

The REAL Framework: Student engagement and student self-assessment

Geoff Munns and Helen Woodward

I chose this work because I am proud of it ... I now know that I can accomplish more things than I thought ... I think I am more confident than I was before ... I can write more than I ever thought ...

(Year 6 student from reflective notebook, 2005)

When students reflect in ways like this about their learning and their views of themselves as learners, most teachers would feel a strong sense of achievement. When you realise that this student has a history of disengagement from school, and at one time had little sense of achievement and low self esteem, the reflection seems all the more impressive. The student was a member of a classroom learning community in a school in South West Sydney serving one of the most socially and economically disadvantaged areas of Australia. Their teacher had used student self-assessment as a critical element in changes to classroom pedagogy aimed at encouraging more engaged learners. These changes were supported by the *Fair Go Project*, research that is investigating ways to improve the relationships that students from poor communities have with schools, classrooms and education.

The *Fair Go Project* involves teachers, educational consultants and university teachers, and is a joint undertaking between the NSW Department of Education's Priority Schools Program and the University of Western Sydney. Researchers and teachers in the project have developed a student self-assessment framework, and this framework is used to encourage deeper student reflections as one of the pathways towards student engagement. This is the *REAL Framework* (Reflective Engagement: Authentic Learning), and its development and implementation is shared in this PEN.

While, the *REAL Framework* has been developed in research contexts historically characterised by large numbers of students who are challenging to teach and likely to become disengaged, if it is helping to engage these kinds of students, then it has tremendous potential and relevance for children of all social backgrounds.

There are four main sections to this PEN. The first introduces a number of key ideas about student engagement. The second establishes links between student self-assessment and student engagement. The third discusses the development of the *REAL Framework*. Finally, the PEN suggests some ways that the framework can be implemented into all stages of primary school classrooms.

What is student engagement?

A good starting point for teachers when thinking about student engagement is to consider the differences between *procedural* and *substantive* engagement. Procedural engagement means that students are complying with teachers' wishes and instructions, regardless of the nature and quality of the classroom learning experiences. This level of engagement does not necessarily mean that the students are enjoying what they are doing or getting an educational benefit. They are just *on task*. A deeper and arguably more beneficial level of engagement is substantive engagement.

The *Fair Go Project* defines substantive classroom engagement as multidimensional: the simultaneous coming together of the cognitive, the affective and the operative at high levels. That is, when students are strongly engaged they are successfully involved in tasks of high intellectual quality and have passionate positive feelings about these tasks. Viewed in this way engagement is much more than students simply complying with teachers' wishes and directions. They are not only *on task* but also *in task*.

This level of student engagement requires teachers to play their part by designing high quality tasks and involving students in reflections about their learning. When this happens regularly in classrooms

the suggestion is that this will lead to improved relationships with education, greater effort and improved outcomes.

Why is student self-assessment important for student engagement?

The research informing this PEN argues that for substantive engagement to be developed and sustained, there needs to be a classroom philosophy of individual and collective student self-assessment. There are three reasons for this.

The first is that qualitative student self-assessment opens up the potential for improved learning and increased student self-regulation. It achieves this by providing opportunities for students to share with each other and their teacher their thoughts and feelings about their learning. When this becomes part of the classroom philosophy, engagement is encouraged among students by directly involving them in the development of a classroom learning community. Such a community promotes reflections about:

- what students are learning
- how students are learning
- what students are achieving
- how students view themselves as learners
- the direction and evaluation of student learning.

The second is that student self-assessment can provide critical feedback to teachers about whether students are engaged. Indeed, given that engagement is an internal process, student self-assessment might provide one of the few ways that teachers can detect when it is happening in the classroom.

Finally, student self-assessment helps to focus students' attention towards internal classroom processes by encouraging them to continually think about learning. There are very strong links between these internal processes and quality teaching and learning. Furthermore peer interaction within a community of learners is a really important way to help develop students' understandings. Readers interested in exploring more about the theoretical ideas surrounding student self-assessment and student engagement can go to Munns and Woodward (2006).

Given the importance of student engagement and the strong links between student self-assessment and student engagement, the *REAL Framework* has been developed as a way of helping teachers introduce and maintain a reflective classroom learning community. Its aim is to progressively move students towards deeper levels of reflection, and in this way promote increased levels of student engagement.

The REAL Framework

The framework consists of:

- Four levels
- Three dimensions
- Five types of reflective prompts or probes.

The four levels are derived from the *SOLO Taxonomy* (Biggs 1995). These levels, while not necessarily hierarchical, involve progressively more difficult reflective challenges that should be considered and utilised from the perspective of each child's needs and abilities.

- *Unidimensional* – recalling basic feelings, thoughts, actions
- *Multidimensional* – developing feelings, thought and actions about learning processes
- *Relational* – relating feelings, thought and actions to other areas and processes
- *Conceptual* – translating into concepts, feelings, thoughts and actions about learning processes.

