Developing Strategic Learners: Supporting Self-Efficacy Through Goal Setting and Reflection

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Introduction

Writing is a challenging literacy task (Graham, Harris, & Chambers, 2016). For learners to be effective writers, they need to understand and respond to the needs of the audience, to represent the characteristics of the discourse, to have stylistic variation, and to write with grammatical and syntactic accuracy and clarity (Hayes, 1996; 2006). Throughout the writing process, writers apply cognitive and metacognitive strategies to achieve their writing goals and produce a coherent message. When they reach the end of their work, they should also reflect on their use of strategies, on what they learned, and set new goals and learning objectives. Without a process of goal setting to identify areas of improvement, learners may come to judge their performance solely by a grade, which may affect their self-efficacy and mindset that writing is a fixed ability (some people are born good writers). Students may not have a good understanding about how to set goals, reflect on their progress, and grow through cycles of goal setting, application, reflection.

Thus, the purpose of this paper is to comment on the value and importance of goal setting for students and teachers. Specifically, the use of goal setting after self-evaluation and revision are explained. Self-efficacy, the process of goal setting, effects on growth mindset, and self-regulation are first explained. Then the instructional approach and its components are presented with materials for classroom use. The paper closes with guidance for teachers' goal setting and clarifications about the meaning of instructional goals and professional goals.

Self-Efficacy in Writing

Self-efficacy relates to beliefs that someone holds that they can be successful at completing a task or not. Bandura, defined self-efficacy beliefs as "*people's judgments of their capabilities to organize and execute courses of action required to attain designated types of*

performances" (Bandura, 1986, p. 391). Self-efficacy in writing refers to beliefs a writer holds on their ability to be a successful communicator and writer. These beliefs are strongly influenced by the social context, the classroom, as well as the writer's emotions and past experiences. For instance, if a writer has been consistently told that their papers are not clear, not well written, and has received poor grading, the writer is very likely to develop avoidance goals, and the belief that independently of the task and effort, the outcome will not change. Overall, beliefs are strongly affected by previous experiences of successes or failures, by the observation of others' success or failure, by comments that others make about one's ability, and by emotions about tasks (e.g., anxiety about a task can negatively affect self-efficacy) (Bandura, 1986; 1994; 1996; 1997). Self-efficacy beliefs connect with writing performance (Bruning & Horn, 2000; Graham & Harris, 2005; Pajares & Johnson, 1994, 1996) and can have a strong influence on the effort, motivation, perseverance, feelings of stress, and overall actions that people take (Pajares, 1994; 1996; Pajares & Valiante, 1997).

Bandura referred to four sources of self-efficacy: Mastery experiences, vicarious experiences, social persuasions, and physiological and emotional states (Bandura, 1997). Mastery experiences refers to previous experiences that resulted in success. Previous, successful experiences lead to an interpretation of the person's capability to complete similar tasks; thus, the person develops a self-efficacy belief that s/he is able to achieve a specific writing task. For instance, when a writer has engaged in writing an opinion paper and was successful in its completion, it is more likely to develop the belief that s/he can write this type of genre in the future. Mastery experiences and perceived mastery experience have a strong influence in the development of self-efficacy beliefs (Pajares, Johnson, & Usher, 2007).

Vicarious experiences relate to the observation of others who perform tasks that may be unknown or not as familiar to the writer. The observation of models that are similar to the observer can significantly affect writer's self-efficacy beliefs as they are able to observe the completion of the task and thus develop the needed familiarity and comfort to attempt to complete it as well as the belief that they are capable to effectively complete it. The use of coping models that overcome difficulties while completing a task can be more supportive compared to mastery models. That is because observers are able to better understand how to effectively overcome a challenge that they will very likely also encounter (Zimmerman & Kitsantas, 2002).

Social persuasions refer to verbal comments and judgements that others make about writers' performance. Positive comments and praise can affect the writers' beliefs and effort. Similarly, negative comments can demotivate and weaken writers. When actions are negative (e.g., overcorrection) but comments are positive (praise), the former can have higher influence on writer's self-efficacy beliefs than the latter (Pajares, Johnson, & Usher, 2007). Finally, emotional states such as stress and anxiety can influence self-efficacy beliefs. Thus, when writers feel stress about their abilities to complete a task, they can become even more anxious and develop negative self-efficacy beliefs and result in poor performance.

