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Utilizing goal setting strategies at the middle level: Helping students self-regulate behavior

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For three weeks, 34 middle level students in the Midwest identified goals, completed pre- and post-surveys, and regularly reflected on their respective goal attainment. Quantitative and qualitative analyses revealed that participants reported increases in self-regulatory behavior.

Introduction

Teachers know better than anyone the trials and tribulations of getting students to actually be *students*. *Students* come to class prepared, pay attention, complete assignments, and engage in a host of other behaviors that facilitate the development of knowledge and skills in and out of the classroom. Unfortunately, many children come into the classroom without really knowing how to be *students*. In many cases, they have not taken the time nor have they been shown how to be the *students* we expect them to be. This paper describes how pre-service teachers were able to get students to be thoughtful about their own behaviors. We hear how students learn to set goals, recognize what they must do to meet those goals, and then act upon that recognition. We see this transition through one student who initially discusses class participation as “...like look[ing] smart”, and later describes it as “...mak[ing] sure [to] ask questions when I don’t know the answer”. The development of being a *student* is also witnessed as a student initially views respecting others in class as “...controlling my feelings” and later describes it as “...not yelling at people and to just say please stop nicely and to take a deep breath”.

This paper explains and provides the results of an action research project implemented by a

group of graduate level pre-service teachers. These pre-service teachers were in the student-teaching phase of their middle childhood (grades 4-9 in two content areas) licensure program. The participants available to them were students enrolled in their cooperating teachers’ classrooms. Thus, the key purpose of this project was to examine an approach through which teachers could promote students’ self-regulative processes within the context of everyday teaching practices.

Literature Review

For teachers in the classroom, a significant concern focuses on classroom management. The time, effort, and energy teachers spend attending to behavioral issues could be better spent on instructional best practices. Commonly, teachers address these issues through behavioral management systems, with a heavy reliance on punishment. Unfortunately, these practices are not effective in the long run, and they often neglect to purposefully foster students’ reflective thinking regarding their own behavior (Seifert, 2004). The promotion of goal-setting and related strategies may be used as a classroom management tool to help middle-level students self-regulate their own behavior.

Current research indicates that self-regulation, the ability to control one’s own emotions and

behaviors, is positively correlated with academic achievement, social abilities, and self-esteem (Crocker, Brook, Niiya, & Villacorta, 2006; Kitsantas, Winsler, & Huie, 2008). Self-regulation is also strongly correlated with academic self-concept; if students are cognizant that they can accomplish a task, they will be more willing to regulate their behavior to accomplish that task (Ommundsen, Haugen, & Lund, 2005). Self-regulation may be fostered via various mechanisms including teachers' encouragement of self-monitoring (Cooper, Horn & Strahan, 2005; Pintrich, 1995; Zimmerman, Bonner, & Kovach, 1996), which helps students to clearly perceive the meaning behind their efforts to regulate their behaviors and the resulting associations with successful outcomes (Seifert, 2004). Self-monitoring may include student-documented homework logs and student-logged grade record sheets. Facilitation of self-regulation via students' self-monitoring and self-evaluating promotes their opportunity to find meaning in their work and, consequently, fosters motivation to further their endeavors (Malmivuori, 2006).

Self-regulation is also facilitated by self-reflection, which involves the ability to think about one's own thinking and learning processes (Suskie, 2009). It can be considered a learned skill; while we all possess the ability to self-reflect, learning how to analyze one's own behaviors, choices, or knowledge can be considered a difficult task (Stevenson, 1994). Purposeful time and efforts in school and at home should be dedicated to self-reflection in order to foster both students' abilities and opportunities for them to understand the meanings of events they experienced. While teachers and parents may promote self-reflection, peers can help students most by helping them define the strategies and plans they utilize during problem solving (Costa & Kallick, 2000). In the classroom, specific facilitator practices such as the modeling of self-reflection and the provision of starter questions or prompts to promote more thought provoking reflections (Costa & Kallick, 2000) will aid students' ability to self-reflect.

The notion that self-regulation fosters in individuals a willingness to overcome task obstacles and increases self-esteem presupposes that those individuals who believe they can accomplish a task goal will follow through and, therefore, accomplish that task goal as they offer themselves praise. In reality, self-regulation is considered a multi-layered intrinsic pendulum; as tasks cause pressure or stress, individuals lose motivation and begin to withdraw from them. The reaction to withdraw reflects individuals' inability to cope with their present state or place while attempting to accomplish a goal; challenges include overcoming setbacks, dealing with failure, and revising tactics to accomplish the goal (Carver & Scheier, 1998; Crocker et al., 2006). Furthermore, individuals who experience apprehension or a weak self-concept often self-handicap themselves and fail more often at accomplishing task goals (Ommundsen et al., 2005).

