

Yes we can

**Growth mindset in a Secondary
School**

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CORE

uLearn18



HUTT VALLEY HIGH SCHOOL

Co-educational school in Lower Hutt
1750 students 160 staff



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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

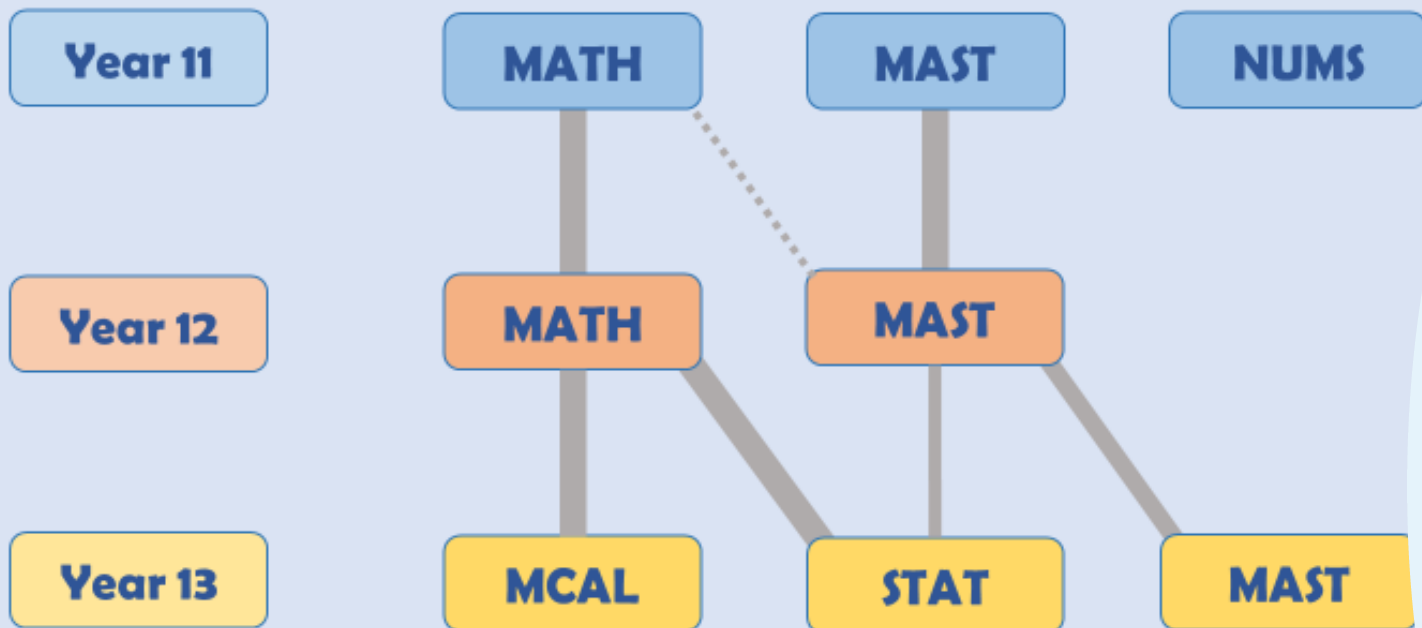
- Trial flipped learning
- Trial combining year groups
- Change three internal assessments to student contexts
- Core Modern Assessment Course
 - NZQA and school policies
- Changed furniture
- Planned new course