The three dimensions target the interplaying elements of student engagement and thus directly involve students in thinking about their level of engagement.

- *Affective* – thinking about responses to learning experiences, working towards genuine valuing and enjoying
- *Cognitive* – thinking about the intellectual quality of learning, working towards deep understanding and expertise
- *Operative* – thinking about the learning experiences, working towards students becoming more successful learners.

The five probes give students different types of reflections and represent different aspects of classroom learning processes.

- *Thinking about achievement*
- *Looking for evidence*
- *Working with other people*
- *Overcoming barriers*
- *Reframing the task.*

The *REAL Framework* brings these levels, dimensions and probes together in an easily represented and understood set of four tables. The direction of the framework is to progressively move from the *unidimensional* level through to the *conceptual* level. This learning journey can be adapted and negotiated with the participants in the learning community and the pacing is dependent on the contextual needs of the school and classroom.

REAL (Reflective Engagement: Authentic Learning) Dimensions of Student Self-Assessment

Unidimensional – recalling basic feelings, thoughts and actions

Affective	Cognitive	Operative
 What were the fun bits in your learning?	 Write a memo to someone about the most important thing you learned today or yesterday.	 What new thing can you do now?
 What surprised you about your learning?	 What is your best hard work?	 List your strengths.
 How does working with others make you feel?	 What cooperation helped your learning?	 Who helped you the most?
 How do you feel now when it gets tricky?	 What was the tricky part?	 What is your biggest improvement?
 What would make you feel better about today's work?	 Name two things to make you think harder.	 What would you change about today's work to help you improve?

Multidimensional – developing feelings, thought and actions about learning processes

Affective	Cognitive	Operative
 Why were the fun bits fun?	 What strategies did you use to learn something important?	 What goals did you set yourself in this activity, task or project? How well did you achieve them?
 Why were you surprised about your learning today?	 How did you know that you had learnt something?	 What is the evidence of your achievement about today's learning?
 Why does cooperative learning make you feel great?	 What did you learn about working in groups while doing this work?	 What is the most valuable advice you could give students who are involved in similar projects in the future?
 How do you feel when you solve a problem?	 Write two questions you could not answer. Explain.	 How could we change this (lesson/unit/strategy/skill) next time we do this?
 How could changes to today's work make you feel better?	 Why do you think doing it differently will help with your learning?	 What would you change to improve your learning if you were to do a similar task?



Thinking about achievement



Looking for evidence



Working with other people



Overcoming barriers



Reframing the task

Relational - relating feelings, thought and actions to other areas and processes

Affective	Cognitive	Operative
 How do you feel when you achieve your goals?	 Connect this knowledge to something you already know or can do.	 Think of a way to use ... since we practised it in class.
 What other feelings do you have about this work?	 How do these processes or content relate to something else you know?	 Reflect on the strategy we used and why we used it.
 How can you ensure your group has positive feelings about your work together?	 Who do you know who would find this learning (content) or strategy (process) helpful?	 How could you become more involved in team work next time that would be different from this time?
 What problems do you have to solve about how you feel when it gets tough?	 Find three sources where this new knowledge could be useful.	 List five places you could use the skills you have learnt during this lesson/unit/task.
 How can you feel like this more in your work at school?	 When and where else could you use this information?	 What would you do differently in your next project given the knowledge you now have?

Conceptual - translating into concepts feelings, thought and actions about learning processes

Affective	Cognitive	Operative
 Think about the many feelings you have about your work. Use colours and/or drawing to represent three of these feelings.	 Explain how your thinking was different today from yesterday and from what it could be tomorrow.	 Why is what you have learnt critical for you as a person?
 How can you generate some specific feelings about your work e.g. empathy, curiosity?	 Why is it important for you to know/understand/be able to do this?	 List three ways the skills you have learnt can be used elsewhere.
 Survey your group about how they felt during this task and align them with your own feelings.	 Reflect on a conversation you had with someone else that triggered your thinking about...	 How you would help someone else to learn something you discovered today?
 What did you find to be the most difficult part in discussing your feelings about this task? What did you do to overcome this?	 How could you broaden your thinking and learn more about what you did today during the task/lesson/unit?	 What did you find out about your problem solving skills and strategies while doing this activity?
 What other positive feelings would you like to generate in future sessions?	 Represent how you think (drawing, matrix, mind map, etc.).	 What advice would you give me before we continue this lesson?



