Creating Classroom Contexts That Support Student Self-Regulation

Q: How can teachers create a classroom context that supports self-regulation?

Abstract

Self-regulation is the ability to monitor one’s own thoughts and actions to reach an objective in a given environment. Highly developed self-regulation has been proven to positively affect social and academic success. The purpose of my inquiry involves two main components. The first is to explore and explain why self-regulation is a philosophy I support and believe in. The second component investigates ways in which a teacher can use an understanding of self-regulation to create an environment that fosters it within their students. In combining these two aspects of my inquiry, my goal is to better understand my teaching philosophy, how it might be applied to my future classroom, and provide insight for others who may share the same beliefs.

Approach

My approach to this project accounted for the 3 Gs of Inquiry in that it was generational, generous, and generative. To ensure my approach to this project was generational, my research involved the historical context of self-regulation. This was a crucial element to my understanding of the topic and knowing the direction I wanted to go in. I was initially unaware of the depth of the concept and the multiple ways the term ‘self-regulation’ can be applied. It was important for me to have a solid understanding of the topic before posing my question. The wording of my question makes the assertion that self-regulation is a positive thing and that teachers should support it in their classrooms. Because of this, I needed to ensure that I understood as much as possible before focusing my research in this specific direction.

I present another perspective of self-regulation to give further context on the topic and to help ensure my project is generous. I discuss a differing definition of the term ‘self-regulation’ and provide information on a belief that differs from my own. More specifically, I
note how self-regulation is used to explain another approach to learning that does not necessarily parallel mine.

Finally, my approach to researching this topic was generative. I am left with many further questions and have been presented with other avenues of potential interests to pursue. Exploring self-regulation has allowed me to learn more about my beliefs and values as a teacher and discover why it is things are important to me. It has also served as a prime example of the ways in which teacher inquiry can create a continuous cycle of questions to investigate.

**Historical Background and Terminology**

Self-regulation (SR) is the “ability to voluntarily control our thoughts and actions to achieve personal goals and respond to environmental contingencies” (Woolfolk & Perry, 2012, p.344). More specifically, in relation to a school setting, SR teaches learners to “understand and deliberately manage their engagement in activities” (Butler & Perry, 2014). This includes responding appropriately, flexibly, and most importantly, adaptively, to whatever the task at hand requires of them in a given circumstance.

Self-regulation is a term that developed out of Lev Vygotsky’s work on culture as a major factor in the cognitive development of children (Whitebread, et al., 2009). He argued that self-regulation developed in 3 stages. The first stage is when children are regulated by an adult. The second stage is when children begin monitoring one another. The final stage is when the child begins to regulate their own behaviour (Woolfolk & Perry, 2012). It is a term that falls under the social-emotional development of a student.
In recent research, it seems SR can be further broken down into 3 distinct branches: emotional regulation, self-regulated learning, and a somewhat new area called socially responsible self-regulation. Emotional regulation is the “ability to effectively cope with affect in order to pursue goals” (Hutchinson, 2013, p. 3). Self-regulated learning is defined as “independent and effective approaches to learning,” in which learners are aware of their strengths and weaknesses and are capable of accessing a list of strategies to appropriately meet their needs (Hutchinson, 2013, p. 4). Socially responsible self-regulation is “children’s engagement in self-regulation in social-situations” (Hutchinson, 2013, p. 5). Because my inquiry question is focused on the classroom setting, much of my findings will be in relation to self-regulated learning. However, the term self-regulation will be used to encompass all three aspects, unless otherwise specified.

All forms of SR consist of three components: metacognition, motivation, and strategic action (Huchinson, 2013). Metacognition involves an awareness of your personal characteristics in relation to the demands and tasks that people are asking of you (Butler & Perry, 2014). For example, students might ask themselves, “what is my job in this situation?” or “what are my abilities that might help me achieve this task?” Learners who exhibit highly developed self-regulation often believe that their abilities are incremental and can develop with support. Motivation accounts for the will that learners bring to a situation (Butler & Perry, 2014). Strategic action requires students to know, choose, and use strategies and tools in a given situation to accommodate their abilities and to reach a given goal (Butler & Perry, 2014). Learners with high self-regulation are not only able to identify strategies, but know how to use them and most importantly, can recognize when to adapt and change them.
There is another definition of self-regulation which involves “the ability to manage your own energy states, emotions, behaviours, and attention” and “being able to deal effectively and efficiently with stressors” (Shanker, n.d., para. 5). While I have no issue with this concept, it is not the self-regulation strategy that I am referring to throughout my project. This alternative perspective will be explored later in my paper.