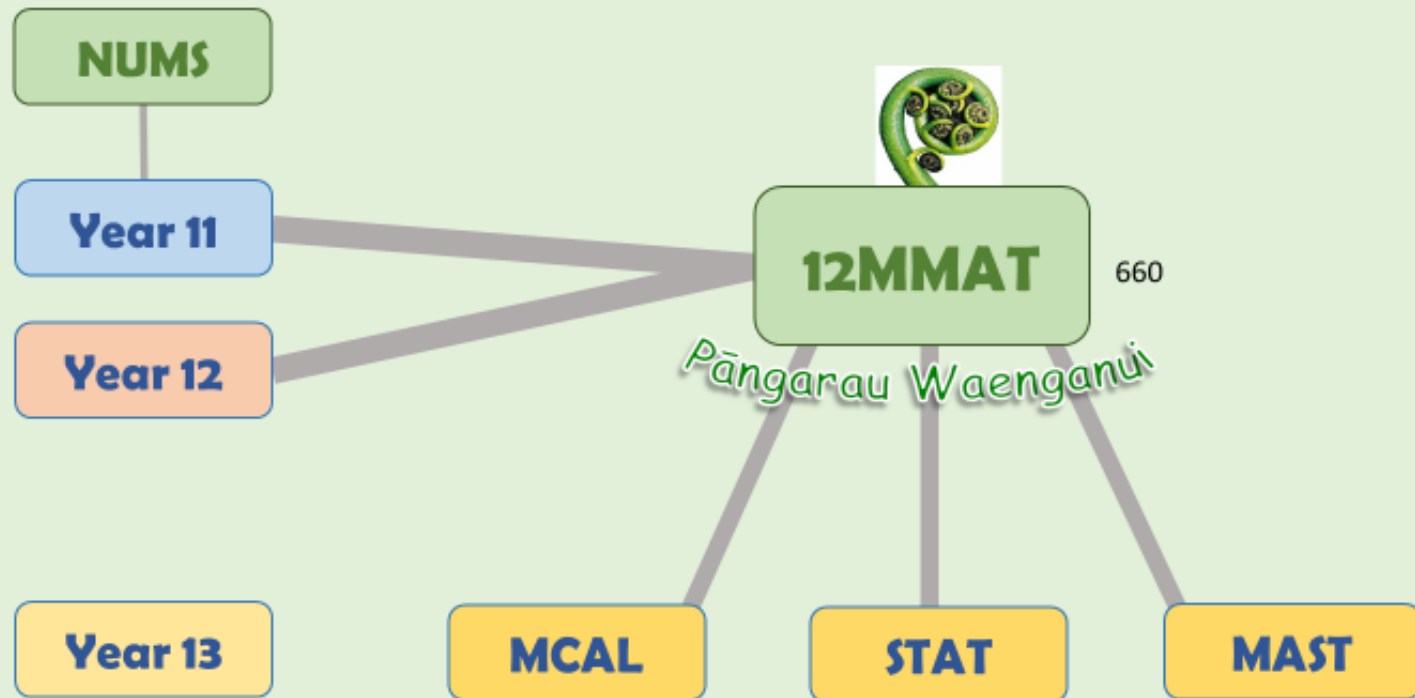
How

- 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



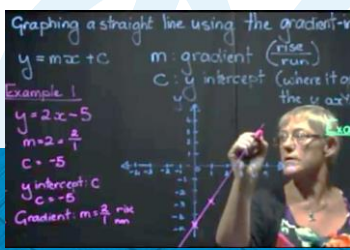
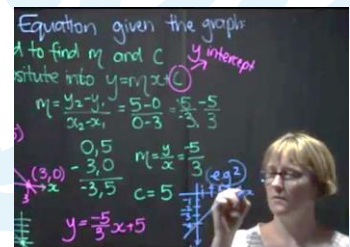
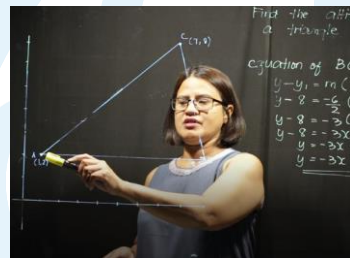
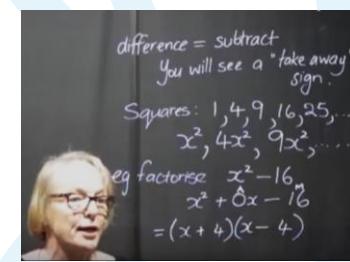
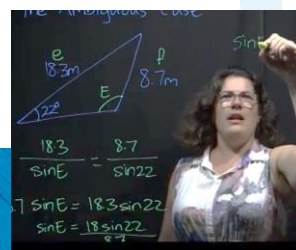
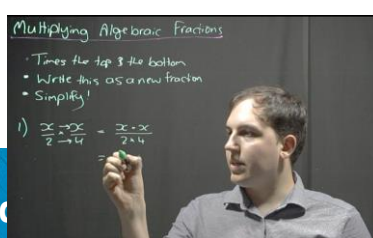
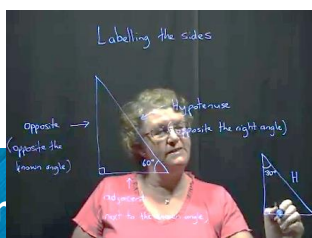
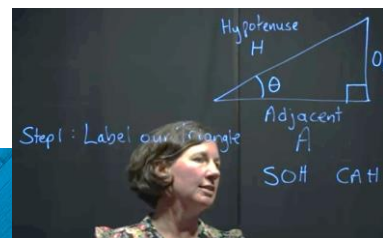
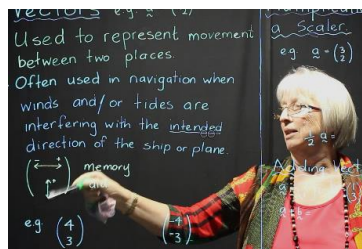
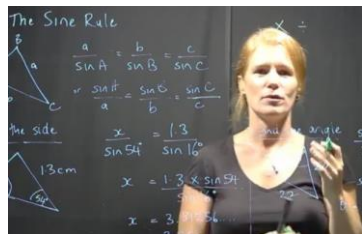
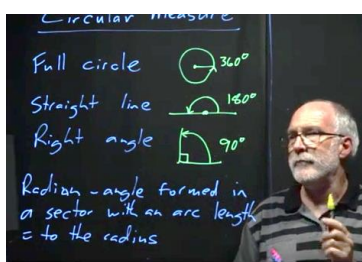
Day to day



