



### ONLINE RESOURCES TO INSPIRE

#### FINANCIAL LITERACY IN PRACTICE

#### Dr Carly Sawatzki

Dr Carly Sawatzki shares her knowledge of numeracy and financial capability. This website will give you a deep insight into vast research, teaching ideas and her favourite lessons.

#### FUSE: Financial Literacy

This page provides financial literacy resources that students and experts have identified as most relevant to young people's lives. It will help your students make good financial decisions and avoid the most common pitfalls and areas of risk, explored through practical, real-life contexts. It is a subset of the full set of financial literacy resources, aligned to the Mathematics and Economics and Business learning areas of the Victorian Curriculum F-10, which can be accessed through the links at the bottom of this page.

#### Talk Money

A free financial education program teaching young Australians money lessons for Life. Talk Money with Ecstra Foundation is provided at no cost to schools.

AMSI Calculates lessons on understanding <u>Percentages</u>, <u>Dollars and Sense</u> and <u>Compound Interest</u> for Secondary and Senior School students.

Financial literacy tasks from *Vinculum* that stimulate secondary students thinking about <u>Economic Literacy</u>, <u>Consumer Literacy</u>, <u>Superannuation and Taxation</u>.

Some recent media bites to challenge your thinking about financial literacy:

- Strengthening your school's approach to financial education
- Fintech education: Are we meeting students interests and needs?
- <u>Time's ripe for financial literacy students can bank on</u>
- Sure, follow the money, but think first



#### PRIMARY YEARS

#### **GOAL!**

Complete these STEM lessons based around basketball to inspire your students.

#### Behind the News

BTN is a fun, accessible way for upper primary students to learn about what's happening in the world around them.

#### **Funbrain**

Watch these fun videos to inspire you to think about different aspects of mathematics and our world.

<u>Optical illusions</u> are combinations of colour, light and patterns creating images that can deceive or mislead our brains into thinking we're seeing something that's simply not there.

#### Math Playground

Explore a range of mathematical concepts and skills and how they may relate to your real world.









## **ONLINE RESOURCES TO INSPIRE**

#### SECONDARY YEARS

#### EY STEM App

Designed for girls around the world to get hands-on with Science, Technology Engineering, and Mathematics. Complete fun and engaging STEM activities and earn rewards points.

#### Cupstaking

A hands-on statistical reasoning rich-task that will get you investigating a range of statistical measures and mounting arguments as to why they are 'the best', based on data.

#### Mathigon

The Mathematical Playground Free tools, courses and manipulatives to make online learning more interactive and engaging than ever before.

#### <u>Australian Bureau of Statistics</u>

Australia's national statistical agency providing trusted official statistics on a wide range of economic, social, population and environmental matters.

#### TED-Ed

This is TED's youth and education initiative. TED-Ed's mission is to spark and celebrate the ideas of teachers and students around the world.

#### GeoGebra for Teaching and Learning Maths

Free digital tools for class activities, graphing, geometry, collaborative whiteboard and mor.

#### Mathematics in Careers

Mathematics investigations for Year 10 to 12 students were developed in collaboration with various industry partners, to showcase how maths is applied in real industry scenarios to solve problems.

# <u>Inspiring videos for maths teachers and</u> students

Thanks to the internet, we are quite literally drowning in video content. It's all around us. There's so much of it, it can be hard to find the really good stuff. But fear not, we have done the hard work for you!

#### **TEACHER RESOURCES**

#### Tom Rocks Maths

Tom is a Mathematician at the University of Oxford where he holds the position of Early Career Teaching and Outreach Fellow at St Edmund Hall. Tom was featured as YouTube's 'Creator on the Rise' in December 2020.

#### reSolve: Maths by Inquiry

This is the flagship mathematics education program from the Australian Academy of Science. It provides curriculumaligned teaching resources and professional learning materials to support teachers to promote a spirit of inquiry in school mathematics, from Foundation to Year 10.

#### FUSE: Financial Literacy

This page provides financial literacy resources that students and experts have identified as most relevant to young people's lives. It will help your students make good financial decisions and avoid the most common pitfalls and areas of risk, explored through practical, real-life contexts.

#### Robert Kaplinsky

Real world problems to get your students thinking about mathematics in their world.

#### 20 Films about Mathematics

Let the big screen inspire your students and the way they think about how they can operate as mathematicians in the real world.

#### Love Maths

This collection of games is a quality resource that many primary schools have come to rely on, for both remote learning and face-to-face classroom work. All of the games have been selected because they are fun, filled with rich learning opportunities.

#### Maths Treats

Is published each term in *Vinculum*, the MAV's Secondary Mathematics journal. A selection of engaging tasks to get your seconday students thinking!

#### **ABC** Education

An inspiring range of ABC programs and podcasts for children in Foundation to Yr 10.

## **ONLINE RESOURCES TO INSPIRE**

### TEACHER RESOURCES (CONT.)

# Which One Doesn't Belong

This website is dedicated to providing thought-provoking puzzles for math teachers and students alike. There are no answers provided as there are many different, correct ways of choosing which one doesn't belong.

#### You Cubed

The world-renowned youcubed project is led by Professor Jo Boaler

from Stanford University, who many teachers will recognise for her work with growth mindsets in mathematics. This website site has an explicit mathematics curriculum focus, it is underpinned by numeracy, grounded in real-world contexts with an emphasis on the development of students' number sense.

#### Math For Love

Mathematical tasks to inspire your students that launch quickly, engage students, and promote the habits of mind mathematicians need: perseverance & pattern-seeking, courage & curiosity, organization & communication.

#### Maths in Art

Inspire your students with <u>M. C. Escher</u>, <u>Scarletfruit</u> and <u>The (Mathematical) Problem of Mondrian's Paintings</u>.



#### A Brief History of Mathematics

Professor of Mathematics Marcus du Sautoy reveals the personalities behind the calculations and argues that mathematics is the driving force behind modern science.

#### Planet Money

The economy explained. Planet Money explores a bunch of really interesting real-world stories and explains how economic concepts are central to each.

#### Estimation 180

Andrew Stadel Poorly designed math curriculum often confuses students and frustrates teachers. The Estimation 180 podcast discusses teaching strategies and math lessons that build number sense and mathematical reasoning.

#### Cautionary Tales

We tell our children unsettling fairy tales to teach them valuable life lessons, but these Cautionary Tales are for the education of the grown-ups – and they are all true.

#### Making Maths Moments Matter

Wondering how to create a classroom culture where students don't want to stop exploring mathematics when the bell rings?

#### The Math Dude Quick and Dirty Tips to Make Math Easier

The Math Dude makes understanding math easier and more fun than you ever thought possible. Host Dr Jason Marshall provides clear explanations of math terms and principles, and his simple tricks for solving basic algebra problems will have even the most mathphobic looking forward to working out whatever math problem comes their way.

#### <u>99% Invisible</u>

This is a great podcast and although many of the episodes are more focused on architecture than mathematics, this particular episode is pretty fascinating. It looks at averages and why 'the average' is not always the best or most appropriate concept.

#### MathsTalk Podcast

Maths Talk tackles key concepts, ideas and content in the Mathematics curriculum – and how to teach them effectively.

