



Ponderers, Sloggers, Slackers and more: understanding the profiles of student bloggers to help promote academic self-regulation

Mark McMahon

School of Communications & Arts
Edith Cowan University, Western Australia

Self-regulated learning is the fusion of skill and will. Students who can regulate their learning show a high level of self-awareness, are motivated and are able to adapt their approaches to the task at hand. Blogging may be seen as one approach to enhancing self-regulation but for that to take place, an understanding of how self-regulation is manifest in blogs must be developed. This paper identifies a range of blogger 'profiles' and offers suggestions as to how the processes in self-regulation can be developed through blogging as a learning activity.

Keywords: blogging, self-regulated learning, elearning

Introduction

The concept of self-regulation, or self-directed learning, is something of an educational ideal. It can be defined as 'the process whereby students activate and sustain cognitions, behaviours, and affects, which are systematically oriented toward attainment of their goals' (Schunk & Zimmerman, 1994, cited by Boekaerts, 1997, p 171) but is an inherently problematic one because it is a process that is only manifest in the outcomes that result from it. We recognize self-regulated learners instantly – they attend classes and deliver work that is timely, demonstrating the application of a range of generic skills to their assignments. The problem is that the processes that underpin these are not so transparent.

At the overt level it can be seen as an active and goal directed approach to learning, that results from self control of behaviour, motivation and cognition (Brooks, 1997). However, the integration of behavioural concepts with less amenable ones that relate to both emotional and cognitive factors immediately situates it in several broad disciplines of research (Boekaerts, 1997). Ultimately it involves students' reliance on internal resources to achieve learning goals and these are difficult to delineate. It can be viewed in terms of phenomenological, social cognitive, volitional, Vygotskian and cognitive constructivist theories (Zimmerman, 1989) all of which provide different approaches to understanding how effective learners are able to manage their learning and ways to promote such practices.

This paper aims to provide a further lens through which to explore and articulate the concept of self-regulation; in this instance through the common learning activity of writing web-based journals – 'blogging'. As blogs are increasingly used as reflective tools in education, it has become increasingly

important to understand what makes for effective blogging in order to assist learners in developing skills in the use of this tool. The purpose of this paper is to make the concept more tangible by identifying the processing inherent in self-regulation or the lack of it, as it is evident in students' reflective journals. By analyzing the textual elements that demonstrate self-regulatory practice we may become closer to identifying ways in which to enhance it.

A model of self-regulation

In order to begin this exploration, a model was developed that identifies the main processes within self-regulation (Figure 1). This was developed from existing frameworks. Boekaerts (1997), for example, provides a six component model based upon the following notions:

- content domain (conceptual and procedural knowledge, misconceptions and inert knowledge);
- cognitive strategies (such as rehearsal, elaboration, generating questions and so on);
- cognitive regulatory strategies (mental representations of learning goals, defining a plan, monitoring and evaluation, goal achievement);
- metacognitive knowledge and motivational beliefs (beliefs, attitudes and values related to tasks within a domain);
- motivational strategy use (such as coping processes, effort avoidance and so on); and
- motivational regulatory strategies (mental representations of behavioural intention, linking this to an action plan, and maintaining that plan in the face of obstacles).

Key to this approach is the notion of both applied and regulatory strategies. Self-regulating students have appropriate domain-specific skills but are also able to moderate and develop these skills through monitoring their effectiveness in the light of their beliefs and attitudes.

In an alternative model, Garcia and Pintrich (1994) articulate self-regulation in terms of knowledge and beliefs, strategies used, and outcomes. Each of these is moderated by motivational and cognitive components such as personal beliefs and conceptual knowledge, motivational and cognitive strategies, and quantity and quality of effort.

Common to both models is an integration of both affective and cognitive issues. 'Neither motivational nor cognitive models alone can fully describe the various aspects of student academic learning, yet the two types of models are complementary due to the respective strengths and weaknesses of motivational and cognitive models.' (Garcia & Pintrich, 1994, p. 127).