- 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

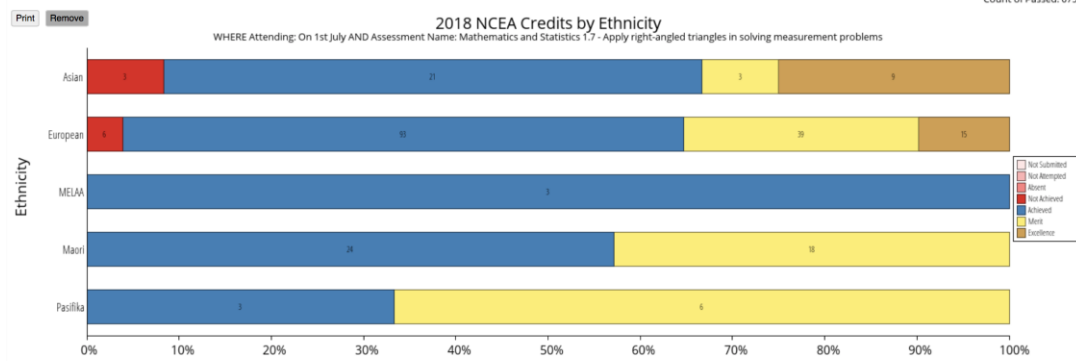
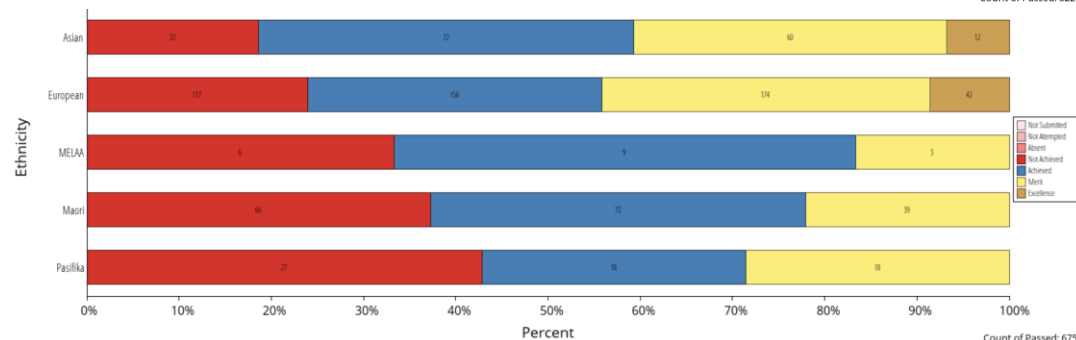
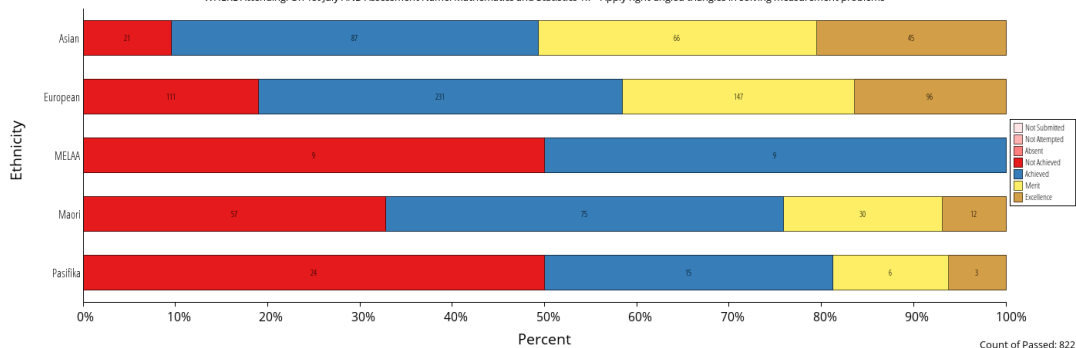
Excellence

