

Principles of effective practice in supporting students to become self-regulated learners

**Research by Linda Sinclair, assisted by Gareth Rapson
Paper written and presented by Verena Watson**

Original version of this paper presented at *NZARE Conference, Turning the Kaleidoscope*, Wellington, New Zealand, 24–26 November 2004

Downloaded from <http://www.nzcer.org.nz/pdfs/14343>

INTRODUCTION

The purpose of this study was to identify the strategies one teacher used to support her Years 5 and 6 students develop self-regulating behaviours. How her students responded to these strategies and how they influenced students' emerging self-regulating behaviours were also identified. The study was carried out within the context of the written language strand of the English curriculum, and required the students to explore and write persuasive texts.

RELATED RESEARCH

Students' ability to assess the quality of their own work is of fundamental importance to effective learning. Such formative self-assessments result in more effective and committed learners (Black & Wiliam, 1998), and are essential components in self-regulated learning because they provide students and their teachers with information that allows all participants to improve the quality of their work.

According to Zessoules and Gardner (1991), formative assessment will only be effective if students can recognise the desired learning outcome, recognise their present position with regard to the criteria of the learning sequence, and understand how to close the gap between actual performance and desired performance. When setting goals, it is crucial that these are specific, have a defined time span that is not too long, and are achievable yet still provide challenge. Specific goals raise performance because they specify the amount of effort required for success and boost self-efficacy by providing a clear standard against which to determine progress (Bandura, 1997; Locke & Latham, 1990).

The purpose of this present study linked these considerations to the identification of the strategies the teacher used to help her Years 5 and 6 students use self-assessment as part of developing their self-regulating behaviours. The students' use of learning goals, and how these facilitated their ability to self-monitor and self-evaluate, was

also part of the study, which was carried out within the context of the written language strand of the English curriculum.

Writing is a complex task, requiring the writer to perform several skills simultaneously. As Flower and Hayes (1980) observe, “a great part of skill in writing is the ability to monitor and direct one’s own composing processes” (p. 39). Students who are developing understandings and skills in the writing process can be assisted to become confident, independent, goal-oriented, fluent writers by being taught self-regulation strategies in tandem with identified writing skills (Harris, Graham, Mason, & Saddler, 2002).

Skilled writers have at hand strategies that help them accomplish specific writing tasks. Students who experience significant difficulties with writing do not, possibly because they may not know how to self-regulate their behaviour before, during, and after writing (Harris et al., 2002). In addition, students with writing difficulties often lack important knowledge of the writing process and have trouble generating ideas and selecting topics (Harris & Graham, 1999).

Teaching self-regulating learning strategies in a language programme can help writers in three ways. First, students are taught effective planning, writing, revising, and editing skills, so enhancing their knowledge and understanding of the writing process. Next, they are taught how to monitor (assess) and manage (self-regulate) their own writing. Finally, they receive support and are equipped with strategies designed to instil positive attitudes to writing and positive views of themselves as writers (Harris et al., 2002).

METHOD

The teacher who participated in this study was known to the researcher to be an effective classroom practitioner, teaching in a decile 7, urban school¹. The school had identified a goal – that was to see a change in roles, where teachers assumed more the role of facilitators or mentors, and students gained skills and strategies that would allow them to take greater ownership of their learning. The pre-study interview of both the principal and the teacher identified the school’s current approach and practice of self-regulated learning.

A researcher worked alongside the classroom teacher to plan a 5-week sequence of lessons on persuasive writing. The teacher structured strategies that promoted self-regulated learning into the programme. Classroom observations of the teaching and learning programme were recorded throughout the study and the teacher was interviewed again at the end of the study. The focus for the observations and interviews was on how the goal setting and self-assessment strategies implemented and fostered by the teacher were helpful to the students’ learning behaviours.

¹ For privacy reasons, pseudonyms are used for the name of the school and the names of the participants.

The teacher selected six students from her class (three girls and three boys) for the study to focus on. These students, who were representative of Levels 2 and 3 of the English curriculum, were observed and interviewed throughout the study. Researchers kept a tally of the behaviours and strategies they used, as well as interviewing them individually as they set their learning goals, wrote their persuasive texts, and after they had had a student-teacher conference. Students' self-assessments were discussed with them, as were their beliefs about their next learning goals.