Such approaches have been synthesized into an integrative model (McMahon & Oliver, 2001, Figure 1). It is defined as a series of levels. At the highest level, described here as psychological states, metacognition and self-concept exist as the primary enabling conditions for self-regulation, but these are developed through subordinate processes – in this case self-monitoring and motivation.

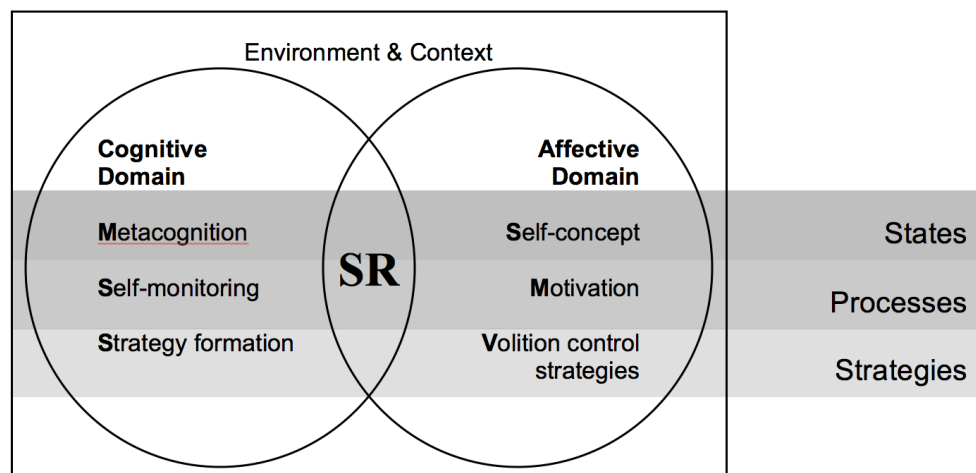


Figure 1: A model for self-regulation (McMahon & Oliver, 2001)

The end products in terms of behavioural objectives of self-regulation are the ability to develop cognitive strategies and approaches to control effort. This model therefore accommodates the role of both affective and cognitive aspects of self-regulation. Most important however is that in both of these domains there is a link between the level of awareness and the application of strategies that is a dynamic one where beliefs are instantiated and strategies are evaluated through a reflective motivational and self-monitoring process.

While difficult to identify within the actual use of strategies, factors that are situated outside the learners themselves must also be taken into account. Many studies and reports have focused on the external factors that can impact on student success and these can include factors both external to and within the learning environment that have significant impacts on the success of students such as the nature of teaching, resourcing or socio-economic status of students and their need to undertake paid work while studying (e.g. Ertmer, Newby, & McDougal, 1996; NCIS, 2002). While the focus of this study is on the evidence of self-regulation inherent in students' blogs, such environmental and contextual constraints must be accommodated.

Blogging as a learning activity

Blogging involves online journaling and is an emergent form of discourse in both the classroom and the broader community. In some large classes blogs allow for the articulation and development of understandings where there may not be enough time for direct feedback from the instructor (Paulus, Payne, & Jahns, 2009). They are also a familiar medium to many undergraduate students, with one 2005 survey identifying that, at least in the USA, over 12 million 12-17 year olds maintained a blog (Lenhart & Madden, 2005). While it may be easy to cursorily dismiss blogs therefore as educationally expedient or an outlet for adolescent narcissism, it must be acknowledged that they can be used for a range of purposes and these can be closely aligned to teaching and learning goals.

McBride and Luehmann (2008) summarise much of the research to suggest that blogs can have a role in:

- promoting reflective thinking;
- nurturing collaboration and relationship building;
- increasing perceived accountability and therefore quality of student work;
- encouraging peer support for one another;
- increasing opportunities for students to receive feedback;
- extending learning outside classroom walls; and
- allowing and encouraging interactions with experts and others outside of the classroom.