Thinking about achievement



Looking for evidence



Working with other people



Overcoming barriers



Reframing the task

How the REAL Framework works

The first point to make is that the *REAL Framework* is not necessarily a recipe to be employed untouched in the classroom. That is, while the levels, dimensions and probes make up the concept of the framework and its shape and direction are important, the framework can (and perhaps should) be modified to suit the classroom and the learners. Teachers could develop their own sets of probes and indeed introduce more categories of probes. These probes are intended to be models of different and challenging ways to ask students to think about their learning. They are not exclusive, but rather examples of starting points that we have found useful to promote student reflection.

Getting started

A good way for teachers to start with the *REAL Framework* is first to become familiar with each of the probes within each level and each dimension. At the same time they might show the framework to their students and discuss what the different levels, dimensions and probes mean for them as learners.

The shape of the framework is that the starting point is in the *Unidimensional* level. The movement through the framework can be a very different process, depending on the needs and interests of the learners. The following are some different examples of the ways reflections could be planned.

Students could move vertically up the *Affective* dimension to the top of the framework. The teacher might decide to do this when they feel there is a need to develop more positive student responses to learning experiences and help them enjoy their classrooms more. On the other hand, students who seem to be rushing through to finish work might work first up through the *Cognitive* dimension.

The class could track the *Working with other people* probes right through the framework if the teacher felt they needed to develop a more supportive learning community. Similarly, other probe categories could be followed in response to particular classroom needs.

Learners could complete all probes in the *Unidimensional* level before moving to *Multidimensional* and the other levels. This might happen when the teacher decides that a concerted reflective challenge is appropriate for the class.

Once both the teacher and the students become familiar and confident with the framework, the students might even be able to make choices as to how and what they will respond to as a result of their own ideas about their classroom learning experiences.

The Framework in action

In our research we have tried several implementation methods. The most successful so far has been a structured step-by-step introduction to the class on a regular weekly basis. For example, in three senior classrooms this year at Curran Primary School (Macquarie Fields), large print copies of the three probes to be introduced for that week were displayed. The classroom also had on view a full copy of the framework.

The different symbols for the probes were discussed with the students. *Overcoming barriers*, for instance, was aligned with the way Jana Pitman overcame barriers to compete in the Commonwealth Games. *Reframing the task* was demonstrated by using the students' artwork and showing how it could look different when framed in another way. Discussions were conducted both as a whole class and in small groups. The important point here was that students were given time to understand the full intent of the probes and to consider their responses.

These discussion sessions also helped with the explicit development of the type of language (articulation of concepts, use of appropriate tenor and vocabulary) to be used by an individual and a whole class in oral and written reflections about learning. On some occasions students used drama (specifically the strategy of still image) to demonstrate their responses to a particular probe. All these strategies helped bring about a community of reflection.

The introduction of a weekly probe began first thing Monday so continual and conscious connections could be made throughout the week. The teachers made journals for the students to record their thinking and learning in line with the probes as they were introduced. The important point to keep in mind here is that there are some quite significant thinking and writing demands attached to these processes and teachers should plan the kinds of support and variety of approaches they would bring to any other learning experience.

Following are some examples of the students' responses to different probes from the framework:



What were the fun bits in your learning?
(*Unidimensional, Affective*)

What I enjoyed in my learning was maths because when I was in year one I didn't know how to do multiplication but now I do. I know how to do it very fast and good. The other things I enjoy at school is being school captain because when

I was young I used to watch the old ones stand up and talk and that made me feel weird. I said to myself that it will be a great experience if I be one and now I am one because I had the confidence like the other people to go for school captain.



What is your biggest improvement?
(Unidimensional, Operative)

I think it is spelling and writing because my spelling words are difficult and I can spell all different words. Writing information reports because last year I could not do one but Mrs B taught me how to do a lot. I have done plans which helped me a lot.

My biggest improvement is writing because I write every day and I learn to spell right because I use a have-a-go card. My biggest improvement is finishing a task. I have improved in a lot of different things like spelling, writing and maths and reading. I feel happy when I have-a-go because I always think its wrong and feel very happy when I get it right!

My biggest improvement is coming to school. I come to school because I like to learn. Stuff like maths, art and other subjects. I like them because they are interesting. I improved in confidence. I used to run away from people but now I talk to people and I have made friends who help me.



Who helped you the most? (Unidimensional, Operative)

Mrs M and Mrs S helped me the most. They help me by telling me how to put sentences in the right order and told me other stuff. Mrs S told us how to write better sentences. When we are in groups J helped me the most rather than the teacher. But we are still having fun no matter what not even if I get it wrong it doesn't matter because I try my best and Mrs S helps me. So that is why I like them as a friend. Because they help you if you need help. The one who helped me the most was B. We helped each other in SOS Sentence Survival. He helped me by telling me where the cards go. We had fun too. I like working with B.