RESULTS AND DISCUSSION

This section is presented as a descriptive account and discussion of how the self-regulating environment developed for the six students as they experienced and learned from the strategies their teacher put in place during the 5-week programme on persuasive writing. The quotes attributed to the teacher that do not relate directly to the observed students and their work, come from the interview conducted with the teacher before she began the programme. The quotes from the students are taken from interviews they had with the researchers, conversations with the teacher, and from discussions noted by the researchers during the time of the study.

What the teacher did and how the students responded

The teacher engaged in deliberate acts of teaching to support the students in both their writing and in the self-regulation of their learning. She modelled and scaffolded strategies and skills for persuasive writing and self-regulated learning, reinforcing these practices with support materials. This aimed at encouraging the students to take greater responsibility for their work. The use of teacher-student and student-student conferences aimed at encouraging the class to see itself as a shared learning community. The following describes each of these strategies and how they appeared to link with the observed students' development of persuasive writing skills and self-regulating learning behaviours.

1. Modelling and scaffolding

The modelling and exploration of persuasive texts, combined with explicit teaching, formed the foundation of the programme. To begin, the teacher presented a variety of models of persuasive writing. The purpose and the probable audiences of these texts were established, an exercise the teacher considered essential as the intention was that the purpose would drive the evaluations and rewriting of the students' own writing later in the programme. As these models were "unpacked" with the students, both the structural and the language features common to these persuasive texts were identified. This work was done within groups and by the whole class, so that everyone shared a common idea of what persuasive texts could look and sound like. This led to the development of success criteria, which the students could use later as a

self-assessment tool to guide their own writing (see Figure 1). Some of the other tools that were developed during the modelling sessions were presented as wall charts, so that the whole class could readily refer to them. More specifically, they provided examples of emotive words (words that appeal directly to the reader), auxiliary verbs, sentence starters, metaphors, and similes. The students added to them as they discovered new examples throughout the 5-week programme.

Before the students embarked on any writing themselves, the teacher modelled writing the features of persuasive texts with them. The students found supporting evidence in the teacher's text of the criteria they had compiled as a class and gave feedback, saying how well their criteria had been met. Students then had opportunities to explore the features further by writing examples in co-operative groups, and to evaluate their examples against their criteria. This process gave the students practice in the skills and strategies that would support their ability to write persuasive texts and to become self-regulating learners. As the teacher explained:

A lot of sharing is what they need; a lot of modelling is what they need. . . . [They need to be] almost saturated in that type of text if you want them to do it—a lot of support as to what a verb might look like, a lot of support as to what an adjective might look like, support of similes and metaphors . . . working co-operatively so no one child feels threatened. [They need] lots of practice, working co-operatively and with mixed abilities.

The teacher scaffolded her students further by facilitating a co-operative brainstorming session, generating ideas on a particular topic using the positive, minus, interesting (PMI) model (a lateral and creative thinking strategy developed by Edward de Bono, 1992). Following this modelling session, each student used the PMI to decide which position they would take on an argument, completed their own PMI based on that position, and used it to plan their argument so that each paragraph contained one main idea and supporting evidence.

When writing their first piece, each student used the persuasive writing criteria that were established by the class during the modelling sessions to identify the particular criteria they wished to set as their own learning goals. They wrote one paragraph at a time, then met with a partner to show what they had done, to discuss why they had done it that way, and to share possible improvements, always referring to their criteria. In evaluating their work, students checked it against the criteria and wrote supporting evidence from their writing alongside the goals they were focusing on, showing how they were meeting each criterion (see Figure 1). The teacher helped the children further develop this self-assessment tool so that they could use it when writing paragraphs. Here, students had to state the main idea for each paragraph (taken from the PMI), and give supporting evidence for each.

Figure 1: Example of a self-assessment tool, demonstrating goal setting by a student, to agreed-upon criteria, with evidence of how criteria have been met from the student's writing.

Criteria for PERSUASIVE WRITING: Name: Jed

Criteria	Tick the box of the criteria you have chosen as your focus.	
	Tick	Comments
Write an opening paragraph that clearly lets the reader know what side of the argument you are on.		I demand that there should not be a tuck shop at Aoturoa school.
Organise your similar ideas into paragraphs.		P1=Don't let the kids get rotten teeth. P2=tuck shops are ^{expensive} are ^{an}
Write ideas with some detail including reasons.		Tuck shops are money hungry. Don't let it eat away your money.
Use a variety of sentence starters.		P1=Being a P2=In my experience P3=However P4=Surely
Use persuasive language such as: - adjectives to describe		disgusting, destructive, poor
- verbs that direct you (auxiliary verbs)	✓	You must, You have to
- emotive language to add impact		poor, suffer, perfectly
- rhetorical questions		How would you like it if you ran out of money?
- words that appeal to the reader directly	✓	Don't let the tuck shop eat away at <u>your</u> money
- metaphors and similes	✓	tuck shops are money hungry, as destructive as a ^{disgust} an
Write a conclusion that reminds the reader of your main ideas and encourages them to see things from your point of view.		Yes!

