Lectorial**: 1 hrs
  - 50-75 students
  - Paper-based
- **Lab / Tute**: 2 hrs
  - Up to 20 students
  - In Lt
### What students said:

#### 2017 Sem A

* = End of module survey

“What do you think about use of Lt compared to lectures?”

**Pros - Themes**

1. Found Lt helpful/beneficial
2. Lt allowed flexibility in the pace and timing of study
3. Lt improved understanding
4. Lt content was concise / provided clarity
5. Like exercises that allow them to check understanding / interactivity
6. Covers more learning styles than lectures
7. Requires you to work to learn

**Cons - Themes**

1. Would prefer to have lectures
2. Prefers to write rather than type / wants to print off Lt content
3. Would like additional explanations
4. Feels like they are working by themselves / being taught by a machine / teaching themselves
What students said:

2017 Sem B *  * = End of module survey

“What is going well in your studies so far?”

“What improvements can you suggest?”

Pros - Themes

1. Generally positive comments about Lt – like/love
2. Lt allowed flexibility in the pace and timing of study
3. Lt improved understanding
4. Like exercises that allow them to check understanding / interactivity
5. Enjoyed applying Lt pre-learning content in lab classes.
6. Like lectorial (consolidation/application) questions

Cons - Themes

1. Too much content in Lt lessons
2. Lectorials are too short
3. Would prefer lectures
What happened?

Individual Assessments

Assessment pass rates of four Semester 2 health science student cohorts in the Bachelor of Nursing

Blue = pre Lt + traditional teaching
Red = Lt + blended + flipped learning

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<tbody>
<tr>
<td>Test 1 (MCQ)</td>
<td>76%</td>
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<tr>
<td>Test 2 (MCQ)</td>
<td>67%</td>
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<td>Short Answer</td>
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What happened?

Overall module pass rates and mean marks

Module pass rate, mean module mark and mean short answer test mark over four Semester 2 health science student cohorts.

Blue = pre-Lt + traditional teaching
Red = Lt + flipped and blended
What changed in 2018?

2016
- Lecture 2 hrs
- Lab / Tute 2 hrs
- Homework 1 hr

2017
- Lt Lesson/s 2 hrs
- Lectorial 1 hrs
- Lab / Tute 2 hrs

2018
- Lt Lesson/s 2 hrs
- Lab / Tute 2 hrs
- Lectorial 1 hrs
Let's look at the details ...

**2017**
- Lt Lesson/s 2 hrs
- Self study
- Lectorial 1 hr
  - 50 – 75 students
  - Paper-based
- Lab / Tute 2 hrs
  - Up to 20 students
  - In Lt

**2018**
- Lt Lesson/s 2 hrs
- Self study
- Lab / Tute 2 hrs
  - Up to 20 students
  - In Lt
- Lectorial 1 hr
  - 50 – 75 students
  - Now mostly in Lt
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<tr>
<td>1. Enjoyed not having lectures</td>
<td>1. Would prefer lectures</td>
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<td>2. Understood when theory was put into context (in labs / lectorials).</td>
<td>2. Would like lectorials to be longer</td>
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<td>3. Labs bring everything together.</td>
<td>3. Would prefer to write / print off Lt lessons</td>
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<td>4. Generally positive feedback</td>
<td>4. Generally negative feedback</td>
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What happened?

Individual Assessments

Assessment pass rates of 5-6 Semester 2 health science student cohorts in the Bachelor of Nursing

Blue = pre-Lt + traditional teaching
Red + green = Lt + flipped + blended learning

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What happened?
Overall module pass rates and mean marks

Module pass rate, mean module mark and mean short answer test mark over five Semester 2 health science student cohorts.

Blue = pre-Lt + traditional teaching
Red = Lt + flipped +blended learning
Into the future....

• 2019
  o Level 5 - Introduction of "snap lesson" videos in Lt on key concepts.
  o Apply MUSIC model of motivation
  o Lt Health science content used to upskills graduate entry nursing students.
  o Level 4 – Lt used in completely online health science bridging module.
  o Level 5 Bachelor of Physiotherapy students start at Wintec will use Lt for health science.
How’s it going so far?

- Polarised student feedback about new structure.
  - On balance more positive than negative.
- Assessment results
  - Improved
    - Overall module pass rate
      - 75% → 86%
    - Mean overall module mark
      - 54% → 63%
    - Short answer
      - pass rate 49% → >70%
      - mean mark 50% → 61%

How is THIS working for us?
Where does the balance lie?

- Assessment + Course pass rates
- Student satisfaction + feedback