

# Yes we can

## Growth mindset in a Secondary School

### Bernie Wills & Frances Horne

CORE  
**uLearn18**



HUTT VALLEY HIGH SCHOOL

Co-educational school in Lower Hutt  
1750 students 160 staff



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#CENZ18

edSpace

CORE



# Why

- Poor results
- Poor retention
- Courses weren't catering to range of students ability
- Assessments were driving courses
- Assessments needed high scaffolding
- High literacy demand in reading assessments
- Capable students put off Maths
- Struggling students had lack of Maths ability confirmed



# What we did - 2017

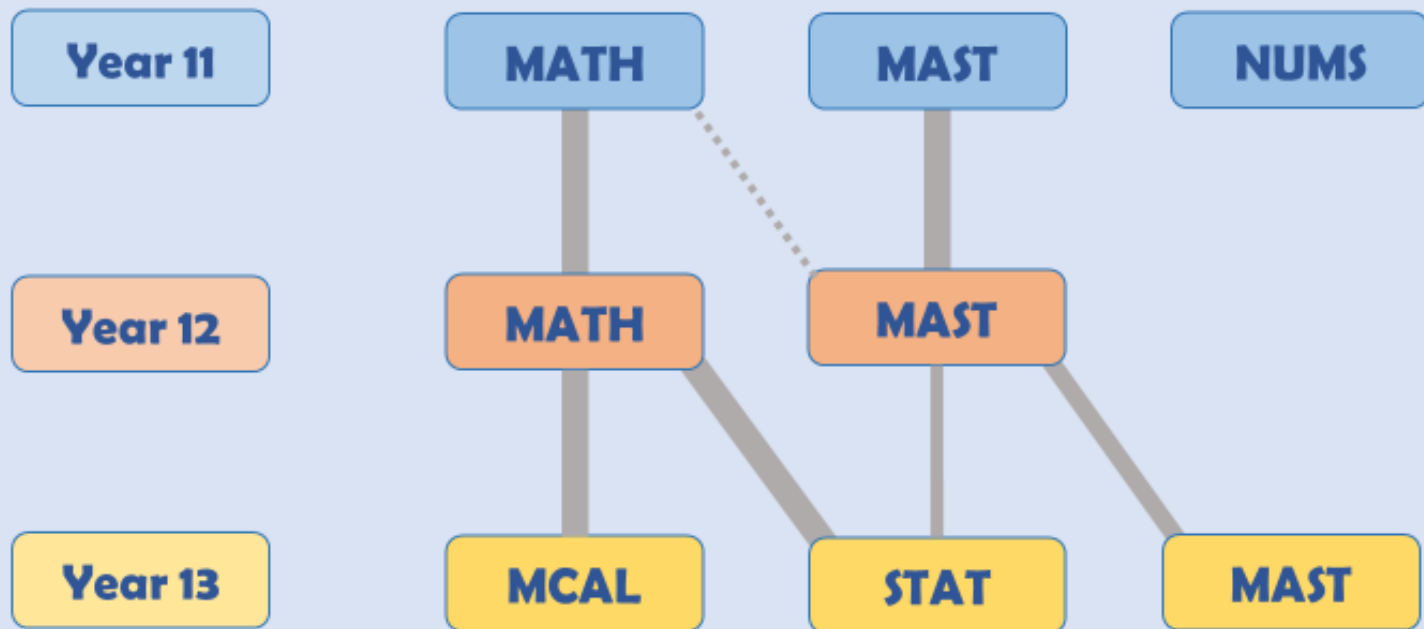
- Trial flipped learning
- Trial combining year groups
- Change three internal assessments to student contexts
- Core Modern Assessment Course
  - NZQA and school policies
- Changed furniture
- Planned new course