With the students, by this stage of the programme, beginning to work more independently, the teacher's knowledge and understandings of the diverse range of abilities and needs in her class were becoming apparent:

There will be children who just understand it one hundred percent and run with it. There are those that need it modelled again and again and again. So you've got a management strategy of extending those ones, revisiting with these ones, and then there will be the one that you almost need to do it for them . . . perhaps choosing from one or two [criteria] that they need to work on, [to] narrow the field down.

The modelling sessions had helped the students understand that the desired outcome of persuasive writing is to write strong arguments and to appeal to the reader, "leaving the reader in no doubt as to what you mean and what you think" (Teacher).

They had also helped the students identify the impact that certain language features could have on readers (audiences):

I didn't know what they [rhetorical questions] were until yesterday. I just got stuck into them. They can add impact to your argument, like talk directly to the reader. (Stephen)

From the final analysis of their first piece of persuasive writing using their criteria, the students were able to set the learning goals for their second piece of persuasive writing, thus supporting what they saw as their “next step”.

I looked at my work and only saw adjectives in my first paragraph. So that's how I decided on my goal. (Conrad)

Students were aware of the links between the support materials available to them, and acknowledged the potential of these tools to support their future writing:

I did meet my learning goal to use more emotive language, but I got stuck on one idea. Next time I'll have to think up more ideas to improve my argument. I'll look at the class charts to see if I've included other ideas too. (Diane)

The provision of class support materials alongside teacher modelling and scaffolding contributed to a shift in the classroom roles. The students were becoming increasingly more able to monitor and direct their own work—to be self-regulating learners—while the teacher was able to take a step back, signalling to the students that they were now more in charge of their own learning.

2. Shifting responsibility through feedback

By the time the students had work ready for student-teacher conferencing, a shift in responsibility from teacher to learner had occurred, to the extent that the teacher was able to conference and give feedback with the assumption that the students had ownership of their writing. The teacher showed herself to be an interested reader of their persuasive texts, using clear, explicit feedback to identify and reinforce each student's self-regulated learning and ownership of their work.

This was evident from the outset of the student-teacher conferences when students started the conferences by reading their work to the teacher and came well prepared, having identified the supporting evidence in their texts of having achieved their learning goals. An example demonstrating this shift of responsibility was shown when a student articulated to the teacher that he had focused on the use of similes. He then went on to identify the simile he'd used in his text (“Lollies are as destructive as giant meteorites”) that he'd written against his goal. The teacher affirmed his learning goal and his choice of language when she said, “That really gave me a picture.” The student had not thought of his simile as evoking an image, and together they laughed about the picture that formed in their minds. The specificity of the oral feedback to

the student's learning goal and to the ownership of his work, was reinforced in the written feedback that the teacher gave this student the next day:

Your goal was to use similes in your writing. You have done this. I particularly enjoyed reading the simile referring to a giant meteorite. I immediately thought of large craters in teeth. (Not a good feeling.) So this added impact to your argument. It appealed to my emotions and how I feel about dentists.

Another way the feedback reflected this shift in responsibility, and therefore roles, was the way in which the teacher responded as the reader (or audience) of persuasive texts, rather than as a "teacher-expert". Her approach here also reinforced the established purpose of persuasive writing:

You met your goals well by appealing to the reader. . . . [When you read it to me] I listened, and I wanted to listen.

You have used many words that appeal directly to the reader such as 'you', 'your' and 'our'. This makes the reader feel that you are talking to them personally. This helps to give weight to your argument.

While in the role of being an audience of her students' persuasive texts, the teacher entered into the debate with students, questioning them about alternative solutions, the causes and effects of actions, and the consequences of stances taken. This approach required students to give full explanations in relation to their writing, to add more details, and to clarify their main ideas or go back to their planning to check that they had included all their intended ideas.

At times, the nature of the feedback moved from being about the writing to assisting the students with useful strategies and skills to enhance their self-regulating behaviours. For example, when students needed to add more details to their writing, the teacher advised them not to rewrite their whole piece of writing, but to use symbols to show where they could insert a new piece of text. She also took care to affirm their self-regulating behaviours:

I liked how you referred to your planning and included a new idea from that.