**Why Self-Regulation? - My Perspective**

My decision to pursue self-regulation developed through a combination of personal interest, my practicum experiences, as well as a growing curiosity that resulted from the research done for this inquiry.

My fascination with self-regulation is ongoing and has been something I have been aware of since high school. Since the age of 5 or 6 I have kept diaries. Looking back on them now, it was very much a regulatory and reflection technique I used, without being aware of it. Reading through my thoughts from childhood through to now, it is evident that I used this outlet to help me cope, monitor, and work through things I was experiencing in those moments. In this stage of my life, I have found that my metacognition is becoming more and more present and noticeable in my everyday life. I often find I am asking myself why it is I feel a certain way and what are my options in moving forward.

My two week practicum led me to my initial interest in self-regulation. The students at my school are involved in a program called the Zones of Regulation. The Zones of Regulation is “a systematic, cognitive behaviour approach used to teach self-regulation by categorizing all
the different ways we feel...into four concrete zones (Kuypers, 2011, para.2). These zones are blue, green, yellow and red. The blue zone represents a low state of alertness in which students might be sad, bored, sick or hungry. The green zone is a calm state of alertness where students are happy, focused, and ready to learn. It is argued that this green zone is where “optimal learning occurs” (Kuypers, 2011, para. 6). The yellow zone is a heightened state of alertness where students may experience elevated emotions, for example frustration or anxiety. The red zone is an extremely heightened state of emotions where emotions are intense and students are “out of control” (Kuypers, 2011, para. 4).

The Zones method “provides strategies, to teach students to become more aware of, and independent in controlling their emotions and impulses, managing their sensory needs, and improving their ability to problem solve conflicts” (Kuypers, 2011, para.2). This was the first time I had experienced an explicit teaching of the subject. What really pulled me in was when students were asked to track their zones throughout the day, noting whether they were in the red, yellow, green or blue zone at given times. Students were able to identify how they felt and seemed quite familiar with the method and aims of the Zones approach. I found myself wanting to know more. Were there patterns amongst the charts? Did students feel similar to other students at certain points of the day? Do specific subjects tend to put students in a particular zone? More specifically, though, I wanted to know if students understood what these zones meant outside of simple emotion identification and if they knew what to do with this information. I was interested in knowing if students could go beyond this and had the ability to focus more on what came next. While this form of self-regulation is present in schools in many
different ways, as mentioned earlier it is important to note that this usage of the term ‘self-regulation’ does not parallel mine.

Finally, my growing curiosity in the subject played a large role in helping me develop my specific question. My initial project was aimed at investigating how an explicit teaching of self-regulation could benefit students. However, after beginning the research process, I was exposed to the different types of SR that existed and the distinction became quite clear. It led me to more of an awareness of how passionate I was about self-regulation itself. I began to realize that much of the theory, practice, and language behind SR aligned with my teaching philosophy. Because of that, I changed my question to its current format of how teachers can create a classroom context that supports self-regulation.

**Other Perspectives**

As mentioned in the above sections, self-regulation has another definition and application. In this project, self-regulation is used as a concept that emphasizes students as autonomous, in charge of their learning, and feeling they have options and know how to use and choose them. Other perspectives of self-regulation view it as “effortful control” or “the ability to stay calmly focused and alert, which often involves - but cannot be reduced to - self control” (Shanker, 2010, p. 4). It also involves a large focus on “up-regulating” and “down-regulating” a student’s “emotions and desires” (Shanker, 2010, p. 6). This definition and methodology seems to view self-regulation more as an approach to student behaviour rather than student learning. It is more focused on why students might be struggling in “paying attention, ignoring distractors, inhibiting impulses,” and “overall, maintaining a state of being calmly focused and alert” (Canadian Self-Regulation Initiative, 2015, para. 3).
I initially struggled with seeing how the two definitions of self-regulation differed, but through this project I was able to better recognize the distinction. What is perhaps the clearest way to distinguish between the two concepts, both defined as self-regulation, is what the central objective of each approach is. One concept is much more focused on assisting a student to remain in an optimum state of emotion. This involves a large emphasis on figuring out why certain behaviours might impair or interfere with a student’s ability to learn (Canadian Self-Regulation Initiative, 2015b). The other is focused on a process of metacognition, motivation, and action. More explicitly, it is interested in a student’s ability to identify their strengths in relation to what it is they are trying to achieve. While it does involve attention, it is more interested in the strategic action that comes next.

