

Overview: This 3-year SPP [1] provides PD for teachers in small rural schools in Science and environmental education. Collaboration with the main 2012 school led to this umbrella theme - ***Sustainability and our Farmlands Environments.***

Purpose: This SPP enables teachers to explore this theme with their children in partnership with Wimmera HUB's environmental educator mainly as in-class teacher PD [2]. The 2013 HUB SPP teacher revealed the SPP's importance:



Schools highly value this level of commitment to education within the school setting along with the opportunity to work with someone with this level of training and skill and learn from them raises the standard of science teaching and learning with many spin-offs into other areas of science and the broader curriculum.

[3]

The Wimmera-Mallee has a poor participation rate in the Science Talent Search (STS), a DEECD priority Science program [4]. One of the aims of this PD is for schools to enter, for the first time, the STS in S2, by creating Science-based picture story books. These bring many learning outcomes for teacher and students [4], and develop new resources, useful for other schools to explore [5].

'20th Century Australian Science Discoveries changing life on our Farmlands in Science Talent Search

In 2013, the one-teacher 13-student F-y6 Beulah Primary School was the main Wimmera HUB SPP recipient, choosing the sub-theme *20th Century Australian Science Discoveries- changing life on our farmlands*. Their 11 session in- and after-class teacher PD program [6] focused on building teacher (and children's) capacity about the local environment in S1, then moving onto the STS book competition - *"It means we've have made an important discovery for farming," said the Australian scientist.*" In S2 this was completed, presented and peer reviewed, submitted to the STS, assessed, their success celebrated (photo above left) and their SPP experience evaluated.



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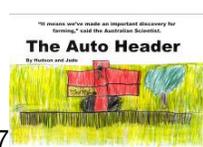
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Beulah PS STS Books

the Beulah PS SPP in S2 focussed on STS Science Picture Books

If, in April, you had shown the teacher and F-y6 children what they would produce in July, they would not have believed it of themselves! The **STS stories** [7], in the box left, that they created concerned: salinity (1), machinery for windmills (2), vehicles (3), baling (4), pickling (5), cropping (6) and harvesting (7). They were fantastic, child-centred, locally based physical products of learning that could also inspire others to explore issues about farming, Science and sustainability.

Some of the **learning outcomes** for this SPP [5], specific to these STS books, are:

- full of the children's own text, up to a maximum of 300 words (English/literacy, regional priority)
- and of the children's own drawings, often labeled, to communicate the Science (Art)
- telling a Science story that was based in the children's families and farms, (Science)
- concerning machinery they had on home farms (collaborating with local business)
- reporting learnings about an Australian farmer/Scientist/innovator, (Science, History)
- and benefits this had brought to farming, to contribute to more sustainable farming then, with modifications and benefits through to today (Education for Sustainability, History, Science)
- enunciating this into a Key Science Ideas page as required by STS (Science, English)
- and identifying resources in bibliography and acknowledgements also required by STS (English)
- following a set format (communication, Science, Design)
- wherein children were mentored, but made their own decisions, for their books. (Pers Dev)

It was a tall order for some of the younger (F-3) BPS students, but BPS showed how well a rural school can succeed at the STS competition, with its hundreds of entries, mostly by city schools. [8] Under Wimmera HUB's SPP mentorship, Beulah PS developed its **capacity to succeed** at STS:

- All students F- y6, including an integration student, entered– **no exclusions.**
- Most worked in **pairs**, sharing the text and drawing work to create their books.
- The **integration student** (a y3) was given additional support to create her story and pictures.
- All children were clearly **proud** of their completed books.

"I like my book the Red Ute" (Y3- integration student) [9]

- All books were presented at a "Beaut Picture Science Field Day" **peer review** session. The children read their stories out in front of a big screen showing their drawings. They produced very positive comments, thoughtful questions and suggestions for each other. [10]
e.g., best features - *"timeline"*, *"showed how it works"*; suggestions- *"bigger text"*, *"speak louder"*
- 12 of the 13 **children** named the books as the **most memorable** thing in the SPP project [9]
- *"I will most remember making the books and sharing it with the class and what they thought (Y6)*
- The STS books were named by the **teacher** as the **most worthwhile** activity of the SPP [11]
"Working through the process and reading the final product of the key science ideas, the source material and learning the science in the illustrations" (teacher)
- **STS awarded** certificates for all 7 books (see photo top left). Six of the 13 students received bursaries - BPS was the only Wimmera and only rural school to win a bursary, and won 3 of 50! [8]
- **Positive publicity** for the school in the media of school newsletters and the local paper [12]