You have been wearing your green hat when you raised this, and your red hat when you showed your feelings.

Giving students affirmations of their learning built student efficacy, and an understanding of its benefits. As one student wrote to the teacher:

I really liked the way you kept on encouraging me, even when I was not doing well.
(Conrad)

The importance of students having a role in assessing their own work follows from recognising that they are the ones who do the learning and have to make the effort to link experience and ideas in seeking to understand. As Harlen (1998) observes, the teacher's role is not diminished by identifying the student as the locus of learning, but is changed to a role of facilitating students to understand what it is they are to learn and helping them to learn it.

3. Fostering a learning community

Essential to a self-regulated learning environment is a climate where the benefits of collaboration are understood and valued. In this class, there was an expectation that all participants would work together productively, sharing ideas, writing tasks, and giving each other constructive feedback. The teacher modelled this process with the class, with both groups and individuals, validating their contributions:

[I do this so that] . . . they have a chance to learn from each other and it's not teacher directed all the time. (Teacher)

Students appreciated the opportunities that such a class climate offered them:

I talked to my friend. He helped me understand what this means. (Stephen)

I talked with [my friend] after I had analysed my other piece of writing, and we both have the same learning goals, and we helped each other to see how we could use the charts on the board to help us. (Lisa)

Through the class and group sharing of ideas and strategies, students obtained a greater pool of ideas and knowledge from which to select. Here again, the observed students acknowledged the benefits:

P for plus, M for minus and I for interesting—we do this sometimes to share our ideas about a topic. It helps you get more ideas and you can share ideas—thoughts you have. (Conrad)

When monitoring and analysing their work, the students again were able to articulate the benefits of working collaboratively, and demonstrated the ability to be reflective and adaptive learners:

I explained my goal to my buddy, and then read my argument to her. Then we talked about it. She said I hadn't really used any auxiliary verbs, so I went and looked at the chart and found some words I could add to my argument. Then I read it to my buddy again, and she said, 'Yeah,' I had now. (Charlotte)

4. Developing reflective learners

By helping the students to take responsibility for their work, both individually and collaboratively, the teacher was assisting them to become more reflective and critical learners. Self-reflection provides both teachers and students with information that they can use to modify their work and make it more effective. Honesty was essential:

I had to think more than usual: about what I'm writing, how I'm writing. (Stephen)

Look what Mrs G has written. Look, she's right. I haven't used any words that appeal to the reader. I guess I had better go back and add some. (Jed)

As the students were writing, the researchers observed each participant writing a bit, rereading their writing, referring to their goals, and reworking. They were self-regulating against identified learning goals:

When I analysed my writing, I found lots of things that I should work on, but I want to try hard to get my ideas in a better order and to write more things to support each reason. I need more detail so that people understand what my opinion really is. Oh, I also want to use more emotive language to make my reader feel more. I will keep checking to make sure I remember to work on the learning goals. (Diane)

Students in this study developed reflective and critical strategies that suited their particular learning style. Some checked their writing out with each other, often reading aloud passages of their work and asking if they thought their learning goal had been met. One student described how he kept his learning goal in his mind as he wrote, imagining as he did so that he was talking to someone face to face, checking his work out.

The students' comments echo findings from other research (Harlen, 1998) that demonstrates the important role students have in assessing their own work, recognising that they are the ones who do the learning.

5. Empowering students

Taking more responsibility for their learning appeared to empower the students. By setting their own learning goals and specifically stating the strategies that would help them close the gap between their present position and the desired criteria, all six students expressed a commitment to their learning, a strengthened self-efficacy, and a motivation to achieve:

I enjoyed this writing because I was in charge. I knew I could achieve my goal. I knew what I could do and what to do to get help. (Charlotte)

I like doing my own work and like to do as much as I can do myself. (Jed)

I like picking my own learning goal because you know what you need. (Diane)

These findings are consistent with other research that shows successful learning occurs when learners have ownership of their learning, understand the goals they are aiming for, are motivated, and have the skills to achieve success. These elements foster self-efficacy, which in turn enhances student achievement and their level of self-regulation (Schunk, 1991; Zimmerman, Bandura, & Martinez-Pons, 1992.) As Zimmerman (1986) explains, it is the development of this capacity to self-regulate that enhances students' perceptions of themselves as learners.