In the classroom, teachers may employ goal-setting strategies as models to facilitate students' self-regulative behavior. Goal setting involves the creation of a target or plan for what one wants to accomplish or achieve. Such planning fosters the development of self-regulative behaviors among individuals, providing a level of self-motivation. In general, goals can be described as being either proximal or distal in nature. Proximal goals are expected to be met in the near future. Distal goals are long-term. With proximal goals, individuals tend to focus on a specific task and perform the needed acts to succeed at that task. However, with distal goals, individuals consciously perform a task as a means to an end. Often, individuals set multiple proximal goals in their attempts to meet their larger, more important, distal goal (Plaks, McNichols, & Fortune, 2009).

The inclusion of goal-setting instructions may lead to positive outcomes, as they provide a means by which students are encouraged to create academic goals derived from the educational curriculum. This development will then foster overall academic achievement (Suk-Hyang, Palmer, & Wehmeyer, 2009). One avenue used to facilitate goal-setting is the

utilization of student-developed SMART (specific, measurable, attainable, realistic, time bound) goals. This may foster students' recognition of the specific behaviors that were utilized to achieve a goal and, as a result, students may begin to self-regulate those behaviors. Students may pay closer attention to their behavior as a means for ensuring goal attainment. The authentic nature of self-created goals may make them more valuable and more likely to be achieved (Eggen & Kauchak, 2007).

The purpose of this paper is to examine how specific teacher support, the explicit promotion of goal-setting strategies, impacts students' recognition of their own behaviors and their abilities to self-regulate such behaviors. This study examined the following: 1) the influence of goal setting and of self-reflection related to goal-attainment opportunities on participants' awareness of their behavior; 2) the influence of the awareness of self-behaviors on participants' self-regulative practices; and 3) changes in participants' goal orientations as self-regulative processes were fostered. A mixed-methods approach was utilized for this study. Paired-sample t-tests and correlations were conducted to analyze quantitative data. Analyses of the qualitative data examined emerging themes.

Methodology

Participants

Students in grades five and six from four schools in the Midwestern United States were asked to participate in the study. Two schools are in suburban areas, one is in an urban area, and one is in a rural area. Within three sites, participants were recruited in their homeroom class. Participants in the fourth site were recruited from one class period, as they were not assigned a homeroom class. Overall, 75 students were provided consent letters for their participation. In all, a total of 34 students participated in this study, one of whom had an Individual Educational Plan (IEP). All identifying information was destroyed and data on participant gender were not collected.

Measures

Goal options. Initially, the researchers discussed student behavior concerns they were observing during their pre-service field experiences. Subsequently, they generated a list of student behaviors that needed improving across all of their respective sites. They developed a list of six specific goals reflecting a combination of both academic and non-academic behaviors. For example, an academic goal was *to complete all assignments on time*, while a non-academic goal was *to treat all people and things in the classroom with respect*. Participants chose one goal on which to focus. See Table 1 for goal options and corresponding behaviors.

Student pre- and post-survey. Selected items from the Patterns of Adaptive Learning Scales (PALS) (Midgley et al., 2000) were utilized for the pre- and post-survey. The PALS was developed to examine how student learning is related to motivation, behavior, and affect. Some items were modified, and other items were also added to the survey. Participants completed the 28-item questionnaire, for which they self-reported their behaviors in and out of class; responses were based on a three-point Likert scale ranging from 1 (not true) to 3 (really true). Statements focused on both desired and undesired classroom behaviors. Of the 28 items, 17 were utilized in the analyses.

Student goal journal. A goal journal sheet was developed for each of the six goals. The top of the form stated the goal and associated behaviors outlined in Table 1. Below that was a space for each day of the week. Each day, participants took informal notes on how they were progressing towards meeting their goal.

Weekly reflection sheet. The weekly reflection sheet consisted of seven items. The first item asked if the participant met his/her goal for that week. The remaining open-ended items focused on why his/her goal was or was not met, his/her understanding of the goal, and what he/she could do the following week to assure goal attainment. For example, participants were asked, "What can I do to make sure that I meet my goal next week?"