Because of low self-efficacy, students may develop the belief that being a writer is a fixed condition: Someone is born to be a writer. Such a belief contrasts an incremental belief of ability that writing develops and is the result of effort. People hold fixed and incremental views on intelligence (Dweck & Master 2009), on reading (Baird, Scot, Dearing, & Hamill (2009), on mathematics (Rattan, Good, & Dweck, 2012), and develop a mindset that progress is not attainable. Learners with an entity belief may have a sense of helplessness and gradually avoid

asking for help or engaging with writing tasks. This avoidance is due to the need not to reveal to others their perceived incompetence and avoid feelings of embarrassment. Further, learners with a fixed mindset may focus more on the performance (and grade) and not on the learning and development of understanding (Hochanadel & Finamore, 2015). The use of feedback that provides students with information about their progress can decrease students' anxiety compared to feedback that points out the distance from the expected, ideal performance. Such feedback promotes a growth mindset as it supports students in seeing that improvement is the result of learning and effort (Ng, 2018).

Goal Setting and Goal Orientation

Self-efficacy beliefs can affect writers' goal orientation. There are mastery goals, performance goals, and avoidance goals reported in the literature (e.g., Middleton & Midgley, 1997). Mastery goals refer to increases in competence and the will to increase competence in a specific skill (Elliot & McGregor, 2001). For example, in the case of writing, mastery goals would refer to improvements on writing competence for a specific type of writing and self-improvement (e.g., striving to clearly communicate ideas to readers). Contrary to mastery goals, performance goals refer to increases in performance relative to others. Thus, the focus is on social recognition and on attaining a standard (e.g., a grade) that will be better compared to others. In this case motivation is external.

Mastery-avoidance goals may refer to avoidance of challenging tasks as there is a comfort of competence while completing a specific type of task. For instance, continuously selecting to write a story versus engaging in other genres. This may also involve writing about a topic a writer is very familiar and successful with without choosing a different one. Mastery avoidance goals can inhibit performance (Yperen, Elliott, & Anseel, 2009). Performance-

avoidance goals take place when learners avoid engaging in a learning situation because they do not wish to fail in front of others or perform less compared to others (Elliot, 2009; Yperen, Elliot, & Anseel, (2009). Therefore, they may avoid completing a task, may not ask for help (as this will reveal lack of competence compared to others who do not ask for help), and may not share information about their performance with others.

Self- Regulation in Writing

Self-regulation refers to the ability of a learner to manage affect, cognition, and processes for the completion of a specific task and goal (Schunk, & Zimmerman, (1997; 2007); Zimmerman & Schunk, 1989; Zimmerman & Kitsantas, 1999; 2002; Zimmerman, B. J., & Risemberg, 1997). Schunk and Zimmerman (2007) describe a model for the development of self-regulation that is based on observation, emulation, self-control, and self-regulation. At the observation stage, learners observe a model that completes a task while making visible and audible the cognitive pathway for its completion. In writing, this observation can refer to the completion of a task such as planning and can involve coping processes for the learner to see how the use of specific strategies results in the expected outcomes. At the emulation stage, learners engage in the completion of the task with feedback and social guidance. The emulation stage is not a copying and replication stage, but rather a stage in which the learners *stretch their muscles* applying the task and receiving feedback from peers. The self-control stage refers to the learners' use of the model independently. The strategy and skill are the same as the one modeled, and learners apply what was taught without any modifications and adaptations. The self-regulation stage is when learners have internalized the skill and strategy and adapt it to contexts and settings other than the ones modeled to them. Cognitive changes on the use of strategies and skills is mediated through social interactions and the internalization of those.

In writing, the Self-regulated strategy development model (SRSD) strives to support students' internalization of writing strategies through the completion of instructional steps that refer to: 1. Development of background knowledge (about the writing task, the type of writing, needed vocabulary), 2. Discussion about the task, its application, importance, and use, 3. Model it with live modeling of the task and processes used for its completion, 4. Memorization of the tasks and processes as well as language necessary for the specific task, 5. Support it with small group practice, practice with a peer, and one-on-one instruction, 6. Independent practice with teachers monitoring students' correct use of the taught strategy with opportunities for them to extend its use. SRSD has been examined across several settings and with different ages and shown its versatility in improving students' writing performance (e.g., Graham, Harris, & McKeown, 2013; Zumbrunn & Brunning, 2013) and the development of language that can support students' positive reinforcement (Harris, 1990).

