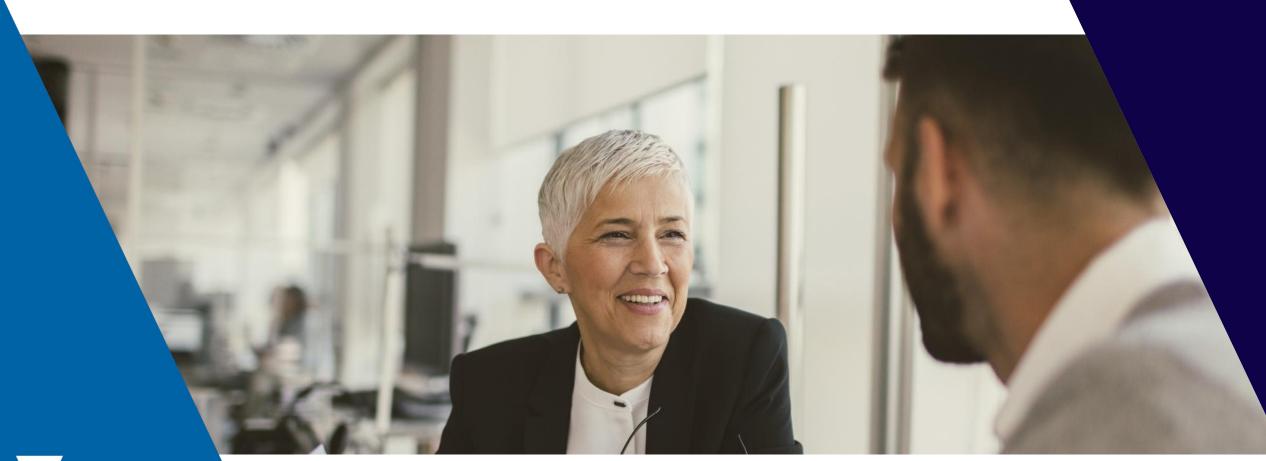
## OOF: Evidence Informing Policy Penny Addison, Director – Curriculum and Assessment





### **Brief:**

- 1. What evidence is needed to inform which policies?
- 2. What government responses are occurring and what else is needed?

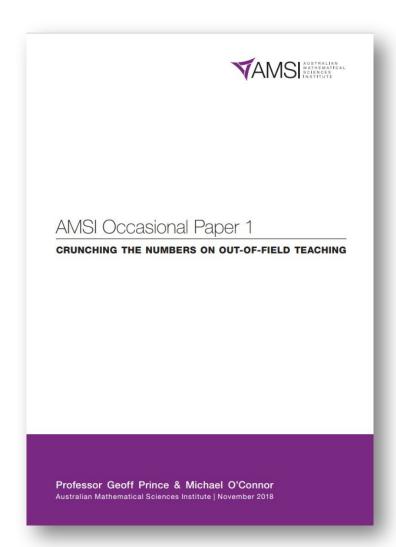
2. What government responses are occurring and what else is needed?



## **Secondary Mathematics and Science Initiative (SMSI)**

In 2019, the Victorian Government committed \$17.85 million for the Secondary Mathematics and Science Initiative (SMSI) for out-of-field teachers. This funding is enabling 272 out-of-field mathematics and science teachers to undertake study to become in-field. By the end of 2021, nearly 180 out-of-field teachers will have completed a fully funded graduate certificate in mathematics or science, readying them to start teaching in-field from the start of the 2022 school year. Up to 100 teachers will undertake the graduate certificates in 2022, preparing them to become in-field for 2023.

The SMSI involves graduate certificates designed specifically for the Victorian context by Deakin University. SMSI also provides funding directly to schools to enable them to support teachers (e.g., through time release) to complete course requirements. The graduate certificates were designed to be delivered face-to-face.



## **Primary Mathematics and Science Specialists (PMSS)**

Through the Primary Mathematics and Science Specialists Initiative (PMSS), the Victorian Government has trained more than 600 specialists from more than 300 primary schools to improve their practice, share knowledge with peers and positively impact their school community.

Since its earliest iteration in 2010, PMSS has been addressing teacher confidence and capability in teaching primary school mathematics and science. The initiative includes extensive professional development (20 days over two years) centred on curriculum content knowledge, pedagogical content knowledge, and leadership and change management skills. It also "releases" teachers 0.5 FTE for two years to plan/enact change.