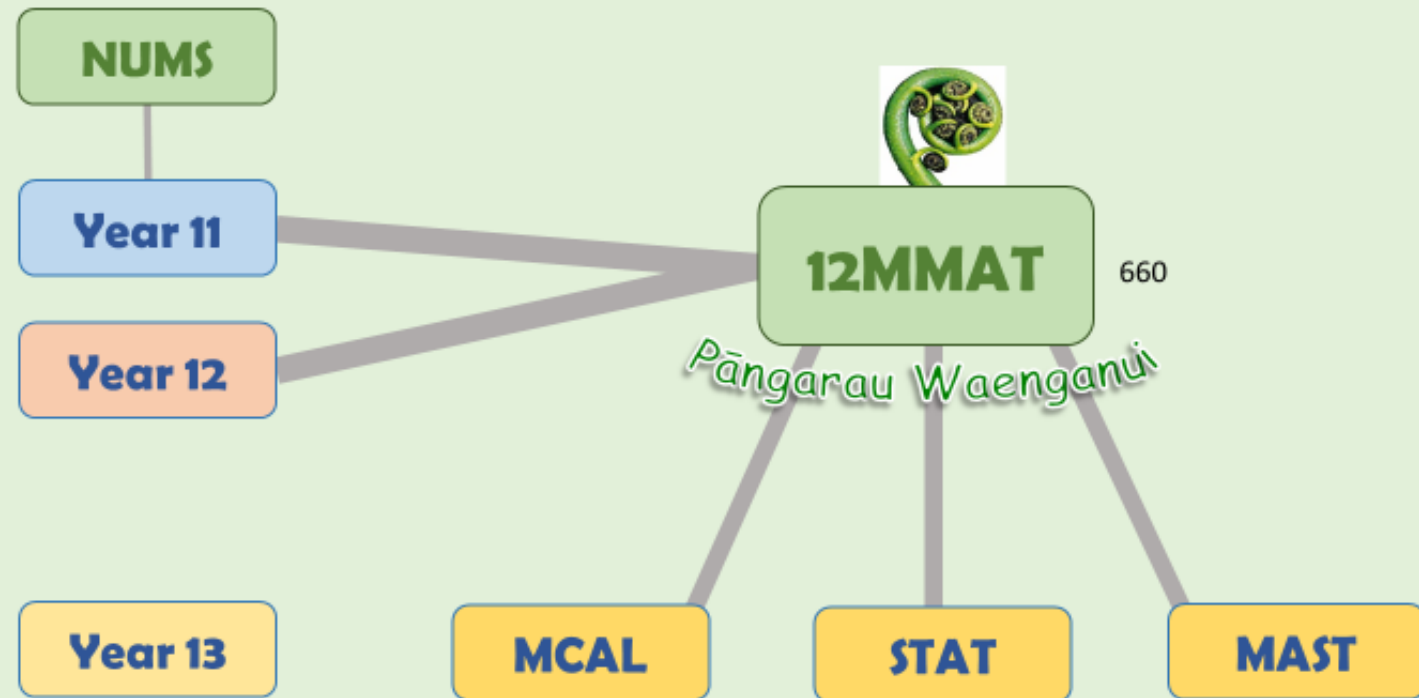
# How

- Brainstormed our 'ideal' then scaled back
- Presented to our department
  - Staff enthusiasm
- Presented to SLT
- Designed the course
  - Opportunities
  - Obstacles
- Lightboard
- Course evolution

## Senior Maths classes pre 2018



# Senior Maths classes 2018



# Nuts and Bolts

- Term 4 planning the structure
- Term 4 developing resources
- Term 1 started with basic structure and resources
- Academic mentoring
- Weekly meetings
- Parent information evenings
- Term 1 review
- Term 4 review