2016:
11MATH
11MAST

2017:
11MATH
11MAST

2018:
12MMAT

2016 NCEA Credits by Ethnicity
WHERE Attending: On 1st July AND Assessment Name: Mathematics and Statistics 1.7 - Apply right-angled triangles in solving measurement problems



AS 2.4

Non - right angled trig

Not achieved

Achieved

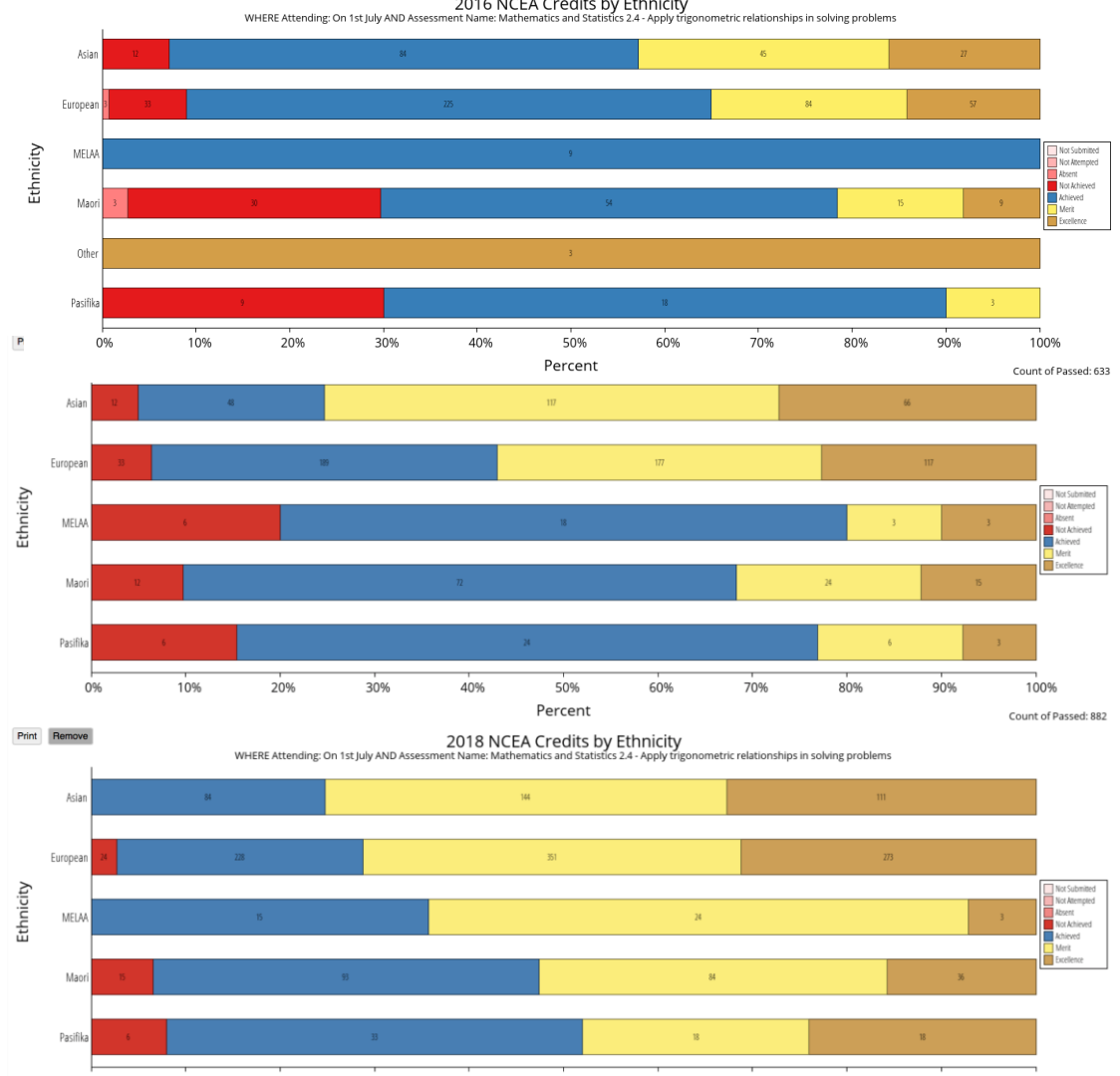
Merit

Excellence

2016:
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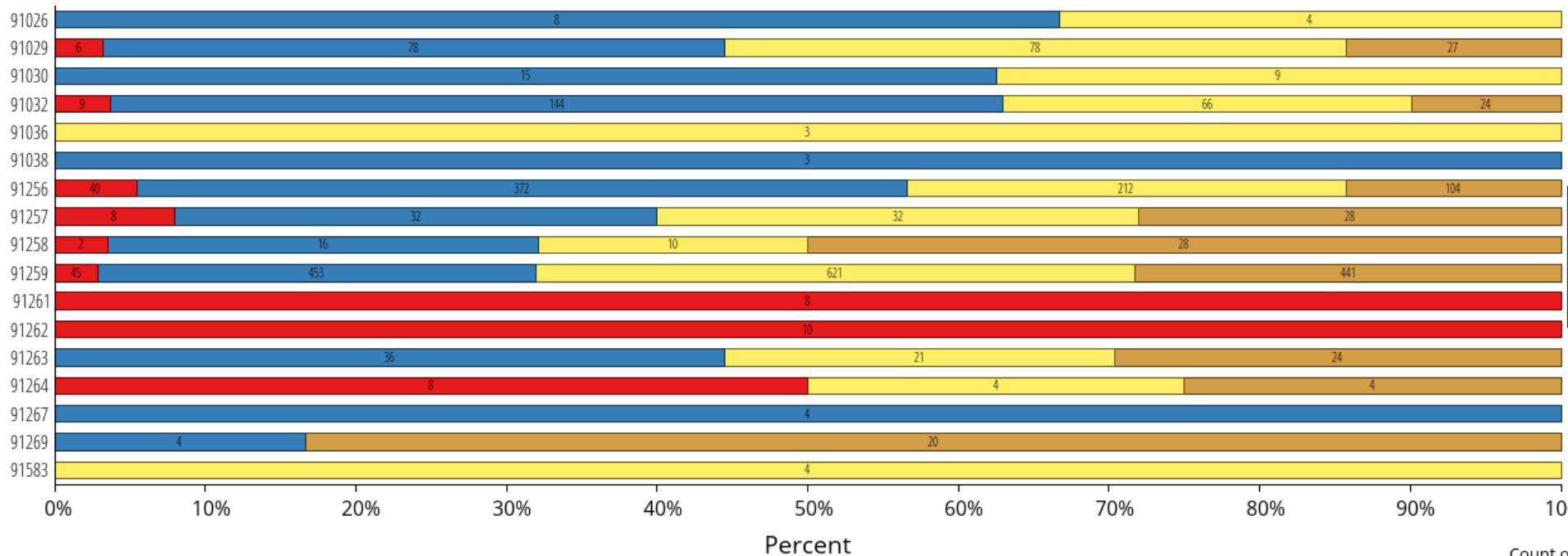
2017:
12MATH
12MAST

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

FIXED MINDSET



What can I say to myself?

INSTEAD OF:

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.

TRY THINKING:

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!

GROWTH MINDSET



(Original source unknown)

@sylvia duckworth