Interactive e-book

EAL Effective Practice Project

Making a difference through explicit teaching of language and literacy

Invested and visible leadership of literacy and EAL
The language and literacy of Mathematics
The language and literacy of Science
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**Teaching the language and literacy of Science Tips for using this ebook**

- learn how to use a QR code on pg.4
- use the navigation bar on the right of the page to jump to a different chapter
- click on the ‘YouTube’ button on the embedded videos to watch them in full screen
- an accessible version of this document is available at:
- for any questions or feedback, please contact:
EAL Effective Practice Project

About this resource
The English as an Additional Language (EAL) Effective Practice interactive guide features a series of literacy-based video case studies and resources from Hume Central Secondary College. Located in Broadmeadows in the North Western Victoria Region, the school has high levels of disadvantage and numbers of EAL students. Hume Central has invested substantially in developing teachers’ knowledge about language and literacy. The videos demonstrate the school’s successful practice change in:
• making literacy and EAL a lived priority across its three campuses
• skilling secondary teachers to teach explicitly the language and literacy of their respective disciplines
• working as a Professional Learning Community that shares collective responsibility for the learning progress and literacy growth of all students including EAL learners.

How to use a QR code
To access the videos using the QR codes provided, just follow these steps:
1. Install a QR code reader on your phone
2. Open the QR code reader on your phone
3. Hold your phone over the QR code so that it’s visible on your screen
4. Your phone should read the code and take you to the intended video.

What is its purpose?
The resource has been developed to enable Victorian schools to learn from Hume Central’s achievement in the crucially important work of teaching students the academic language they need to succeed within all curriculum areas at school. The videos are supported with learning guides and sample resources to promote discussion and deepen understanding.

Who is it for?
Leaders, Learning Specialists, teacher teams and individuals teaching Mathematics, Numeracy, Science, English as an Additional Language and Literacy.
School teams including Leadership, School Improvement and Professional Learning Teams.
While directed at secondary school leaders and teachers, the practices featured are also relevant to primary schools.

Acknowledgement
The resource is modelled on the South Western Victorian Region Effective Practice Guide.

EAL Learnings from Ontario

Video 1: EAL Learnings from Ontario by Dr Mary Jean Gallagher
### Invested, visible leadership

**A whole school literacy focus**

The school’s vision, values and culture position it for student improvement

School leaders communicate the vision and values and engage with stakeholders

The leadership team leads professional learning

School leaders lead teaching and learning

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### Invested and visible leadership of literacy and EAL

- **Vision, Values and Culture**
- **Building Leadership Teams**
- **Instructional and shared leadership**

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<th>FISO priority</th>
<th>FISO dimension</th>
<th>FISO continua component</th>
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<td>Professional Leadership</td>
<td>Vision, Values and Culture</td>
<td>The school’s vision, values and culture position it for student improvement</td>
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<td>Building Leadership Teams</td>
<td>School leaders communicate the vision and values and engage with stakeholders</td>
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<td></td>
<td>Instructional and shared leadership</td>
<td>The leadership team leads professional learning</td>
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<tr>
<td></td>
<td></td>
<td>School leaders lead teaching and learning</td>
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A whole school literacy focus
As you watch the video:
1. Identify why Irene, Teresa, Andrew and Dajarra have committed to the literacy and language work.

Team discussion questions
2. Share your experience of a time that professional learning led you to change your own practice.
   • how has the change impacted your teaching?
   • how has it benefited students?

Invested, visible leadership of literacy and EAL
As you watch the video:
3. Identify the different ways the principal engages others in the school’s literacy vision
4. List the shifts in teacher practice and student learning that are happening in the school

Team discussion questions based on both videos
5. Reflect on how this case study relates to your context. For example,
   • what shifts in practice and learning are you seeing in your school?
   • what further opportunities are there to strengthen professional learning and practice in Literacy and EAL
6. Read the Physics example and discuss how a register continuum might be used in a topic you are teaching now.

Additional Department of Education and Training resources
Department of Education & Training (DET) Literacy Toolkit
Secondary resources to focus on disciplinary literacy (to be published in Semester 2, 2019)
DET – Framework for Improving Student Outcomes – distributed and shared leadership
DET – Professional Learning Communities
DET – Literacy and Numeracy Strategy
DET – Resources for EAL Teachers
Teaching the language and literacy of Mathematics

The school implements consistent and sustained high-impact teaching strategies.
The school has high expectations for learning progress.
Teachers evaluate and modify their teaching practice.
Professional Learning is focused on student outcomes.