Procedures

Toward the beginning of the researchers' year-long pre-service field experience, they brainstormed ideas for their required master's inquiry/action research project. After reflecting on their own experiences and collaborating with their respective cooperating teachers about potential project ideas,

the researchers determined that they would develop a research agenda focused on trying to improve their students' behaviors by helping them self-regulate better. Their cooperating teachers and their respective school principals had to approve the project idea before they could move

Table 1

Pre-generated Goal Options and Corresponding Behaviors

<p>Goal #1: My goal is to class prepared and ready to learn. This means that I will: -Bring all of my materials (paper, book, sharpened pencil, folders/binders & agenda) to class. -Be ready to learn and participate in class</p>
<p>Goal #2: My goal is to complete all assignments on time. This means that I will: -Write my assignments in my agenda/planner. -Finish all questions on my assignments. -Finish all homework and in-class work.</p>
<p>Goal #3: My goal is to not make disruptions during class. This means that I will not: -Interrupt the teacher during class. -Get out of my seat unless I have permission to do so. -Talk when I am not supposed to.</p>
<p>Goal #4: My goal is to participate during class. This means that I will: -Ask questions during lessons -Answer questions that my teacher asks. -Work with and help my group members during group activities -Complete in-class activities and homework.</p>
<p>Goal #5: My goal is to pay attention to the teacher during class. This means that I will: -Take notes during lessons -Follow along with the teacher -Stay alert and stay on task -Following directions</p>
<p>Goal #6: My goal is to treat all people and things in the classroom with respect. This means that I will: -Not call people names -Not yell at other people or fight with other people -Not take other people's things without permission. -Take care of my textbook and all other materials in the classroom</p>

forward. An Institutional Review Board for Human Subjects petition was submitted and approved prior to the implementation of the study. Students were eligible to participate if they had a signed consent form and if they signed an assent form. Participants were reminded of the voluntary nature of the project prior to its implementation.

Participants were given an introductory lesson on goal-setting in their classrooms. Some of the guiding discussion questions for the lesson included "What is a goal?" and "Have you ever set a goal?" During this lesson, the researchers also shared examples of various goals, including: *After high school, I plan to attend college and I want to*

receive 'As' in all of my classes this year. The researchers continued by describing the research project and the participants' role in the project.

After the goal-setting lesson, participants completed the pre-survey. Based on teacher recommendations and pre-survey results, participants selected a personal goal from the pre-generated list. They were then given a packet that included a daily journal sheet for each of the three weeks and three weekly reflection sheets, all of which were specific to their selected goal. The researchers explained to each of their respective students that they would be asked to complete the daily journal and weekly reflection sheets. Given the prompts and questions, the researchers explained to the students that it was important for them to think about and pay attention to their behaviors every day. Also, students were asked to hold on to these sheets and asked not to lose them. Participants then individually and in groups brainstormed ways to achieve their goal.

The study took place over the course of the following three weeks. Each day, participants were given approximately five minutes at the end of class to complete their daily journal sheet. Every Friday, they were given approximately 10 minutes at the end of class to complete the weekly reflection sheet. After the three-week period, participants completed the post-survey. Although time was given to students to complete the journals and weekly reflections, the researchers noted that not all of their participants completed the forms. As these tasks were part of the university-required research project, the students had been told that their participation in the study was voluntary and that they were allowed to stop at any time. Consequently, some of the students chose not to provide informative content. Students were aware that since it was a research study, their grade would not be affected in any way.

Data Analyses

At the end of the three-weeks, the researchers matched each student's pre- and post-survey, goal journals, and reflection sheets. All identifying information was then destroyed.

Both quantitative and qualitative data were collected and analyzed. The data from the student pre- and post-data were quantitative in nature and were utilized to examine changes in

self-reported behavior after goal-setting and self-reflective strategies were implemented. The purpose was to see if there were significant changes in participants' responses to the items prior to and after engaging in the goal-setting strategies. Correlations between the various items were examined in order to determine if any of the behaviors were positively or negatively associated. Paired sample *t*-tests were utilized to indicate if the difference in the average score on each item before and after the goal-setting strategies was significantly different from zero.

The qualitative data from the journals and reflection sheets were analyzed to determine students' thoughts about their behavior across the three-week period and suggested rationale for any changes that may have occurred. First, all responses from the participants were typed into one dataset. Each student's responses were grouped so that the researchers were able to see how each individual student responded over the course of the three weeks. This allowed the researchers to note individual and aggregate changes in students' responses. If students did not have a completed form for each journal and weekly reflection, the data were not used in the following analyses. A completed form merely meant that the student put a response; there was no judgment of the quality of the response for the purpose of determining the sample. Qualitative data were then examined for themes central to the list of goals and their associated behaviors that were provided to students at the onset of the study. The data were further categorized based on whether they reflected students meeting or not meeting those particular goals.

