**Building Academic Vocabulary – Robert Marzano Workshop** at Hawker Brownlow Teaching & Learning Conference May 21, 2011

Please note: these are the notes taken during the presentation – presenter’s comments & ideas in black, my thoughts (Anne Doody), connections etc in blue.

Helping students to build an academic vocabulary is one of the more important things we can do – as it is foundational to learning. **Students cannot learn if they do not understand the words being used / read.**

One of the tests used in the past to identify a students’ intelligence was the Peabody test –it was a vocabulary test. While we now know that there are other ways of measuring intelligence, we also know that **one thing that differentiates high performing students from low performing students is their command of the vocabulary associated with the learning.**

Keith Stanovic’s ‘Matthew effect’ – that a **low performing student will not only stay behind others, but they will go further back**, the gap continues to widen.

In the US it is **exacerbated at about grade 3 /4** – at this stage language used in classes changes from controlled text / vocabulary to much expanded vocabulary and wider reading expectations that the lower students cannot keep up with.

This is no different in our schools, and some research suggests that it occurs again when students move into secondary college, as the vocabulary expectations of the wider subject content blow out by many thousands of words.

In the US there is also **rapid growth in the numbers of ESL students in schools.** Some districts have up to 70 primary languages in their environments. (Another phenomena that is replicated to some extent here.)

**Thus there is a resurgence of the need for explicit vocabulary instruction.**

**THE VOCAB WAR IS OVER:**

Information from slide 4:

Students reading new information, with comprehension being assessed:

If there is some regular vocabulary instruction – 12%ile gain in results

If the direct instruction is for words in the passage that is being read – 33%ile gain.

For a long time, many people believed that vocabulary learning would just come through reading – but we now know that any direct teaching hugely value-adds.

We also know more about the chances of students learning new words without direct teaching:

|  |  |  |
| --- | --- | --- |
|  | Factor | Chances of learning word through context |
| Ability | Low  Medium  High | 8%  12%  19% |
| Grade Level | Grade 4  Grade / Year 11 | 8%  33% |
| Text density | 1 new / 10 words  1 new / 74 words  1 new / 150 words | 7%  14%  30% |

So, the student’s ability to learn new words independently is somewhat dependent on the number / volume of words they already know. The way to maximize the new words learnt by students is through direct/ explicit teaching.

Revisiting the information from slide 4, Robert explained that this is why he is not a fan of ‘high-frequency’ word lists – but even these approaches result in a 12% gain in understanding during reading. Note again – if word lists / learning are focused on current content – it accelerates to a 33% gain.

At this point it was brought to our attention that there is great inconsistency in the frequency with which new words will come up/be relevant to content for students in Grades 3 -9.

Isabelle Beck has built a system to distinguish between the frequency of word use, and refers to them as either Tier I words, Tier II words or Tier III words. This was then combined with Nagy and Anderson’s analysis of 88,500 terms in grades 3 -9 texts.

Tier I words come up 1 time or more in a year of reading, (some Tier II words also are encountered this frequently, but some fit more into the description of Tier II which is up to 3 times in 10 years, while Tier III words will be encountered up to 3 times in 100 years of reading or less.

The argument was that if teachers focus on the subject specific vocabulary that is to be encountered more frequently, then the essential learning words list becomes narrower. All of the high frequency lists were analysed to see how they sat in the ‘tiers’. Thus the 88,500 terms that were found in the year 3 -9 texts can be narrowed to 2,845 Tier I terms ( or 3,638 if advanced Tier I terms are included) + 5,162 Tier II terms which comes to a total of 8,007 terms to be learned by most students.

Marzano’s book ‘Building background knowledge for academic achievement’ was referred to at this point – if people need to read further on the process that was undertaken to arrive at these conclusions. Most of us could believe / trust the process enough to accept that identifying the most important vocabulary to help students be able to access learning in any particular subject area would be a great thing. This is in a way the basis of the thinking behind ‘whole school literacy’ ideals – that each subject area deals with the vocabulary and reading / writing styles that make information for their particular subject area accessible.

It was pointed out that some subjects, like History, are extremely heavy on subject specific vocabulary – but even expanding to include some of this, the total of 88,000 terms can be reduced to about 15,000, which is much more ‘doable’.