While it is not my intent to discredit Shanker’s work on self-regulation, I believe that students can move beyond simple emotion identification. It may serve as a starting point, especially for young children, but students have the ability to not only identify how they feel, but also how they learn, work with others, and interact in social situations.

**Research Findings**

My question specifically addresses the teacher’s role in creating a classroom environment that supports it. Because of this, much of my research findings are focused specifically on self-regulated learning. Many of the specific strategies, however, could also be applied to emotional regulation and socially responsible self-regulation. While there are many different opinions and findings on what might be considered the most effective ways to foster SR in the classroom, there are some consistencies.
Creating open and complex tasks is a strategy that I noticed was laced through my research. Open and complex tasks are often cognitively demanding (Perry, Phillips, & Hutchinson, 2006), involve cross-curricular integration (Hutchinson, 2013), offer a variety of solutions or answers (Hutchinson 2013), and allows for differentiated learning (Hutchinson, 2013; Perry et al., 2006; Whitebread et al, 2009). In framing tasks this way, it will allow students to identify, test, and discover what they are capable of. Students who understand the material and want to challenge themselves have the option to do so, while students who are struggling can adapt the task to fit their abilities. It also shares the responsibility of learning with the students, rather than placing it all on the teacher. Students are both challenged and expected to identify their strengths and areas of need, giving them more control over their learning. It also creates the opportunity for students to demonstrate their learning and provide evidence of their knowledge in ways they feel best reflect them.

Student choice is another common theme amongst research and will likely develop hand in hand with the above strategy (Perry, Hutchinson, & Thauberger, 2008; Perry, Vandekamp, Mercer, & Nordy, 2010). Because a large component of SR involves strategic action, student choice needs to be made available in order to achieve this. In providing students with the opportunity to exercise autonomy, it allows them to take authority over their learning and become actively involved in their education. It also promotes the idea that the classroom decisions students make are meaningful and important. Student agency also teaches them to figure out what it is they want to learn, why they want to learn it, and how to go about
doing so. This process echoes the 3 components of self-regulation: metacognition, motivation, and strategic action.

Finally, the most common and adamant way in which teachers can develop student self-regulation is through constant support and scaffolding. It also involves an awareness that the development of self-regulation skills is a process and requires commitment and discipline from both students and the teacher. While this may not seem unique in relation to my topic, my research has led me to learn that the most principal way a teacher can begin to develop self-regulating ability in students is to demonstrate continuous and persistent reinforcement of a specific type of classroom community. More specifically, teachers must develop an explicit understanding with students that they are there for emotional comfort and are a reliable source of reassurance during times of discovery.

One important element of this teacher support and scaffolding is to create an environment in which students “view errors as opportunities to learn” (Perry et al., 2006, p. 239) and use this as evidence for what it is they need to change to move forward (Perry & Vandekamp, 2000). In a classroom where students understand that errors and mistakes are stepping stones in the learning process, there will be more willingness to challenge and participate in more demanding, higher level activities. This will in turn require teachers to give valuable and meaningful feedback, simply another way to scaffold student learning.

While the above three strategies were most common, other suggestions were also provided. Patrick (2010) suggests that students need to have an internal list of strategies, approaches, and tools for when they are in need of help or have identified that they are unable
to complete a given task. Grau and Whitbread (2012) state that collaboration and group work is important in developing self-regulation because it serves as an opportunity for students to identify their understandings and abilities as an individual in relation to the group.

Regardless of the specific strategies that different literature argues, it seems that student self-regulation is an attainable goal for a teacher. It also seems clear that it will require a whole class devotion in order to achieve SR. It should be noted that none of the research I encountered argued for one sole strategy, seemingly suggesting that in order to create the necessary classroom context, multiple strategies and techniques are required.

**Links to Practice**

The above findings suggest ways in which a teacher can introduce SR in the classroom and techniques for developing it with students. How might these look in concrete examples? First and foremost, if teachers are hoping to establish a classroom where students are to develop self-regulation, the most effective way to do so would be to share this with students. In informing students of the characteristics of self-regulation and the expectations it places on both you as a teacher and them as learners, it will help to establish a foundation for the strategy.

In terms of complex and open tasks, a simple adjustment might be to change how lessons and activities are framed. Well thought out lessons work towards a learning objective with a larger PLO in mind. Because activities will be framed to meet these objectives, simply altering something a guiding question could allow for teacher support of student self-regulation. This aspect is very similar to inquiry based learning, in which students have more
freedom to problematize a specific topic. As long as expectations are clear, this modification will provide opportunities for them to discover their capabilities at their own pace.