Supporting Students' Goal Setting Through a Process of Evaluation in Genre-Based Strategy Instruction

Genre-based writing draws from the work of Rossbridge and Rushton, (2015), Martin and Rose (2012), Martin (2008) and the understanding that writing in the genres results in the teaching of concepts that are prominent in those genres as those relate to their purpose, structure, and language features (McCutchen, 1986). Genre-based strategy instruction provides systematic instruction of skills, processes, and linguistic concepts related to types of writing and has the following characteristics: 1. Connects reading and writing through a rhetorical analysis of readings to determine the genre, the structure, and uses this information to make meaning, progress monitor meaning making, and summarize content (Tierney & Shanahan, 1991; Traga Philippakos, in press). 2. Connects reading, planning, and evaluation through the use of the same

genre elements that are used as a guide for meaning making, are used to develop and organize ideas for planning and drafting, and are used as evaluation criteria to critically reread and set goals for revision (Englert, Raphael, Anderson, Anthony, & Stevens 1991), 3. Promotes self-regulation through goal setting and continuous reflection (drawing from SRSD; Harris & Graham, 2009), 4. Explicitly refers to the organization of genres, their linguistic demands and characteristics, and their syntactic features (e.g., use of simple sentences for suspense in mysteries), and 5. Addresses evaluation through application of genre-specific criteria (Philippakos, 2017). The Strategy for Teaching Strategies includes the components of instruction as reads below and can be used by teachers to develop their own lessons on genres (Philippakos & MacArthur, 2019; Traga Philippakos, 2019; Philippakos, MacArthur, & Coker, 2015):

1. Introduction to the writing purposes.

2. Introduction of genre via read-alouds.

3. Evaluation of good and weak examples.

4. Think-aloud modeling.

5. A focus on self-regulation and a mini-lesson.

6. Collaborative practice.

7. Guided practice.

8. Preparation for peer review, self-evaluation, and peer review.

9. Editing for Spelling, Capitalization, Indentation, Punctuation, and Sentences (SCIPS).

10. Continuous practice to mastery and independence.

Goal Setting as Product of Evaluation Embedded in Gradual Release of Responsibility

Development of expertise takes place within a gradual release of responsibility model with the teacher gradually scaffolding students' application to independence (Pearson, & Gallagher, (1983). Since modeling is at the core of self-regulation (Schunk, & Zimmerman, 2007), teachers model the process of evaluation (Lesson 3 in STS) through the use of well-written and poorly written samples that represent students' grade-level. Teachers discuss with students the characteristics of text that contribute to good quality and clarity for readers. They then introduce the genre elements and explain how they function as evaluation criteria. Using a scoring system of zero, one, and two (0,1, 2), they explain that a score of zero means that a specific element, language characteristic, or syntactic element is not present, a score of one means that it is present but unclear to readers, and a score of two means that it is clear and well developed for readers (See Figure 1 with sample procedural rubric).

Once teachers model the process of evaluation, they collaboratively practice with students the analysis of other papers written by unknown others supporting emulation and giving feedback on students' use of the strategies. Thus, students with feedback and guidance evaluate papers and apply the evaluation criteria. In this process, it is explained that progress is possible when writers use the evaluation results to identify learning goals for improvement. Next, teachers provide students with their own papers that were part of preassessment to develop goals for improvement. Students reread their work and by using their rubric evaluate their paper and write a specific goal or goals. At this stage, in order to support students' self-efficacy beliefs, teachers may work with individuals to help them develop attainable goals as they may tend to develop overly ambitious ones. For instance, for a student who has not included any of the elements of procedural writing (See Figure 2 with elements of procedural writing), expecting to develop all of the elements in the next paper, it would be an overwhelming goal.