It is the first of these that was the primary focus of this study. That is not to say that the others are not integral to the reflective process, however. Scaffolding learning through both peer and instructor feedback can play a large role in prompting the reflective process inherent in self regulation as well as activities such as problem-based learning and concept mapping, and supports such as modelling, explicit instruction and self-assessment (McMahon & Oliver, 2001).

The approach to blogging that was taken in this study was one that was developed from the discipline of design. McColl et al. (n.d.) cite Fiedler (2003) in identifying key design processes within blogging and these include recording and representing one's personal patterns of meaning as well as reflecting upon the representations through temporality and history. It should involve shifting from a task-focused level to a learning-focused level of awareness and the development of an internalized language to converse about design.

This was instantiated within an assessed activity undertaken by students in a unit of Writing For Games and Edith Cowan University. Students were required to use the blogs in a formative capacity, to reflect on open-ended game writing problems posed in class and to draw from a range of readings and other sources to assist in the development of a game script. Students were encouraged to identify key elements of weekly readings that were relevant to them, explain them within the broader context

of gaming and use that as well as other game examples and external readings to assist in the development of their game ideas.

The purpose of this research is not to evaluate the approach taken in the classroom but to identify the patterns of blogging demonstrated by the students and to see to what extent they manifested the six internal processes within self-regulation. Conclusions can then be drawn about the pitfalls inherent in using blogs to promote self-regulation and strategies that may be implemented to enhance the level of self-regulation inherent in them.

Patterns of self-regulation in blogging

To expose the types of thinking evident in blogs, six examples are presented that represent the 'typical' blogger in terms of the elements of self-regulation discussed. These are:

- the *Slogger Blogger* – demonstrating volitional control;
- the *Worker Blogger* – demonstrating cognitive strategy formation and application;
- the *Eager Blogger* – demonstrating motivation;
- the *Ponderer Blogger* – demonstrating the reflection inherent in self-monitoring
- the *Bragger Blogger* – demonstrating high self-concept; and
- the *Über Blogger* – demonstrating a high level of metacognition.

These are discussed through textual analysis of learning outputs that best exemplify the above characteristics. While it may at first appear to be a somewhat reductive approach to defining a complex process, it is hoped that it will provide a simple framework to assist future students in understanding themselves and the strategies that work best for them.

A. strategy formation and application in blogs – the *Slogger Blogger* and the *Worker Blogger*

The best evidence of strategy use is in the blogs within the unit on Writing for Games lay in the specific activities that students selected. Typical cognitive strategies evidenced by *Worker Bloggers* were:

- summarising readings;
- describing designs;
- sourcing other forms of information; and
- writing personal anecdotes.

Most students in the group were able to produce elements of the above. These varied, however, in the extent to which they demonstrated higher order thinking. *Worker Bloggers* could select strategies and apply them to their assignments. Summaries were the most common of those demonstrated by weaker students in that they tended to describe what the week's reading was about. This involved some necessary selection of detail but not always an ability to effectively critique work. Similarly being able to express opinions, identifying links and articulating design ideas in an unintegrated way are all symptomatic of students who operate purely at the strategic level but without engaging in self-regulatory processes.

The best of these were also *Slogger Bloggers*, who showed an ability to manage effort. One 'slogger' provided lengthy descriptions of the reading but even then there was little that related back to the week's topic and other materials such as the lecture notes. Failure to apply volitional control, on the other hand, resulted in little or no work contained within the blog. These *Non Bloggers* are typically the students that fall by the wayside over the semester. Only one student in this group could be classified as demonstrating high volitional control but weak cognitive strategy formation. This student simply reiterated the contents of that week's lecture, with each post beginning, 'This week was about...' Ultimately there was little evidence of the student having done anything other than attend the class and reword the lecture material.

Non Bloggers may be amenable to a more rigorous and frequent approach to assessment to provide an external mechanism to ensure consistent effort. *Slogger Bloggers*, however, appear to have the opposite problem, where they cannot match their effort with a consistent level of quality. For those that do not have existing cognitive strategies, direct instruction may be helpful. The assumption that all students already have existing skills in areas such as summarising or internet research proved an inaccurate one, at least for the student in this cohort.