# Bumps

Staff

In department

Outside department

Students

Year 11

Year 12

Parents

For

Against

Course

Standards

Videos

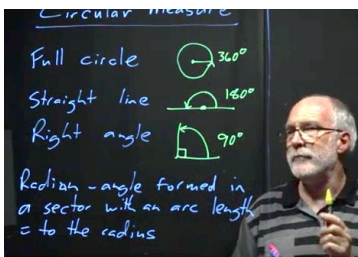
Structure



# Day to day

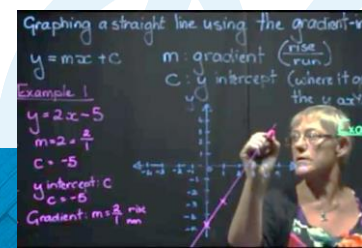
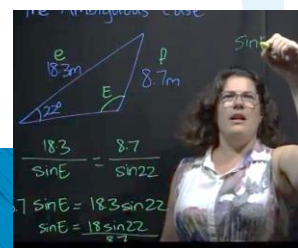
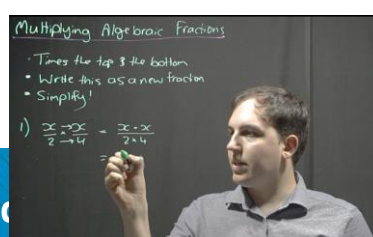
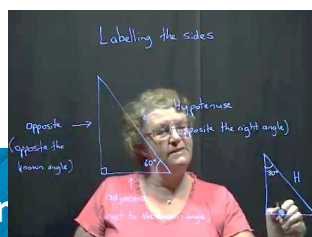
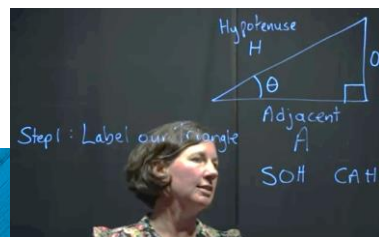
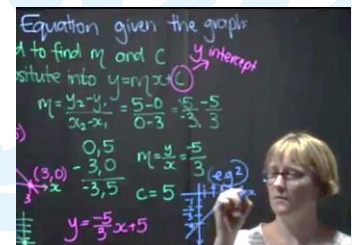
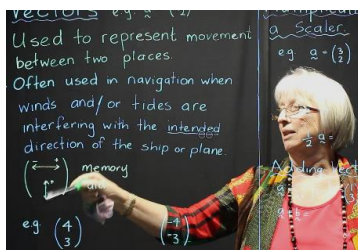
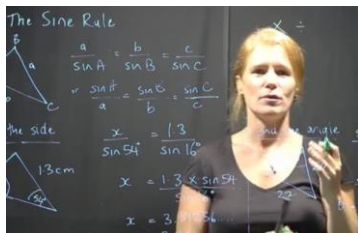
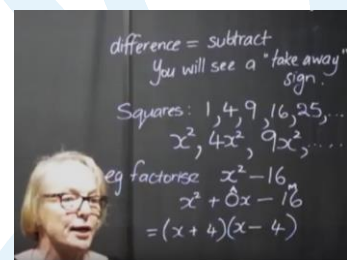


- Students working on a range of standards
- Students working on a range of activities
- Students working at their own pace
- Self selected groups and rooms
- Resources the same for all classes
- Practice assessments



# Day to day

- Writing assessments
- Marking
- Flexibility of rooms
- Teacher strengths and weaknesses
- Off task students
- Devices
- Teacher workload



# Assessments

- 2017 changed 2.4 Trig and 2.1 Co-ordinate Geometry
- 2018 varying degrees of contextualisation
- Marking panels
- Holistic marking
- Teacher confidence
- Students understanding of the Achievement Standards
- Student confidence
- Results
- Resits