Figure 1

Evaluation Rubric for Procedural Writing

		Score of a 0, 1 or 2
Beginning	Topic: Is there a clear topic that focuses the paper and the readers' attention?	
	Purpose / Importance: Is there a logical explanation on the importance and purpose of the task?	
	Materials/Skills: Is there a clear list of materials and skills that the learner will need?	
Middle	Are there clear and logical steps with relevant explanations? St. 1 Ex. 1 St. 2 Ex. 2 St. 3 Ex. 3 St. 4 Ex. 4	
End	Is there a clear restatement of the purpose/importance of the task?	
	Evaluation: Is there an evaluation for the learner to know whether the task was successful?	
	Message to Reader: Is there a message for the reader to appreciate the task or its importance?	
GOALS	What are my goals for revision? What are my future writing goals?	
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Figure 2

Elements of Procedural Writing

Beginning	Topic/Task	Is there a clear topic/task that focuses the paper and the readers' attention?
	Purpose / Importance	Is there a logical explanation of the importance and purpose of the task?
	Materials/Skills	Is there a clear list of materials and skills that the learner will need?
Middle	Steps and Explanations (what and why or how)	Are there clear and logical steps with relevant explanations? St. 1 Ex. 1 St. 2 Ex. 2 St. 3 Ex. 3 St. 4 Ex. 4
End	Evaluation	Is there a clear restatement of the purpose/importance of the task?
	Restate Purpose/ Importance	Did the writer restate the purpose of this paper and the importance of learning about this task?
	Message to Reader	Is there a message for the reader to appreciate the task or its importance?
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The student is highly likely not to be able to achieve that goal and then develop the belief that the strategy is not useful or that s/he is not competent enough. Therefore, developing with teachers' support a goal to include a *Beginning* with a statement of purpose and a list of materials, a *Middle* with Steps (possibly introduced with sentence frames if needed), and an *End* with a restatement of the purpose is more likely to be attained and less likely to overwhelm the writer.

After teacher modeling of the writing process for the genre (Lesson 4 of STS) and collaborative practice (Lesson 6 of STS) for the use of cognitive strategies (what to complete at each stage of the writing process) and metacognitive strategies (how to use the specific strategies and how not to get overwhelmed), teachers proceed with students at guided practice (Lesson 7 of STS). Students work on their own paper applying the taught skills and strategies while they focus on the completion of their own goals. Teachers' provide feedback on the use of strategies and on students' effort toward their goals.

When papers are written, teachers model how to give feedback and repeat the process of evaluation but now the focus is on identifying revision goals and on giving feedback that is honest and is based on the genre's expectations (Lesson 8 of STS) (Philippakos & MacArthur, 2016a,b). Once the process is modeled, teacher and students practice evaluation on papers written by other (unknown students) and students revisit their papers to self-evaluate to identify their progress toward the goals they had set prior to the writing task. Once they complete peer review and editing (Lesson 9 of STS), writers reflect:

- On their use of the strategies (did I use the strategies as designed to be used? What did I change? Was this effective in achieving my goals?)

- On their completion of their goals (did I achieve the goals I had set? What helped me achieve those goals? If I did not achieve them, what inhibited by ability to do so? What goals do I have for the next task?)

- On their effort (did I make the time and effort to use the strategies? Did I work as directed? If I did not, what did I learn that I should try to do in the next task?)

- On their learning (what did I learn in this process as I used my strategies that I can apply in the next task?)

- On their affect (how do I feel about the writing task? How do I feel as a writer? How can the use of strategies affect my feelings?)

Then with new goals in mind, students proceed to complete a new writing task (Lesson 10 of STS). If they have indeed achieved their previous goals (the use of self-evaluation and peer review and teacher evaluation can provide this information), writers may add to their previous goals; otherwise, they may modify them in order to gradually progress toward writing in a specific genre. In the previous example on procedural writing, the writer may add to the previous goals the inclusion of explanations (when appropriate) in the Middle after Steps and the inclusion of Evaluation at the End. This process of evaluation with continuous goal setting and reflection can support (See Figure 3) students' motivation and belief that 1) writing progress is attainable through the use of strategies, 2) writing can be taught and they can improve as writers, 3) they can reach their goals to improve as writers.