B. Motivational and self-monitoring processes in blogs – the Eager Blogger and the Ponderer Blogger

While most of the students in Writing for Games could submit their work and use received strategies such as summary appropriately, they did not always demonstrate a high level of motivation or self-monitoring. *Ponderer Bloggers* did more than apply strategy - they connected strategies together to enhance them and reflect on their value. A good example of this was one student who identified key elements of a reading on genre that were perceived as particularly relevant and then discussed in terms of how it applied in films as well as games. The student identified a contrasting perspective and sought to reconcile it with the one in the reading. As self-monitoring is a key regulatory process that assists in the formation of strategies it is important to provide students opportunities to reflect on their performance and to go beyond being purely *Worker Bloggers*. While it was not a component of this particular activity, one of the intrinsic benefits of blogging environments is its potential as a medium for peer review. Allowing for social remediation that is geared towards learners' zones of proximal development (Vygotsky, 1978) provides a strong point from which to reflect as well as exposing learners to multiple perspectives on an issue. Such techniques may be able to support *Ponderer Bloggers* in developing new strategies

Many of the students appeared to have a high level of motivation. This was evident in the stated enthusiasm for the concept within class and in their blogs, with one student in an early activity where they were required to discuss their motivations for studying the unit arguing that this was an opportunity for him to combine two of his loves – creative writing and gaming. Previous teaching evaluations have demonstrated a strong orientation towards having choice in their blogging activities and may have explained the large number of *Eager Bloggers* that made up this group. The level of enthusiasm inherent in the tone of some of their writing when either agreeing or disagreeing with concepts or ideas reinforced this ('This article summed up my ideas perfectly') as well as the strong evidence in the form of the outputs of motivation through the effort evident in their work. For the two students who could not be classified as *Eager Bloggers* it became clear that personal relevance was a major factor in their motivation or lack of it. The first statement of one student on her first week's blog was that she 'didn't like writing'. In order to address these *Slacker Bloggers*, teaching strategies need to be in place that go beyond purely extrinsic motivators such as assessment to provide more intrinsic mechanisms to motivate learners. Malone (1981) for example described motivational factors such as Challenge, Control, Curiosity and Fantasy. In having a strong sense of ownership of their work, and a lot of choice in terms of activities, most students could be described as demonstrating *Eager Blogger* characteristics.

C. Self-awareness and self-concept in blogs – the Bragger Blogger and the Über Blogger

The separation of self-awareness to affective and cognitive components is a necessary but somewhat arbitrary one. Corno (1986), argued for metacognition as the dominant controlling process; that 'affect is the subjective perception of emotional states; thus associated attempts to control negative affect fall within the domain of metacognitive control' (p. 334). While this may be true, most would argue that knowing oneself and believing in oneself are still discrete states of awareness. To have belief that is not based upon an accurate model of one's abilities suggests that on its own self-concept is a limiting state. This evidenced itself in the form of *Bragger Bloggers* within the unit Writing for Games. Gaming often is associated with fan-based activity where the line separating knowledge of the medium as a consumer and ability to actually design games can be a difficult one for novices to understand. *Bragger Bloggers* were most visible in this study where students articulated designs that tended to replicate their own favourite games without providing much originality or creativity. In this

sense, their high level of self-concept combined with low level of metacognition meant that they were unable to critique their own work. Providing a 'reality check' for such students to ensure that they continued to question the value of their work became an important focus of the feedback provided throughout the semester. This was done by asking students to question the originality of their ideas and provide a mini 'exegesis' to accompany their designs, which both placed their work in a cultural framework but separated it from other typical examples. Further evidence of Bragger Blogging could be found in a tendency of some students to critique other examples without applying the same level to their own work.