Results

Analyses were conducted to examine students' reported behaviors and attitudes before and after engaging in goal-setting strategies. A paired sample *t*-test was conducted to examine any differences in students' self-reports of their classroom behavior before and after goal-setting strategies were implemented. Analyses revealed that after engaging in goal-setting activities, participants were significantly less concerned about the perceptions of their peers.

That is, participants were less likely to care if their peers thought they were good in school, $t(32) = -3.22, p = .003$. These results were supported by participant journal comments. For instance, at the beginning of the study, a participant wanted to be called on when he/she “know[s] the answer,” implying that this participant is concerned about peer perceptions. Three weeks later, this same participant became less concerned with peer perceptions as he/she “stood up for [him/herself], shared [his/her] writing, answered and asked questions and talked more” each day.

At the beginning of the study, student responses did not indicate a relationship between getting distracted and their desire for their friends to know they are doing well in school. However, after the goal-setting strategies, participants who were not concerned with others’ acknowledgement of their success noted that group work was distracting $r(28) = -.39, p = .03$. Similarly, it was only after the three-week study that participants who completed classwork recognized that they got distracted when working with other students $r(28) = .40, p = .03$. Meanwhile, those who were less likely to complete class work did not state that group work was distracting.

Just as with the aforementioned relationships, participants were able to recognize the relationship between getting in trouble and following directions only after experiencing the goal-setting activities. In the post-survey, students who reported getting in trouble with peers also reported that they were less likely to follow directions well $r(30) = -.46, p < .01$, which was supported by qualitative data. During the latter part of the study, one participant indicated that his/her goal of paying attention was achieved as he/she “paid attention and followed directions,” and that he/she was “not getting in trouble” when he/she was paying attention. Another participant, whose goal was to not be disruptive, reported that he/she tended to “obey the teacher, listen, and follow directions.” During the second week of the study, this participant also reported awareness

of disruptive behavior as evidenced with “I get yelled at for not paying attention.” One participant even noted that he/she “used the steps of following directions” to achieve his/her goal of not being disruptive. Various other participants also stated that following directions would help them reach their goal of paying attention, which they recognized they were meeting when they did not get into trouble.

The changes in the quality of responses in the daily journals and weekly reflections indicated that as time went on, students were better able to recognize and articulate their classroom behavior. During the first week of journaling, comments from students were minimal and neglected to provide specific behavioral and attitudinal trends. Responses included, “do everything I did this week,” “work harder,” “do what I’m supposed to do,” “be nice,” and “don’t fight.” Comments changed dramatically during the latter part of the study. Participants provided more in-depth remarks regarding their behavior in class and even reported how they better attended to their behaviors in an effort to be less disruptive. These comments included, “be quiet and listen to teachers instructions,” “be nice and watch what I say,” “I took notes and I stayed on task,” “I remembered to do my homework and write down all assignments,” “ask nicely and try to keep my anger inside,” and “I listen to the teacher and make eye contact.”

Discussion of the Results

Based on the journal comments made during week one, with respect to one’s desire to look good academically, the participants seemed to be performance-oriented, seeking reinforcement from their peers. Performance-oriented students are more concerned with the perceptions of others and often fear that having to put forth effort is a sign of incompetence. Therefore, performance-oriented students will likely avoid tasks for which they do not foresee immediate and easy success (performance-avoidance orientations), yet they will confidently engage in tasks in which success is assured (performance-approach orientations) (Guerra, Hsieh, & Sullivan, 2007). After

employing goal-setting strategies and reflecting on their actions, the participants' journaling demonstrated a move from performance-oriented to mastery-oriented with respect to meeting their proximal goals. Mastery-oriented students believe that with enough effort they can improve their abilities to complete the assigned tasks (Guerra et al., 2007). The participants were no longer focusing on the reactions of their peers, but rather reflecting on their own behaviors. This transition may have been fostered by the qualitative nature of the questionnaires. Suskie (2009) notes that such assessments are beneficial to the learning process. The weekly questionnaires prompted students to identify specific behaviors that led them towards either successful or unsuccessful goal attainment.