# AS 1.7

## Right angled trig

Not achieved

Achieved

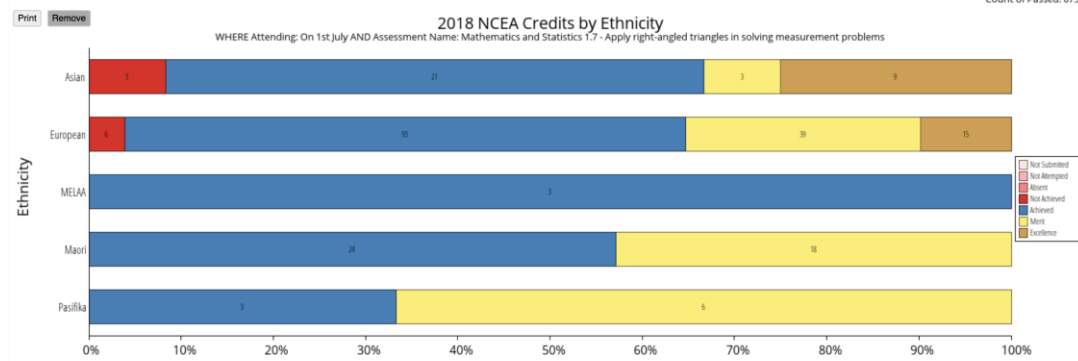
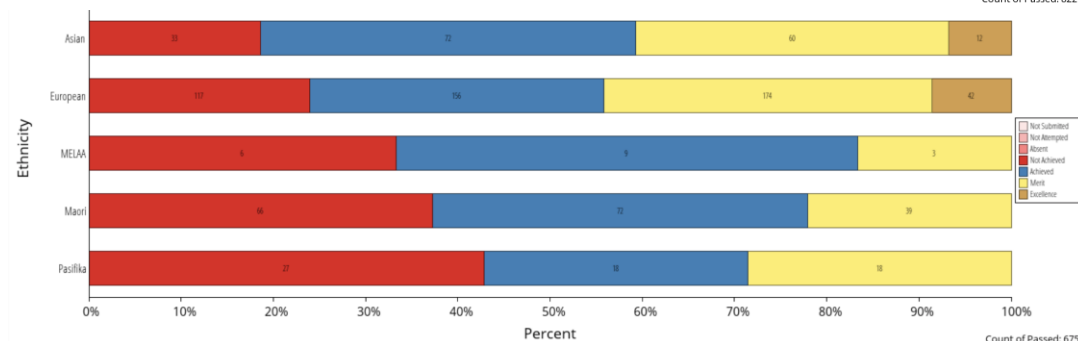
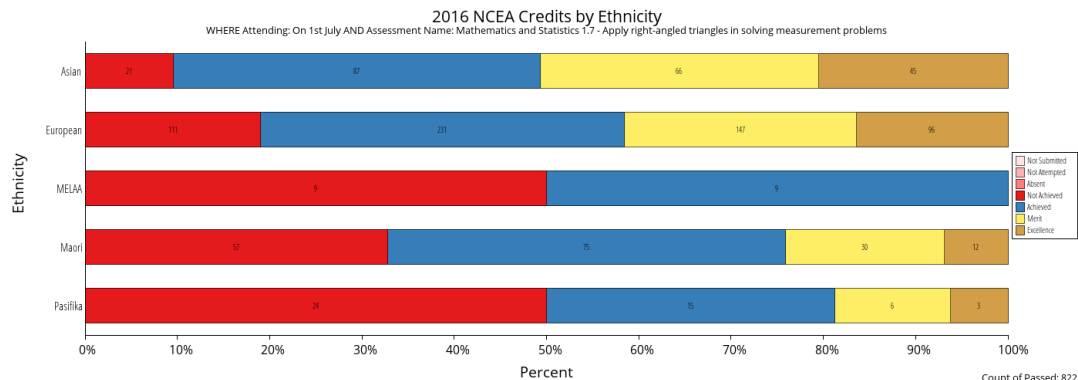
Merit