Robert suggested that if we operate as a system, rather than individuals, we can achieve this – BUT we need to work TOGETHER.

Faculties must work out what the ‘essential terms’ are – that we agree we don’t want students to leave without knowing & understanding. Must then agree to ‘guarantee that certain terms are taught’. He acknowledged that it is necessary to allow each teacher some flexibility in their teaching – but that as whole school environments, we also have responsibilities to the students to identify the parts of learning that are non-negotiable. This resonated with me, as frequently the difficulty in achieving the same opportunities for each student, no matter which classroom they are in, is voiced in conversations that I find myself in.

The example was given, that English teachers teach about 400 terms per year, and that if English teachers teaching to a cohort could agree on about 120 terms that EVERYONE would teach, it would provide for the consistent basis, but still provide for some freedom for what was taught by each teacher beyond that.

If teachers want academic lists to look at to get them started, Robert suggested googling either;

Tennessee academic vocabulary lists; or

Oklahoma academic vocabulary lists.

When I checked the first one, there were lists available for English, Social Science, Maths and Science that could get people started. There are other brief lists in resources that are in most of our schools already, such as the lists for Geography, History, HAPE, Science, Biology and Maths in the back of the ‘English Handbook and Study Guide’ by Lutrin & Pincus.

Robert’s suggestion for how to go about his in schools was to – ‘always start with someone else’s research – then do your own to decide whether you agree’. Eg. find two classes with a same starting point – trial a new strategy with one and not the other – at the end of a time period, compare results. \*Teachers have to be committed to doing the identified strategy with the designated class for the agreed period of time. CONTROL GROUP versus TRIAL GROUP. Use the 50%tile as a passing grade ( those without the new strategy), then use that to compare to the trial group.

Marzano made the point the we need to start looking more closely at correlations:

* With things like health, we quickly act on very small variances – we see it as important.
* In education, we still aren’t looking enough at research, or acting upon suggestions that come through the research – there is plenty of it.

**Faculty activity:**

1. **Identify the important terms for each grade level or cohort**
2. **Scope and sequence the lists for look for overlaps**
3. **Pilot the agreed lists for ONE YEAR**
4. **Revisit lists & look at results to finalise before making it ‘school-wide’.**

A slide was put up to outline a Six-Step Process for teaching new terms, it looked like this:

A Six-Step Process for Teaching New Terms

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Step 1: Provide a description, explanation, or example of the new term

Step 2: Ask students to restate the description, explanation, or example in their own words

Step 3: Ask students to construct a picture, symbol or graphic representing the term or phrase

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Step 4: Engage students periodically in activities that help them to add their knowledge of the terms in their notebooks

Step 5: Periodically ask students to discuss the terms with one another

Step 6: Involve students periodically in games that allow them to play with the terms

\*Note – looking the word up in a dictionary and putting it into a sentence is NOT seen as a valuable way of introducing new words.

Steps 1 -3 are for introducing the new words, Steps 4 – 6 are for reinforcing / deepening the learning.

Robert pointed out that even literate adults are ‘fuzzy’ about really understanding many terms that we actually use. If a word that we use is not in our particular field of study / expertise, we will have a less-expert understanding, but may still use the word.

SO, the aim is to firstly ‘get students in the ball park’ of understanding a new word, then gradually build more specific understanding over time.

The old way of teaching would have been to instruct students to look up the word in the glossary – the new way is for the teacher to explain and to give examples, then invite students to check the glossary if they wish to re-check the word at any time.

* we need to check on the difference between ‘doing tasks’ that appear to meet teacher requests, and tasks that result in increased understanding.

Robert spoke of the importance of WORD BANKS built up by students to record their own understanding of terms – as they are introduced to them, and as their understanding develops over time. The use of word banks is quite common in Primary settings, and in some secondary settings, but is often just used to compile lists as new words come to hand, and not revisited periodically to add to or adapt what is recorded to demonstrate increased understanding over time.

Another slide was presented to show how word banks could be set out to allow for additional information / understanding to be added over time. I have seen this used on a few occasions, but not often or consistently in secondary schools. The slide looked like this:

|  |  |
| --- | --- |
| Category: (standard, unit, alphabetical…) | |
| Term, phrase: | |
| Description: | Picture / graphic: |
| Related Terms, phrases: |

At this point, Robert referred back to step 4 of the six-step process for introducing new words / terms – he mentioned again the importance of having students discuss their understanding of the words – to struggle through to a common understanding. This made me think of something else that I have read – in a book titled ‘They still can’t spell?’ by Bowers-Sipe, she too spoke of this need for students, especially those who struggle with spelling, to discuss understandings of words and spelling strategies with peers.