The Role of Teachers in Promoting a Growth Mindset

For students to develop the belief that improvement is the result of learning and effort through systematic and continuous goal setting, teachers should also tend to their instructional and professional goals. Research in mathematics shows that teachers who hold entity theory

Figure 3

Cycle of Goal Setting, Application, and Reflection
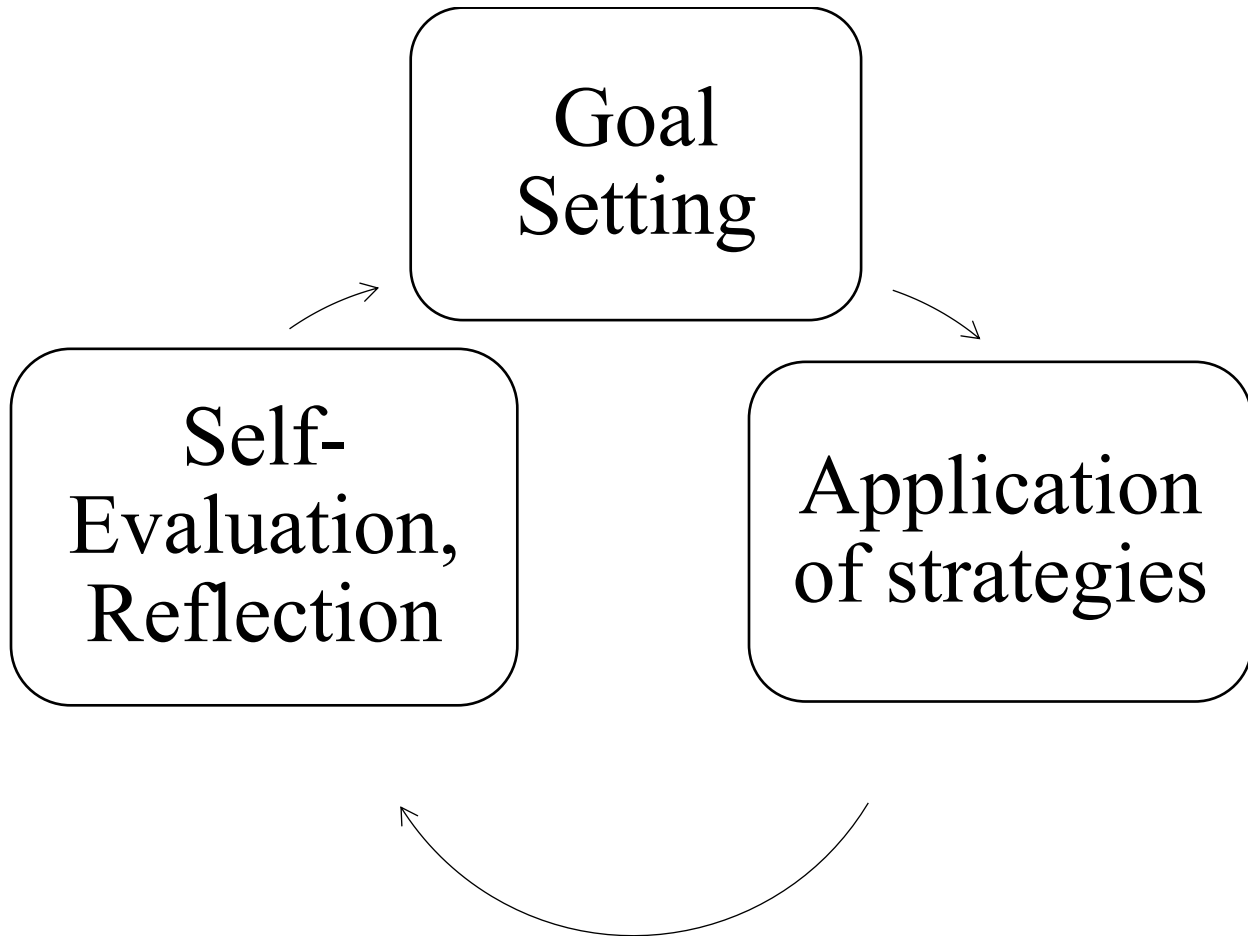
beliefs (that not everyone can be good in math) tend to develop a sense of comfort to students

(e.g., less homework) that gradually demotivates them (Rattan, Good, & Dweck, 2012). Thus,

teachers should hold themselves to the belief that writing can be taught, and they can teach their

students to be writers. They should equally develop self-efficacy that their writing instruction

results to specific student writing outcomes. Consequently, teachers in turn should engage in a

process of goal setting to develop Instructional and Professional goals (Philippakos &

MacArthur, 2019).