Excellence

2016:  
11MATH  
11MAST

2017:  
11MATH  
11MAST

2018:  
12MMAT



# AS 2.4

Non - right  
angled trig

Not achieved

Achieved

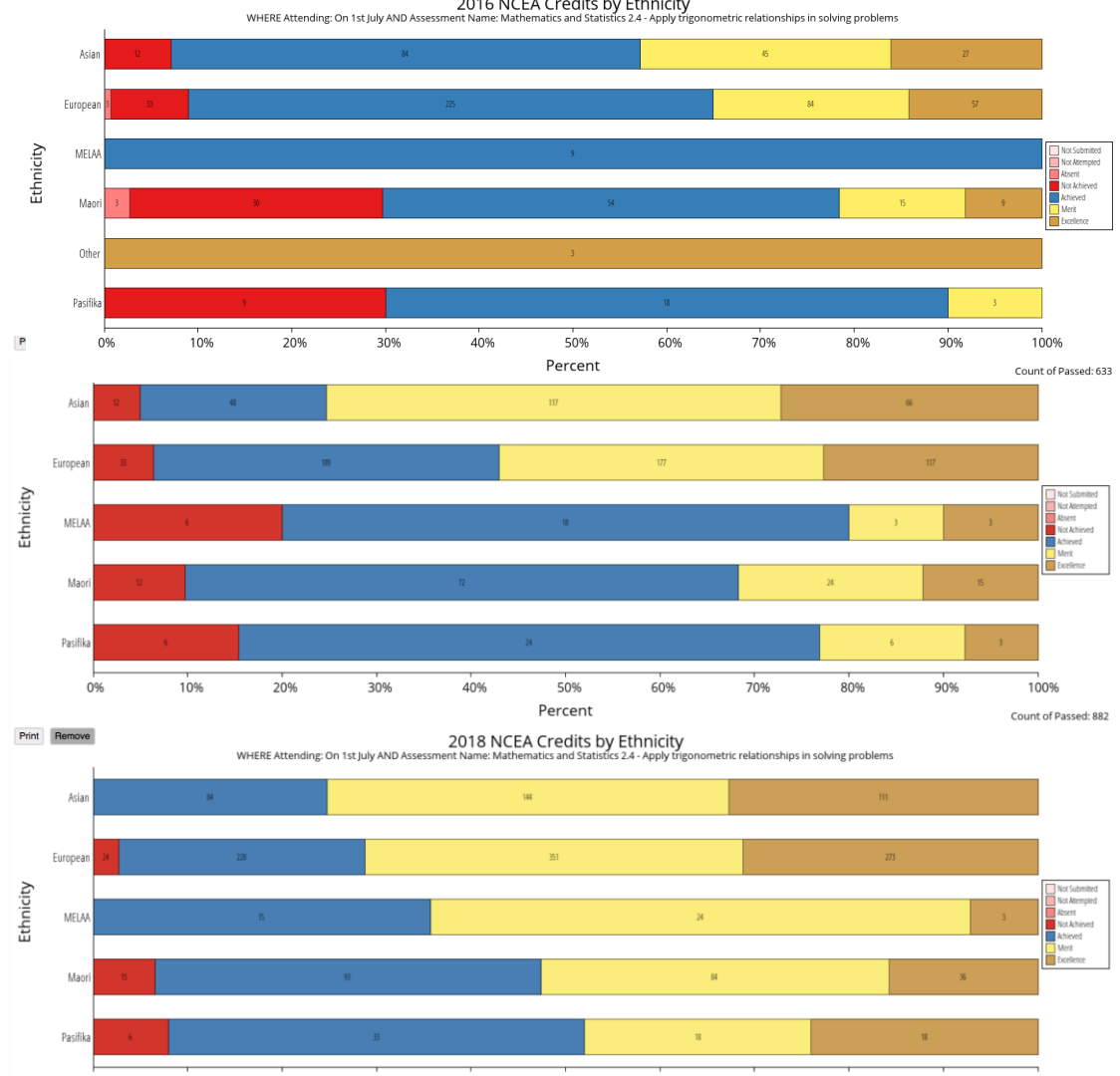
Merit

Excellence

2016:  
12MATH  
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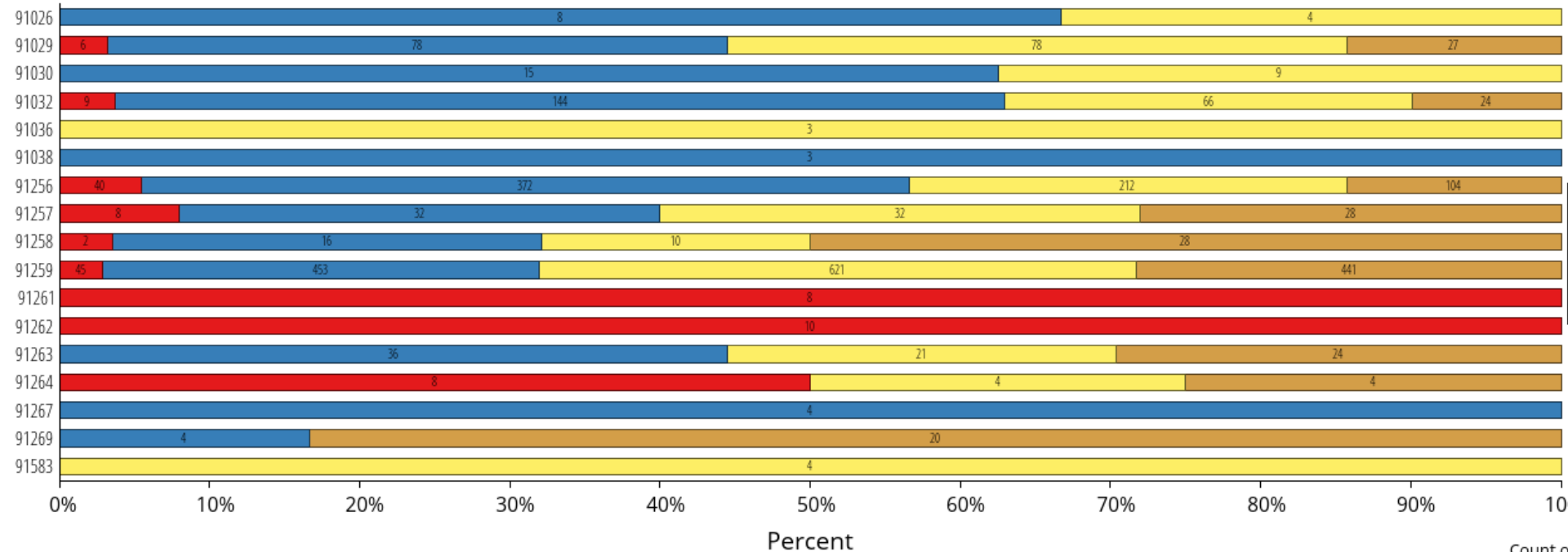
2017:  
12MATH  
12MAST

2018:  
12MMAT



## 2018 NCEA Credits by Assessment Number

WHERE Attending: On 1st July AND Subject: 12MMAT



Not achieved

Achieved

Merit

Excellence

# Questions ?

We don't know it all... contrary to popular belief

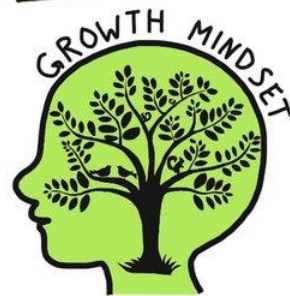


**Thank you**  
**Tēnā koutou**  
**Fa'afetai lava**

# 10 Growth Mindset Statements



What can I say to myself?



INSTEAD OF:

TRY THINKING:

I'm not good at this.

I'm awesome at this.

I give up.

This is too hard.

I can't make this any better.

I just can't do Math.

I made a mistake.

She's so smart. I will never be that smart.

It's good enough.

Plan "A" didn't work.

1 What am I missing?

2 I'm on the right track.

3 I'll use some of the strategies we've learned.

4 This may take some time and effort.

5 I can always improve so I'll keep trying.

6 I'm going to train my brain in Math.

7 Mistakes help me to learn better.

8 I'm going to figure out how she does it.

9 Is it really my best work?

10 Good thing the alphabet has 25 more letters!