A vocabulary game that can be used in any subject area:(like charades, but with words)

* Divide class into pairs – one person in the pair is the ‘A’, the other is the ‘B’.
* Put 7 words up on a screen / board – only the ‘A’s can look at the board.
* ‘A’s give clues & the ‘B’s guess what the words are
* First team to guess all words – WINS! Reverse process.

The use of games does TWO things:

* Provides for multiple exposures to the words / terms
* Allows students to associate ‘fun’ with the words /terms which can also deepen learning.

When I ‘googled’ the Tennessee academic vocabulary lists, a lot of vocabulary games also came up – they are readily available. Teachers can use smartboards for these games.

Games don’t have to be used all of the time, perhaps once a week or as a reward.

We can also use strategies such as GET ONE / GET ONE to provide opportunities for students to deepen their understanding of new vocabulary. Students pair up and look at 5 terms – they give some information and get some information from their partner – then add it to their ‘word bank’ or vocabulary notebook. This is one of the strategies that David Anderson has taught many teachers across our Diocese in recent years, so should be familiar to a lot of teachers who joined in the Middle Years Project.

A good TIP for teachers who have their students use vocabulary notebooks – have the students put the numbers 1,2,3,& 4 at the top right hand corner of each page, and circle the number that indicates how well they think they understand the particular term.

Marzano’s research into the area of academic vocabulary led to the construction of ‘cluster of words’ - semantic clusters of basic and advanced terms – these could accelerate learning by helping students to learn ‘groups of words’ or at least be able to identify ‘ball park understanding’ by recognizing that a new term belonged to a ‘cluster’. For example:

Size and Weight – 5. Measurement, Size and Quantity [**big, giant, great, huge, large, little, small, tiny, enormous, gigantic, jumbo**]

Forms of Water/Liquid – 20. Water [**ice, rain, snow, water, hail, icicle, liquid, rainbow, raindrop, rainfall, snowball, snowman, steam**]

* The numbers – eg 5 & 20 refer to another layer of the research which has produced ‘super clusters’ – links between clusters of words which can be useful for differentiation in different groups depending on the level of understanding they currently have around a topic.

The reference for this research is to Robert J. Marzano’s ‘Basic Terms and Phrases’ (2007) and they are very extensive, the samples shared on the day went from pages 17 – 35 in the handout.

In order to assist students to develop their understandings of words, it is beneficial to sometimes have them articulate the similarities and differences between words that may belong to a cluster / topic. This can help them to identify the subtle differences between the terms, and thus choose to use each in more appropriate contexts. The slide suggesting how to have students work through this was:

Where ‘A’ and ‘B’ are different words / terms:

A and B are similar because they both

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A and B are different because

A is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but B is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but B is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but B is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

I can see this as being a valuable tool in secondary classrooms where students’ understanding of terms dealing with one topic. Or different aspects of a topic may be unclear.

Another template for having students do this type of vocabulary building work in any subject area was:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Eg. Lake  (basic term) | Eg. Ocean  (basic term) | EG. Cove  (advanced term) |  |
| Characteristic 1  Eg. Size |  |  |  | Similarities and/or differences |
| Characteristic 2  Eg. Type of water |  |  |  | Similarities and/or differences |
| Characteristic 3  Eg.Things that happen here |  |  |  | Similarities and/or differences |
| Characteristic 4 |  |  |  | Similarities and/or differences |

* It seems to me that many of our secondary teachers may already be using a research technique with their students that very much replicates this, but they do not recognize it as being a literacy / vocabulary exercise at the time.

This session finished with Robert reinforcing the importance of addressing this issue of building academic vocabulary for our students in a systematic way, to ensure that students reach their learning potential.

They can’t learn, when they don’t understand the language teachers are using.

What if each of our schools just had each faculty / domain / department start by identifying the terms / words / vocabulary that were essential for that area of understanding, and agree that it was a non-negotiable to teach those words explicitly? What would that do for student outcomes?

SESSION CLOSED