The flipside of self-concept was evident in *Blamer Blogging*, which in the case of this study proved to be a more damaging concept. This was evident through self-blame or the application of defense strategies such as self-handicapping, defensive pessimism or self-justification. Examples of this were where one student regularly qualified his ideas as 'not very good' but failed to identify specific aspects that could be improved. Another student in class admitted that he deliberately left his work until the last minute, not because he could not regulate his effort but because he could then justify a bad mark as a result of his laziness rather than his talent. It is therefore important that blogging environments encourage supportive feedback and allow the risk taking inherent in many creative processes. Enabling students to identify a specific number of strengths and weaknesses in their work allows self-assessment to be done in a way that is not punitive, as does ensuring that peer feedback is always focused on improvement rather than identifying problems.

As the dominant controlling process there is evidence to support the contention that metacognitive blogging is the ultimate goal to be achieved. The best examples of blogs were those that provided a clear development of design and an ability to both justify design features and identify areas for improvement over coming weeks. Such students are called *Über Bloggers* in this paper because they have share some qualities with the Nietzschean concept the *Übermensch* – a transcendent individual characterised by a *Will to Power*, which is not necessarily a state of domination over others but more one of creativity and self-efficacy (Nietzsche, 1977). Such students may be seen as manifesting the true potential of blogging. The most metacognitive of blogs demonstrated the best of its subordinate processes – enthusiastic and timely posts that bore witness to the application of key strategies both for design and learning within a framework of reflection and self-evaluation.

Recommendations

The profiles discussed in this paper are not designed to be a complete or fully accurate depiction of the multiple forms of discourse in blogs as they relate to self-regulation. Rather, they are provided here as a point of discussion and basis from which to explore the value of blogging for effective learning. Nevertheless the following key findings may prove useful for those attempting to use blogs as a learning tool:

- Provide extrinsic volitional rewards and controls such as frequent assessment.
- Provide direct instruction on the strategies inherent in blogging within the academic discipline.
- Encourage intrinsic motivation by providing challenge, engaging curiosity and promoting choice and personal relevance.
- Encourage multiple perspectives, contextualisation and recontextualisation learning content.
- Provide opportunities for peer review.
- Provide a supportive environment for risk taking, identifying strengths as well as weaknesses and providing opportunities for improvement.
- Have students not just reflect on their work but themselves as learners, through self-assessment, journaling their thinking processes and developing plans.

Appendices 1 and 2 show two example blogs from this study. These and others will be discussed in light of the concepts identified here. Most students will not become *Über Bloggers* overnight and to try and 'make' someone metacognitive is inherently contradictory. Instead, students need to use blogs in ways that help make their own thought processes explicit and give them the means to understand them. When this is combined with the teaching strategies identified above, then students may have a greater opportunity to develop as self-regulated learners.

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Appendix 1 – Blog Example 1

The World of PGT

Just another WordPress weblog

[Home](#)

///Week 4 Writeup: Worlds (Inspiration)

Posted by admin on 26 August, 2009 (0) Comment

I have just recently completed Portal, a first person shooter by Valve Incorporated, USA. unlike most other shooters, Portal differs from others where it is based on the player's puzzle solving ability to complete the game, rather than his/her quick reflexes.



Chell, and the Handheld Portal Device (Valve corporation, 2007)

Background:
you play this game as Chell, a girl who is basically placed through a number of tests in order to receive a reward of "cake." The puzzles are grueling and challenging, requiring skills in basic Physics, Visualisation and Logic in order to solve the associated problems. your only weapon is a device called the "Aperture Science Handheld Portal Device," a gun which can create portals from one part of the map to another. Your goal is quite simple, to make it across the map without injuring yourself. the problem is that there are several different challenges and pieces of equipment used to solve said puzzles.

What i like about it's world: User Interactivity
one of the things i liked about this game is how the Physics engine is directly connected to the Puzzle Solving mechanic of this game. for example, if you say, dropped out of a portal on a place that is high on the map, you can shoot another portal below you, and when you exit the first portal again, your residual downwards momentum is kept and thus, you gain more forward velocity upon exiting the portal.