Challenges in moving forward

The researchers identified challenges for both teacher and students during this study. A shift in responsibility meant that the ability to work in a more self-regulating environment was not necessarily linked to past performance.

The teacher in this study had observed that one of the less able students had managed his own learning, monitoring his progress and employing strategies to help him achieve his goals, while one of the higher achieving students had struggled, requiring more assistance than her usually less able peers:

I thought this student might struggle as he often has difficulty generating ideas and staying on task with writing activities. Yet I would say he has been the more successful writer. He stayed focused on his goal and it is the first time I have known him to add to his writing and improve the impact for the reader. I wonder what exactly has sparked that change? Maybe the style of teaching before the independent ask. (Teacher)

One of the challenges for students is to set goals that are specific and achievable. The higher achieving student referred to above chose all of the criteria compiled by the class, rather than focusing on only a few. This impacted on her motivation as she found she had "too many" goals to focus on.

Another challenge is for students to see how the skills and strategies they have acquired in one learning domain transfer into other learning areas, and even into their lives outside school. One of the participating students made this leap:

I'm going to set myself a goal to get my soccer gear ready the night before. Then I'd be ready on time when Mum wants to leave and we wouldn't get fighting. (Jed)

To help students meet this challenge, teachers face their own challenge of making links between learning domains explicit for students and meaningfully incorporating various skills and strategies across curriculum areas. The teacher in this study, for example, said she intended to employ persuasive writing in a later topic study, and so was ensuring that her students had skills that they could transfer to that work. Knowing that the success of a later unit of work was dependent on the success of her current focus, meant that the teacher had to be able to move between roles,

recognising the teachable moment, when to be an expert, and when to give greater responsibility and control, in a meaningful way, to students.

Managing a self-regulating classroom is demanding. Having a good understanding of every student and their learning styles, as well as ensuring that the diversity of their needs are being met, is a challenge. As the teacher in this study said:

The range of abilities in a class is a challenge, but it can be met, making sure that your children who are running with this programme have the opportunity to keep running, broadening their knowledge base, making sure you give enough time to those who need to meet a simpler goal . . . just trying to arrange strategies, until you get one that works. Sometimes you feel you're not making progress, until you take time out, and look back on where you've come and realise you have travelled down a path. You do move and they do move.

Conclusion

Explicit teaching and modelling of the necessary skills and strategies was vital to the six study students' development of self-regulating writing behaviours. The teacher provided opportunities for the students to practise both their writing skills and self-regulating behaviours in manageable "bites". Feedback (from both the teacher and the other students) was specific to the learning goals students had set, the effect of this being to reinforce to the students that they were responsible for driving their learning. This shift in responsibility to the students meant that there was a corresponding shift in the role of the teacher, from that of a teacher expert to that of the audience for the students' persuasive texts.

The powerful and timely combination of deliberate acts of teaching, support materials, and structures, as well as the explicit feedback specific to learning goals, promoted student ownership and a collaborative and reflective environment and led to the students developing self-regulating writing and learning behaviours.

Acknowledgements

Linda Sinclair, Researcher
Gareth Rapson, Researcher

References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80(2), 139–148.
- de Bono, E. (1992). *Serious creativity: Using the power of lateral thinking to create new ideas*. New York: HarperBusiness.

- Flower, L., & Hayes, J. (1980). The dynamics of composing: Making plans and juggling constraints. In L. Gregg & R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 31–50). Hillsdale, NJ: Erlbaum.
- Harlen, W. (1998). *Classroom assessment: A dimension of purposes and procedures*. Paper presented to the New Zealand Association for Research in Education conference, Dunedin, 3–6 December.
- Harris, K., & Graham, S. (1999). Programmatic intervention research: Illustrations from the evolution of self-regulated strategy development. *Learning Disabilities Quarterly*, *22*, 251–262.
- Harris, K., Graham, S., Mason, L., & Saddler, B. (2002). Developing self-regulated writers. *Theory into Practice*, *41*(2), 110–115.
- Locke, E., & Latham, G. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Schunk, D. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, *26*, 233–262.
- Zessoules, R., & Gardner, H. (1991). Authentic assessment: Beyond the buzzword and into the classroom. In V. Perrone (Ed.), *Expanding student assessment* (pp. 47–71). Association for Supervision and Curriculum Development.
- Zimmerman, B. (1986). Becoming a self-regulated learner: Which are the key subprocesses? *Contemporary Educational Psychology*, *11*, 307–313.
- Zimmerman, B., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, *29*, 663–676.