Instructional goals. As a cycle of instruction completes with students evaluating their own papers and determining what they need to work on in their next work, teachers should carefully examine students' progress and identify areas that are still challenging to the whole group or challenging to individuals. For instance, teachers may observe that at the evaluation-to-revise stage students tend not to be honest and rather assign high scores to their partners with minimal comments. This information can be valuable for teachers to design mini-lessons. Therefore, teachers can set as a goal to conduct an additional lesson on the value of evaluation and constructive feedback and discuss the negative effects that feedback has when it is not honest and sincere. Teachers' observations as well as a carefully review of students' work (thus, both sources of qualitative and quantitative data) can lead teachers to the development of goals for their instruction that will reflect the needs of students. Instead of teachers only identifying what students' work does not include and does not have evident, teachers can develop the language in their classroom and in their Professional Learning Communities (PLCs) about what they need to teach, reteach, and what goals they set for themselves in their instructional delivery. Therefore, the language used shifts from "*students cannot do X*" to "*I need to reteach/represent/work again on X.*"

Professional goals. Professional goals relate to instructional goals, but they have a broader meaning. Once teachers identify the need for a specific instructional goal/s, they may also identify the need to develop their knowledge on a specific topic. This is done in order to increase their expertise in area or develop expertise as ongoing learners. For instance, if students find the process of revision challenging, teachers may set as a professional goal to learn more about evaluation to revise and revision. Therefore, they may seek the expertise of collaborating researchers for answers or resources to read, discuss and conduct an article or book study with

their peers at PLCs and or seek professional resources to better understand the process of evaluation, the challenges that learners' face, and ways to better support them. The instruction and professional goals that teachers develop can also be shared with students within a community of learners so that learning is not one-dimensional and one-directional but is circular between teachers and students.

Discussion

Writing is a challenging construct to teach, to study, and to evaluate (MacArthur, 2011). In the process of developing as writers, students develop beliefs of adequacy or inadequacy that can impede their growth as writers and learners. These beliefs can originate from the writer, from the task, and from the environment and students may develop an inaccurate understanding about their capabilities to achieve writing goals and be writers.

The process of evaluation with continuous goal setting and discussions with peers, among teachers and students about the progress made, the use of strategies to achieve specific goals, and the development of new goals can support writers to develop a belief a) that writing competence is attainable and that they can be effective writers; b) that learners are not born as writers and that writing can be taught; c) that they may not be able to complete a specific task, yet, but they have the tools and ability to complete it through their work and systematic goal setting. Bandura (1986) shared that,

> *educational practices should be gauged not only by the skills and knowledge they impart*
>
> *for present use but also by what they do to children's beliefs about their capabilities,*
>
> *which affects how they approach the future. Students who develop a strong sense of self-*
>
> *efficacy are well equipped to educate themselves when they have to rely on their own*
>
> *initiative.* (p. 417)

This process of goal setting through evaluation, discussion, reflection, and new goal setting can support students' self-efficacy beliefs and the development of persistence toward goals supporting a growth mindset. Instructionally, the goal is for students to develop mastery goals and the belief that they can improve in their writing competence. For this, students should be supported in setting goals, setting priorities in their goals, reflecting on their progress toward them, and modifying them as needed (Troia, Shankland & Wolbers, 2012). For this, modeling of goal setting and provision of private feedback versus public feedback can support students' mastery goal development as their focus becomes their personal journey of improvement (Wentzel & Wigfield, 1998). When students reflect on their progress and on the ways they reached success, apprehension toward the task can decrease, and they can develop the belief that progress is attainable. This process of reflection can support self-efficacy beliefs that support growth and progression toward goals.

Teachers in this process, also develop their self-efficacy belief and shift their comments from what students cannot yet do to what they need to teach or reteach or themselves learn for students to develop a needed skill. Therefore, teachers may invest time and effort to expand their learning horizons and professionally grow in their knowledge on specific topics and on their pedagogy for instructional delivery. Thus, in such an environment, goal-setting and reflection is part of everyone's learning experience.

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