Thus the whole aim of this game is to exploit the laws of physics in such a way that it allows you to make your escape from the tests.

Portal: Simple inspiration.
What i really like about this game is its sheer fun and simplicity in its gameplay. for a short game (most people could probably finish it in about 90 minutes after practise), it was quite a pleasurable experience. the graphics were smooth (considering i run a fairly basic setup) and the scenery was (in its early stages) crisp and clean cut, yet rather minimalistic at the same time. It is the earlier stages of this game that are giving me ideas about designs for my own game worlds.

Appendix 2 – Blog Example 2

The screenshot shows a WordPress blog post with the following layout:

- Search:** A search bar at the top left.
- Title:** "Week 7: Scripting and Storyboarding Cut Scenes" in a large, bold font.
- Meta:** "Posted by Admin on 29 September 2009 | No Comments".
- Content:** The main text of the post, which discusses the purpose of cut scenes in games and provides a list of five techniques for starting a cinematic sequence.
- Pages:** A sidebar on the left with a link to "About".
- Archives:** A sidebar on the left with links for "September 2009" and "August 2009".
- Categories:** A sidebar on the left with links for "GDT3102" and "Uncategorized".
- Blogroll:** A sidebar on the left with links to "Development Blog", "Documentation", "Plugins", "Suggest Ideas", "Support Forum", "Themes", and "WordPress Planet".

Main Content:

Week 7: Scripting and Storyboarding Cut Scenes

Freeman describes cut scenes as serving several purposes; it sets the tone of a game, to establish characters, to establish game worlds and their background, to bridge parts of a story, to bridge games (in the case of prequels and sequels), and also to serve as a reward to players.

As cinematic are in essence short films, Freeman suggests several ways of ensuring that they are not corny or amateurish, that is avoid huge blocks of dialogue in one set, interesting and useful character diamonds, it's alright for characters to feel more than one emotion toward another character, ambivalence between characters is okay also; avoid bland dialogue, use actions instead of words when possible, its permitted to stray (a little) from the main topic, cinematic should be unpredictable, interest can be aroused by placing problems and obstacles within a cut scene, and lastly dialogue should sound natural.

Opening cinematic sequences are another breed as well, their purpose is most importantly to hook players into the game by arousing their interest in the plot, visuals and mechanics, and Freeman suggests many methods of doing this;

- 1) Beginning with a mystery
- 2) Begin with a false intro, a misleading aspect to the story
- 3) Show a unique character, with a unique attitudes or powers
- 4) Throw the player directly into the action
- 5) Display a unique word

To ensure the players continued interest and integrity of a game storyboarding is used to map out both cinematic sequences, scripted in game events, and general game level design. Storyboarding therefore is used to save time and money, show sequence, communicates game concepts, and helps solve design problems.

1. Discuss the following questions:

a. If storyboarding each part of a game takes work, how does it save the development company money?

Storyboarding helps by solving problems in design and communication before more money is spent on the development, for instance in the making of a game cinematic with complex action the use of storyboards helps plot out the action and where all characters and objects are in a scene as opposed to a much costlier trial and error method where any number of time and money might be spent trying to "get it right" where a storyboard would have stopped having to resort to such methods by deciding before production what something should behave like.

b. Why is a storyboard for animation more important than one for live action?

A storyboard is more important for animation because in a wholly digital world anything can be changed or altered and there are no "set" rules such as gravity or air, depending on the game these things might not even exist and are up to the creative brain of the development team. Therefore all unique aspects have to be plotted out and communicated in a much clearer way as actors can simply be told what to do, but programmable characters rely on having set rules and coding on how they behave and what they do

Author contact details:

Dr Mark McMahon
Edith Cowan University
2 Bradford Street
Mt Lawley, Western Australia 6020
Ph: +61 8 9370 6434
Email: m.mcmahon@ecu.edu.au

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