In terms of student choice, this will most likely be a natural result if the above strategy is implemented. Tasks that are open should have room for students to decide how it is they wish to approach the activity. Initially, students might require prompts in being able to recognize which options are available. Giving examples of potential directions is a great way for students to begin to exercise choice. Gradually, students will be able to take this step without teacher prompts and make their own decisions on the direction they wish to take on a given task. Making these choices available is the first step in allowing students to become advocates for their learning needs, an important aspect in developing successful self-regulation.

As mentioned, teacher support and scaffolding is perhaps the most important and effective way to create a classroom context that supports self-regulation. Teacher scaffolding should be an integral part of any teaching philosophy, however, because SR takes time and commitment to develop, it needs to be done in a very specific and intentional way. Modelling tools and strategies used during self-regulation is a great way to provide explicit support for students. Demonstrating that mistakes are a natural and important part of the process and that each person has strengths and weaknesses will help set an example for what students can expect in the classroom. Although this may seem relatively easy to implement, in reflecting upon past and present experiences in relation to student assessment and feedback, it is not often that space and time is made to explore mistakes. The majority of the time, student errors
are highlighted for the sole purpose of correction. If committing to the development of SR, teachers need to take the time to evaluate these mistakes and discuss with students why they happen and how they can be used as a learning tool.

Another great way for teachers to help their students in developing their SR abilities is to create an open and ongoing dialogue within the classroom. This dialogue can take the shape of simple class discussions, one on one conversations with students, or co-creation of activities and accompanying criteria. Clarity and transparency in what you expect of students and what students can expect of you will demonstrate that you value their learning and place worth in what they have to offer.

So What?

I feel self-regulation is an important skill that contributes to academic and social success. Moreover, I believe teachers should support the development of SR in their classrooms. If students are able to practice highly developed SR, it will allow them to become highly engaged with their learning, move towards a growth mindset, and develop a sense of empowerment. The ability to self-regulate in an emotional, academic, and social way is a valuable skill that extends beyond both the classroom and the school year. SR undoubtedly has its academic relevance, but one’s ability to identify thoughts and feelings, recognize needs, and take the appropriate steps is an important skill at any age and in any setting.

A common worry with self-regulation is the time involved in supporting students and the workload that might be created with open tasks and student choice. The teacher’s role in creating a classroom in which students can exercise SR is front-loaded. Much of the explicit
teaching and specific guidance will occur at the beginning of the process when students are still learning what is expected of them. Gradually, once students begin to develop SR, there will be less formal instruction needed and time can be spent on other aspects of development.

In terms of the workload that might be created from making options available to students, teachers are still welcome and encouraged to set parameters. What might make these parameters and limits different from a non-SR classroom would be the ways in which students are able to display their learning. For example, teachers can still limit the scope of an activity, but allow students to choose different mediums to explore it. In the long run, it will actually require less preparatory time on the teacher’s end. Students will develop an understanding of creating tasks on their own and exploring the options that are available to them.

**Now What? - Closing Thoughts**

Self-regulation is a relevant and important topic for educators and will involve a complete commitment to the process. It is a concept that will allow students to respond “flexibly to the demands of a wide range of contexts” (Woolfolk & Perry, 2012, p.344). More importantly, it is a skill and a strategy that students can continue to develop beyond the classroom and use in their everyday life. SR also has similarities to differentiated learning, an approach to education that is becoming more and more of a reality in the school setting. I would argue, though, that differentiated learning places more responsibility in the teacher’s identification of individual needs whereas SR is more of a tandem recognition involving both the student and the teacher.
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Investigating SR has left me with a growing interest in further pursuing it. I am particularly interested in the social aspect of the topic and am left wondering about the role it plays in the classroom. Because students are not schooled in isolation, exploring the ways in which students use metacognition, motivation, and strategic action in regards to social situations is very appealing to me.

This project has helped me realize the wonderful and effective way a single question provides teachers with the opportunity to combine their personal passions with their career aspirations. It served as a catalyst in helping me realize the vast nature of teacher inquiry and the ways in which it can provide possibilities for the teaching community to grow as a whole and presents endless opportunities for deeper learning.
References


Grau, Valeska and Whitebread, David. 2012. Self and social regulation of learning during collaborative activities in the classroom: The interplay of individual and group cognition. Learning and Instruction, 22, 401-412.