Evaluations show that PMSS schools successfully develop cultures where student engagement and outcomes improve.

The latest cohort is Cohort 6 was funded under the 2020-21 State Budget for \$32.8 million (200 specialists).



- Victorian Government Teacher Excellence Award for Outstanding Primary Teacher
- AMSI Awards
- Leadership positions

## Music in Schools (MiS)



The Victorian State budget 2020-21 included an additional **\$1.2 million** over two financial years to extend the Music in Schools program including funding for:

- a professional learning program for primary and specialist teachers, especially in rural and regional areas, so they can teach music with greater confidence and capability, particularly for students in Prep to Grade 4
- the purchase or hire of music instruments and other resources for eligible schools participating in the professional learning program so they can establish quality classroom music programs for their students
- additional support resources for teachers and schools.

This funding builds on the Victorian Government's previous commitments totalling **\$4 million** for the Music in Schools program.

Since 2015, it has provided professional learning for 1,883 teachers and 1,325 pre- service teachers across Victoria and enabled 309 schools to purchase resources for classroom music programs.

## Resources (mathematics example)

The Department provides an extensive suite of teaching support resources to help improve numeracy and mathematics engagement and outcomes in the classroom, and at home. One of the key resources to support the teaching of mathematics is the Birth to Level 10 Mathematics Teaching Toolkit which brings together new and existing numeracy and mathematics supports including:

- the Mathematics Curriculum Companion, a suite of learning and teaching resources developed in consultation with Victorian primary and secondary teachers
- a series of **Mathematics Monographs** written by researchers on contemporary topics and issues, which include links to relevant resources and activities. These include research pieces on 'addressing maths anxiety', 'engaging families in mathematics' and exploring the 'critical connections between numeracy and mathematics'
- 75 Middle Years Mathematics Challenges structured on the mathematics proficiencies and provide highly engaging learning and teaching activities for to support students in Years 5 to 9 (forthcoming)
- a suite of **Numeracy at Home** resources and activities for young children and their families. This includes the *Mathscots* animated series, and the *Flip Make Play* card sets that will be distributed to about 65,000 early learners in 2022.



#### Unlock everything with maths

Start exploring now



#### Maths Curriculum Companion

teaching resources aligned to the Victorian Curriculum. It has been developed in consultation

understanding, fluency, problem solving and reasoning. These resources unpack the mathematics content descriptions to provide teachers with relevant content knowledge, online

The Mathematics Curriculum Companion is a key component of the Birth to Level 10 Mathematics Teaching Toolkit.



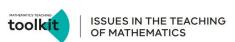
#### **Mathematics Teaching Toolkit**

The Birth to Level 10 Mathematics Teaching Toolkit brings together new and existing numeracy and mathematics resources and supports in an easy to access format.



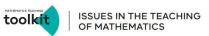
#### Frequently asked questions

ow is the Mathematics Curriculum Companion structured?	>
e Companion consists of	
A teaching contest section which helps teachers with contest knowledge, teaching advice and strategies	
The Victorian Curriculum alignment and useful VCAA resources	
Selected online resources and,	
A range of teaching ideas specific to each content area	
ow can I find resources?	ं
	1
ow can the Mathematics Curriculum Companion help with planning teaching and learning programs?	



#### **Mathematics Anxiety**





#### **Gender and Mathematics**



The Mathoooto is an animation series that has been developed to support numeracy at home. Following the introductory episode, there are 9 episodes (each between one and two minutes long), which you can watch with your children in any order at any time. For each episode, there are ideas and activities that you may like to explore with your shild/ren. Whether you choose to explore a few activities or many, the important thing is to learn alongside your shild/ren and ensourage suriosity and discussion

#### **EPISODES**



**BUYING A DOG COAT** 

PRIMARY STUDENTS

EARLY CHILDHOOD

FUSE Q



SECONDARY STUDENTS

**TEACHERS** 







SHARING THE SAUSAGES



VISITING THE DOG GROOMERS



## **Software (STEM example)**

The Department provides a suite of digital applications and platforms to enhance and inspire quality STEM learning, including:

- the \$25.4 million Software for Schools program, which includes EP Science, Adobe Creative Cloud, LinkedIn Learning, ClickView, and Minecraft Education Edition (all with STEM applications)
- Arc, which provides access to high-quality, engaging, virtual learning experience for students and professional learning for teachers a large range of Victorian STEM-focussed providers form part of this offering
- the Department's content repository FUSE, which hosts thousands for STEM-related learning objects for school use.







stem

Events

Software

Learning

Sign in



# TO SO AM - 2:00 PM





#### STEM for Endangered Animals

Activate Year 7-8 students' STEM skills by designing new nesting boxes for endangered possums and parrots.