Name two things to make you think harder?
(Unidimensional, Cognitive)

1. *I think that not telling us the answers makes me think hard.*
 2. *Giving us harder work to see what we can do.*
- This is what I learnt. Good things happen to good people!*



Why does cooperative learning make you feel great? (Multidimensional, Affective)

Learning makes me feel great because if you are in the right working group they make you feel calm and happy and it

helps me because when I am happy I do more work. So I thank M and D because they are the ones that make me stay calm and happy. I feel great when I learn. I feel better about learning in school and out of school. When I am in a group I get help from the kids and I feel happy about it. I can understand it or when I get it from the kids that are in my group. Co-operative learning makes me feel good inside and happy on the outside. It makes me feel great 'cause once I get it right I feel great.

I think now I am confident in a group and I am happy about that. It makes me feel great because I do not just have one person I have a whole group of people helping me. Co-operative groups makes me feel great because what my dad always says is the bigger the better and also instead of teachers helping me the students in my class can help me.



Reflect on the strategy we used and why we used it. (Relational, Operative)

It helps me find information faster because if I don't know how to skim through I will spend 10 minutes reading to find an answer. My class is researching Prime Ministers. Miss taught us how to skim through and skip, but not skip the information. I felt good and then happy because I worked by myself independently.

How teachers and students might use the REAL Framework

As mentioned earlier, the REAL Framework was developed more as a conceptual model than a rigid classroom recipe. With this in mind the guidelines on pages 7 and 8 are just some of the ways that the REAL Framework might be used in schools and classrooms. The first set of guidelines is for teachers, and the second is for students. We hope these guidelines will help teachers use the framework in a way that best suits them and their classroom contexts.

Conclusion

The REAL Framework, together with other classroom changes called for within the Fair Go Project, has the potential to be a significant factor in encouraging deeper and more productive levels of student engagement. This is a hope recognised also by the students.

We get to do self-assessment and we get to say how we feel about the work. And she {teacher} reads it and tries to make improvements in what she teaches us, and she tries to make it as fun as possible. She listens to the whole class and she just wants everyone to enjoy what she's teaching and be able to learn it (Student interview, Curran Primary School).

Suggestions for using the *REAL Framework*

TEACHERS

Build school plans for reflection and student self-assessment.	Different levels could be used for different stages and grades with the aim to have senior students reflecting at conceptual levels.
Develop a class plan to scaffold student self-assessment over a year.	Pick up the example described in the framework in action, where all students in senior classes will advance to using three probes a week to reflect and so have a journal containing 60 reflections over a two term period.
Use different sections to overcome classroom learning issues.	The <i>working together</i> probes might be used to build a stronger learning community. <i>Overcoming barriers</i> could be employed when students are reluctant risk-takers.
Discuss with students the importance of deeper reflections about learning and show how this might be achieved by working through the model.	Make the <i>REAL Framework</i> into classroom wall posters to be referred to individually and during class discussions.
Use the concept to write different sets of probes according to the needs of the learning context.	Teacher education students can use the framework to self-evaluate their professional experiences. Teachers also can use the framework in reflections about their professional development.
Build a reflective learning community.	Teachers and students can write their own probes together as part of metacognitive learning activities.
Develop and explore the concept further to suit contextual needs.	Teachers could think of new ways to use the framework and concept that we have not thought of.

STUDENTS

Write reflections in learning journals.	This can be done in a number of ways. Students might strategically build to the high end conceptual levels with the teacher directing the probes or be more self-directed and choose their own reflections.
Discuss aspects of the framework with each other and the teacher.	Group and whole class discussions could be used.
Decide as a class which part of the framework to reflect on at any time.	If the framework is displayed as a wall chart students could match the probe to their current learning or how they are feeling at that time.
Invent own probes	Students could be encouraged to write probes according to their current learning experiences and place.

Share reflections with other learners, teachers and parents.

Learning journals could be regularly used in discussions with people inside and outside the classroom.

Explore ways other than talking and writing to respond to probes.

Students could use visual art, music or drama to represent their reflections.

Develop and explore the concept further to suit contextual needs.

Students could think of new ways to use the framework and concept that we have not thought of.

About the authors

Geoff Munns is a Senior Lecturer in Education at the University of Western Sydney. He has more than 25 years teaching experience in primary schools (including executive roles as Assistant Principal and Principal). His research interests focus on improved educational outcomes for students from educationally disadvantaged backgrounds (including Indigenous students). In particular he is interested in how these students can become engaged in their classrooms and subsequently develop a long-term commitment to education.

Helen Woodward was formerly Associate Professor at University of Western Sydney. She has been Head of Primary Education and as such has been deeply involved in the development and implementation of several primary education programs. Assessment has been of both research and practical interest for some years. She has worked with educators across the world in establishing assessment programs and strategies for students from primary school through to higher education.

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A more detailed discussion about student engagement and the *Fair Go Project* can be found in *Fair Go Team* (in press) and Munns (in press).

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