Excellence in Teaching and Learning

Evaluating impact on learning
Building Practice Excellence

Evidence - based high impact teaching strategies
The school has high expectations for learning progress
Teachers evaluate and modify their teaching practice
Professional Learning is focused on student outcomes
Teaching the language and literacy of Mathematics. The importance of oral language teaching sequence

Teaching sequence
1. As you watch both videos, take notes about:
   • the questions that Dajarra asks his students
   • the comments he makes about the importance of oral language

Team based questions
2. Reflect on Dajarra’s use of the HITS
3. Where do you see the Mathematics proficiencies in Dajarra’s practice?
4. What types of questions support students to build their reasoning and understanding?
5. As you read this analysis of the teaching sequence, take notes about how Dajarra supports the students to understand and use the language of Mathematics
6. What elements of Dajarra’s practice might you trial?

Additional Department of Education and Training resources

Numeracy Portal
DET – Framework for Improving Student Outcomes – Evaluating Impact on Learning
DET – Professional Learning Communities

Evidence
VCE Further Mathematics Median Study Score, Hume Central Secondary College, 2016-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Median Study Score</th>
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<tbody>
<tr>
<td>2016</td>
<td>21.6</td>
</tr>
<tr>
<td>2017</td>
<td>24.7</td>
</tr>
<tr>
<td>2018</td>
<td>26.4</td>
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Teaching the language and literacy of Mathematics

Breaking down questions in Mathematics

Structure of Measurement Questions

FISO priority | FISO dimension | High Impact Teaching Strategies
--- | --- | ---
Excellence in Teaching and Learning | Evidence-based high impact teaching strategies | Explicit Teaching
 |  | Worked examples
 |  | Multiple exposures
Breaking down questions in Mathematics

As you watch the video, take notes about:

- the colour coding steps Andrew uses with his students

Team discussion questions

- Reflect on Andrew’s use of the Explicit Teaching, Worked Examples and Multiple Exposure HITS
- Where do you see the Mathematics proficiencies in Andrew’s practice?
- As you read the resource that Andrew used for this lesson, list your questions and comments to share with your team.
- Discuss examples of where your students find it hard to understand and break down questions in Mathematics.
- What elements of Andrew’s practice might you commit to trialing?

Additional Department of Education and Training resources

DET – High Impact Teaching Strategies
DET – Framework for Improving Student Outcomes Evidence-based high impact teaching strategies
DET – Supporting your role as a numeracy leader
Numeracy Portal

Evidence

NAPLAN Relative Growth, Year 9 Numeracy, 2017-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
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<tbody>
<tr>
<td>2017</td>
<td>48%</td>
<td>55%</td>
<td>12.8%</td>
</tr>
<tr>
<td>2018</td>
<td>55%</td>
<td>48%</td>
<td>19.8%</td>
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## Vertical Professional Learning Community in Science. Teaching the language and literacy of Science

<table>
<thead>
<tr>
<th>FISO priority</th>
<th>FISO dimension</th>
<th>Professional learning is collaborative, involving reflection and feedback</th>
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<tr>
<td>Excellence in Teaching and Learning</td>
<td>Building Practice Excellence</td>
<td>Professional learning is ongoing, supported and fully integrated into the culture of the school</td>
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<td></td>
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<td>Professional learning is informed by the collection, analysis and evaluation of student data</td>
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Vertical Professional Learning Community in Science

As you watch both videos, take notes about:

- the structures and strategies the school employs to build consistency and coherence across the three campuses and within Year 7-12 Science
- The benefits the explicit teaching of the language of Science gives students

Team based questions:
- Discuss the costs and benefits of investing in a vertical PLT structure.
- What do you currently do, and what further could you do, to build consistency in teaching of language and literacy at learning area and whole school level?
- Read the common inquiry questions that Hume Central uses across all PLTs. Discuss the benefits that having a transparent set of questions provides for teacher teams. Do you think this approach could assist PLTs at your school?

Additional Department of Education and Training resources

DET – Framework for Improving Student Outcomes – Building Practice Excellence
DET – Professional Learning Communities
Peer Observation
DET – Practice Principles Reflection Tools
DET – EAL Science language literacy pilot