#### STEM for Endangered Animals

Use the power of your STEM curriculum to engage Year 5-6 students in finding solutions for endangered possums and parrots.

Digital Program | STEM for Sustainability

Level up your curriculum by finding solutions to real-world environmental problems at Melbourne Zoo.

#### STEM & Social Innovation | Learning + Design

Explore how we might design powerful transdisciplinary social innovation projects, driven by STEM and underpinned by the Google digital

Healesville Sanctuary - Zoos Victoria



Melbourne Zoo

Google









#### Digital Program | STEM for Zoo Habitat Design

Boost your STEM curriculum by focusing on real-life STEM scenarios. Year 5-10 students will use their creativity to design hippo enrichment.

#### STEM Camp: For Years 9-10

A 2-day event for students in Years 9-10 held as part of the Victorian Challenge and Enrichment Series.

#### Moon Base Camp (Scienceworks)

A two-day STEM camp for Years 7 & 8 students to learn about the design of a Moonbase for human survival on the Moon.

#### STEM Camp: For Years 9-10

A 2-day event for students in Years 9-10 held as part of the Victorian Challenge and Enrichment Series.

Werribee Open Range Zoo

Scienceworks

Scienceworks

Scienceworks

## (Smaller) programs

#### School operations

## Holocaust Education — Delivery Requirements

Policy

Guidance

Resources

#### Policy

This policy outlines the requirements for Holocaust Education in school-based curriculum programs in Victorian government secondary schools.

#### Details

All Victorian government school students must be taught about the Holocaust as part of the school's Level 9/10 World War II History curriculum program.

Schools are expected to align the design and delivery of their Holocaust Education program to the Framework for Improving Student Outcomes (FISO) and the guidance and tips provided in the Guidance tab of this policy, which have been developed with teachers who are currently teaching the Holocaust in Victoria and Holocaust Education experts from Victorian, national and international organisations and universities. This guidance identifies 8 characteristics of a quality Holocaust Education program:

- 1. Program is clearly and comprehensively aligned to the Victorian Curriculum: History.
- Program is logically sequenced and thematically rich and explores the significance of the Holocaust.
- 3. The Holocaust is taught with all essential components.
- Program is factually accurate, rich in primary source material, and incorporates Victorian-specific content.
- 5. Learning resources used are well designed and varied.
- 6. Program has experiential components.
- Pedagogical choices enable deep learning, are sensitive to the particularities and complexities of the Holocaust, and are inclusive of diverse learners.
- 8. Assessment opportunities are appropriate, varied and engaging.

The Guidance tab also identifies common barriers to designing and delivering a quality Holocaust Education program and suggests solutions and provides links to support resources.

The Resources tab contains links to capacity building resources for teachers, including professional learning opportunities and background reading/viewing as well as teaching and learning resources.



Print whole topic

#### Policy last updated

2 March 2021

#### Scope

Schools

#### Contact

Learning Design and Innovation Unit

studentlearning@education.vic.gov.au



Search this site

Home > The Department > Program directory

## Blended Arts Education Program (Dance and Drama)

Every child and young person – no matter their background or circumstance – deserves a chance to participate in quality arts education.

Quality dance and drama education engages, inspires, and enriches students to reach their creative and expressive potential.

The Blended Arts Education Program (Dance and Drama) is part of a suite of programs to improve educational outcomes for Victorian government rural and regional schools. Participating schools receive a series of virtual lessons provided by expert teachers. Classroom teachers are provided with lesson plans and other support materials that allow them to facilitate these lessons and further Dance and Drama learning in the classroom.

The program will run over three years (2021 – 2023), with 30 new schools participating each year and is aligned to the Victorian Curriculum F-10. Ausdance Victoria and Drama Victoria have been engaged to provide regional primary schools with live-streamed lessons and face-to-face incursions in Dance or Drama over Terms 2 and 3 each year for students in Years 3 to 4 and 5 to 6.



