Penguin/Riana Cluster 5-8
Literacy/Numeracy Project

Campbell Town Presentation

Collaboration, Data Driven, Evidence-Based, Students at the Centre
Headlines of our work to date

• Pre-testing done.
• Year 5-8 Cluster teaching staff have done PL.
• Project tasks mapped to DoE requirements and John Hattie’s Visible Learning biggest effect sizes.
• Project tasks currently underway in classrooms.
• OneNote shared area set up for project.
• Links to History and Science as well as English and Mathematics.
Overview of today’s presentation

- Topic
- Goals and Strategies
- Key questions
- Strength and Challenges
- Timeline
- Learning to date
- Specific future actions
- Project evaluation
- Links to frameworks
• Improving literacy/numeracy outcomes in the 5-8 cluster.
• Measured through pre and post-testing.
• Four guiding questions.
• Utilising the UTAS and DoE strategic partnership.
• Aiming for incremental improvements during the action research life cycle.
Goals

• Improved outcomes in our project-specific diagnostic testing.
• Carry over improvement into NAPLAN testing (outside the project).
• Improved teacher confidence in using best practice in 5-8 classrooms.
• Collaborative planning across 5-8 based on key questions.
Strategies

• Professional learning to model best practice and explicit teaching of classroom strategies.
• Planning time provided for collaboration.
• Classroom observations and monitoring to provide feedback on the effectiveness of the plan.
• Moderation of work samples and planning documents.
Key questions: 1. Persuasive writing

- How can we improve persuasive writing through enhanced use of assessment for learning principles?
Key questions: 2. Comprehending information texts

• How can explicit sharing of objectives and the provision of relevant/authentic texts help students more effectively comprehend information texts?
Key question: 3. The language of mathematics

• How can we improve written mathematical reasoning through problem solving and working through some students’ linguistic misconceptions?
Key question: 4. Collaborative planning

• How can focused, collaborative planning deepen student understanding and enhance performance?
Timeline

- March 2013 Day 1: Analysis of data to outline pedagogical objectives
- March 2013 Day 2: Formulate key questions.
- April 2013: Diagnostic testing (pre-test).
Timeline (2)

- May 2013 Day 2: Professional learning for 5-8 English/Literacy teachers.
- July 2013: Review of progress.
- August 2013 Days 1 and 2: Professional learning to analyse feedback from classroom experiences to date.
Timeline (3)

• November 2013: Diagnostic testing (post-test).
• November 2013: Analysis of diagnostic testing.
• November 2013: Preparation of action research findings.
• December 2013: Celebration of success and embedding a sustainable cycle for continual collaborative improvement.
• September 2015: Analysis of two-year NAPLAN gain.
Strengths

- Cluster schools place high value on school improvement, especially in literacy and numeracy.
- It is a natural focus for two schools (Penguin Primary and High amalgamating) and the closeness geographically of the cluster.
Strengths (2)

• Linked to identified needs through data analysis and school plans.
• Classroom teacher focussed.
• Developing a strong relationship with UTAS that will become sustainable beyond the project life cycle.
Challenges

• Considerable change at some of our cluster schools, e.g. new principal, amalgamation.
• Maintaining momentum due to project length and teacher workloads.
• Classroom teachers owning the process.
Learning to Date – General areas

- Consistency across the 5-8 team is needed to avoid the transition/grade 8 drop-off in the areas of:
  - Language used
  - Planning done
  - Units and tasks scoped across 5-8
  - Students achievement tracked
Learning: 1. Persuasive writing

- Skill development of teacher so that lessons are strategic and engaging.
- Exploring a variety of successful strategies.
- Comprehension, meaning and inference strategies
- Identifying resources for best practice.
Learning: 2. Comprehending information texts

• Comprehension meaning and inference strategies.
• Summarisation strategies.
• Use of varied assessment strategies.
Learning: 3. The language of mathematics

• Consistent use of language – readily available in the classroom, e.g. word wall.
• Using appropriate words for reasoning.
• Being able to mathematise a problem, e.g. purposefully including extensive mathematising opportunities in rich tasks.
Learning: 4. Collaborative planning

• Planning was modelled by:
  – Targeted PL.
  – Making professional connections between all 5-8 teachers.
  – Preparation of rich tasks across 5-8.
  – Embedding a feedback/planning cycle to be used in a sustainable way.
Specific future actions

• Persuasive writing
  – Grade 5: Justifying reasons in History
  – Grade 6: Higher quality sentence construction in History
  – Grade 7: Higher quality connectives and language of discourse
  – Grade 8: Tuning-in and ongoing engagement strategies; peer review and feedback.
Specific future actions (2)

• Comprehending information texts
  – Explicit learning intentions
  – Choosing appropriate authentic contexts
  – Using scaffolding – organisers, modelling, discussion, vocab support, prior knowledge
  – Trial these specific strategies:
    • Hunt the text, graphic overlay, 3 level guide, picture this, main-idea sort, note taking framework
Specific future actions (3)

• Comprehending information texts (continued)
  – Grade 5: ABC vocabulary
  – Grade 6: Facts and falsehoods, pair dictation
  – Grade 7: VIP guide
  – Grade 8: Cross off
Specific future actions (4)

• The language of mathematics through problem solving and reasoning:
  – Grade 5: Four cubed houses
  – Grade 6: My garden
  – Grade 7: Statistics rich task on standing on one leg
  – Grade 8: Algebra rich task on Jumping Kangaroos and Eric the Sheep
Specific future actions (5)

• Collaborative planning
  – Dedicated PL days (indicating the value placed on this process by all cluster schools).
  – Regular 5-8 meetings Term 3
  – Shared data on student educational pathway and achievement
  – Forming a professional interschool connection
Project evaluation

- Documented feedback from teacher observations
- Collaborative planning discussions and reflection
- Lesson and unit plans
- Diagnostic assessment data – pre and post
- Student self-assessment
- UTAS Formal Case Study Report

*The evaluation is related back to each key question.*
Links to Frameworks

- **Australian Curriculum**
  - Emphasizing the problem solving and reasoning mathematical proficiencies.
  - Expanding range of elaborations.
- **Tasmanian Literacy and Numeracy Framework**
  - Data focused
  - Collaborative learning communities
  - Targeting teaching to address individual needs
  - Developing literacy/numeracy throughlines with all learning areas (e.g. History/Science)
  - Link to school improvement plans
  - Lead teacher involvement
Links to Frameworks (2)

- John Hattie’s Visible Learning
  - Showing high quality models of expected outcomes with student self-reporting (effect size 1.44)
  - Deep understanding: reasoning/problem solving at appropriate stage – Piagetian programs (effect size 1.28)
  - Explicit about learning objectives (effect size 0.75)
  - Peer teaching, peer assessment and reciprocal teaching (effect size 0.74)
Links to Frameworks (3)

• AITSL
  – We hit many elements with this project.
  – Particular ones are:
    • Standard 1.2 – Understand how teachers learn
    • Standard 1.5 – Differentiate teaching
    • Standard 2.5 – Literacy and Numeracy strategies
    • Standard 5.4 – Interpret student (assessment) data
    • Standard 6.4 – Apply PL to improve practice
Links to Frameworks (4)

• Action Research Framework (Eileen Ferrance)
  – Feedback based
  – Will improve students this year
• UTAS
  – Improving collaboration
  – Providing curriculum specialists.
  – Making small incremental steps.
  – Rigorous data analysis.