## 1. What evidence is needed to inform which policies?



## Policy Context:

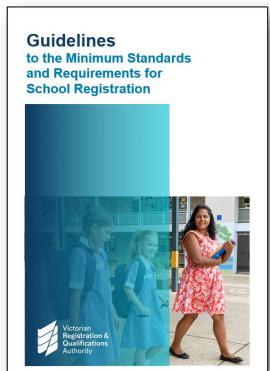
#### Alice Springs (Mparntwe) Education Declaration

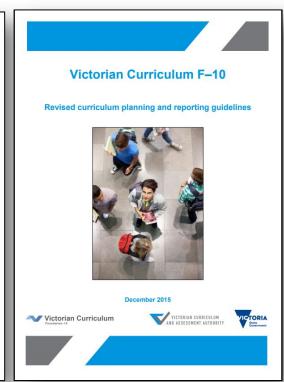
Australian Education Act 2013
Australian Education Regulation 2013

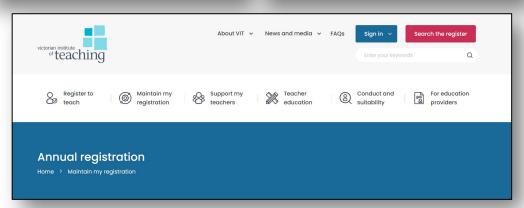
Education and Training Reform Act 2006
Education and Training Reform Regulations 2017

#### **DET policies:**

- Assessment of Student Achievement and Progress
   Foundation to 10
- Curriculum Programs Foundation to 10
- Reporting Student Achievement and Progress Foundation to 10







## Policy Context:

#### Education State Ambition

#### LEARNING FOR LIFE

#### Excellence in Reading, Maths, Science, Critical and Creative Thinking and The Arts.

The Education State is equipping students with the broad range of skills they need to reach their potential and achieve success in school and in life.

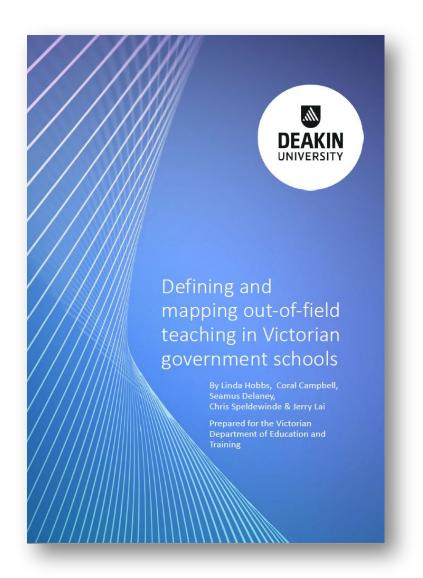
#### WHY IS THIS IMPORTANT?

Literacy and numeracy are key life skills that enable students to learn and thrive in all curriculum areas. Success in these foundational areas at school will benefit students for the rest of their lives.

Science, Technology, Engineering and Mathematics (STEM) skills, along with the ability to think critically and find creative solutions for complex problems, are vital for future employment opportunities in our rapidly changing world.

WHAT AR	WHAT ARE WE TRYING TO ACHIEVE?		
	READING	By 2020 for Year 5 and 2025 for Year 9, 25 per cent more students will be reaching the highest levels of achievement in reading.	
	MATHEMATICS	By 2020 for Year 5 and 2025 for Year 9, 25 per cent more students will be achieving the highest levels of achievement in maths.	
	SCIENCE	By 2025, 33 per cent more 15-year olds will be reaching the highest levels of achievement in scientific literacy.	
**	CRITICAL AND CREATIVE THINKING	By 2025, 25 per cent more Year 10 students will have developed excellent critical and creative thinking skills.	
8	THE ARTS	By 2025, 20 per cent more Year 10 students will be achieving excellence in the Arts.	

### Research



Research came from an internal question that was a bit difficult to answer: how long would it take to solve the OOF problem.

Initial answer was "Well... it depends..."

### **Digging Deeper?**

- Specialisms, sub-specialisms (e.g. Technologies)
- Principals (e.g. as decision makers; workforce managers)
- Equity (e.g. rural and regional, low-SES)
- Primary, specialist settings
- Early career teachers (and burnout)
  - Cultural factors in schools
- Models (that work) when you simply can't recruit a teacher (e.g. mentoring, PL)
- Priorisation
- Thresholds (e.g. tolerance of OOF)
- Targets
- Other states/territories
- Autonomy versus centralisation (responses to OOF)
- (why curricula fluency matters)

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