While the participants were striving towards attaining a solid identity for themselves, they were likely to consider and place importance on the reactions of their peers. This was evidenced in the first week of journal comments. However, during the study, participants were focused on setting and achieving goals, forcing them to consider their own behaviors. As the participants began to become self-reflective, focus shifted from peer perceptions to self-perceptions. This type of introspection, fostered by self-reflective processing, may have promoted self-regulation. As research has indicated (Suskie, 2009), self-regulation can be promoted by purposeful opportunities for self-reflection. In this case, the process of requiring students to set a specific and appropriate goal, think about how well that goal was met each day, and then to reflect on goal attainment at the end of each week all exhibit this purposefulness. The researchers ensured that time was given to the students to really think about their behaviors and to put them to paper. In doing so, students were more likely to become cognizant of their actions.

The post-survey results indicating a negative relationship between a desire for peer academic acknowledgement and group work distraction may reflect a greater degree of participants' understanding of their own behavior. Those who were more concerned

with positive peer perceptions may have worked harder in groups so as to maintain such positive perceptions, and may have reported less distraction during group work. Likewise, those who did not desire positive peer perceptions may have been focused more on the task at hand; consequently, they may have been more cognizant of how other students negatively impact their learning.

After the participants employed goal-setting strategies, those who successfully finished class work were likely to say that group work was distracting. Given this lack of finding in the pre-survey data, such results indicate that goal-setting strategies fostered participants' awareness of their own group participation efforts. It may be the case that those who were confident in their ability to be successful individually were worried about peer distractions. Meanwhile, those who were not likely to report that they finished class work may have neglected to report group-based distraction as they may have attributed class work completion to others in the group.

Results indicated a negative correlation between students' self-reported responses of getting work completed and getting distracted from their group of peers; there were a number of participants who reported that they were not able to get their work completed and who also reported that they were getting distracted in a group. This correlation is significant, as students may have been developing an awareness of their behavior and heightening their awareness of the group's behavior. For example, during the first week, one participant stated: "I need to listen to the teacher and get all my homework done," reflecting a connection between his/her behavior and the teacher. However, towards the end of the study, this same participant noted, "[I] still keep working and not talking when I don't need to," focusing on the behavior itself. This change also represents the student's ability for thoughtful self-reflection. Self-reflection is facilitated when students are attentive to their behaviors while problem solving (Costa & Kallick, 2000). The response at the end of the three weeks was much more focused on behavior; instead of a general reference to

listening, it included specific behaviors to address.

The post-survey results and analysis that indicated a negative relationship between getting in trouble and following directions well may be an indication of individuals becoming more aware of their own behaviors. These results favor a growth in self-regulation, as the relationship did not exist in the pre-survey data. It may be the case that after participating in goal-setting strategies, participants were more conscious of the classroom connection between getting in trouble and following directions. Becoming aware of one's own actions is a positive step towards self-regulation.

Implications

Given that participants may have different reasons for engaging in or avoiding group work, which may directly impact academic effort, teachers should be purposeful in its utilization. Two considerations for in-class groups include a time limit and the delegation of individual responsibility, both of which allow students to work more effectively and efficiently. This fosters students' abilities to work on individual work as well as to achieve group success. Individuals who report a lack of class work completion may not be concerned with being a distraction in a group, while those who do complete their work may be more apt to recognize distractions to their learning. This makes purposeful group creation all the more important.

Having observed changes in the overall quality of journal responses, these opportunities for students to reflect on their own behavior may have assisted them in recognizing how easily distracted they can be by their peers. As such, teachers may choose to employ daily reflections or goal-setting activities in the classroom in order to allow students to become more aware of their behaviors.

The use of goal-setting strategies is significant for teachers as they consider classroom management and classroom activity structure. Goal-setting strategies can promote a positive classroom environment because students are

forced to consider their own behaviors and how those behaviors affect both their own success and their peers in the classroom. If students are not functioning properly in groups, they are probably unaware of problematic, distracting behaviors that cause the group's dysfunction. As students work in a classroom setting, teachers need to consider taking the time to work on self-regulation, which can promote best practices in education such as higher involvement, greater effort, and higher-order learning.

Limitations

Given the nature of the project, there are some limitations that may have influenced the outcomes of the study. First, the study took place over the course of three weeks during the beginning of the academic year. It could be the case that the students were attempting to impress their teachers and start the school year off right. Conducting this study during the middle or end of the academic year may have yielded different results. Furthermore, during the three weeks, participants were asked to continually think about their goal attainment via formal journals and reflections. We are very aware that providing students time every day during the academic year to do this has multiple drawbacks. First, this requires too much time that could be spent on learning the required content. Second, students would quickly tire of this and would likely cease to provide thoughtful comments. While we recommend that teachers require formal reflections from students, it may be most prudent to require this at intermittent times during the year. This will help to keep the students cognizant of their progress towards goal attainment. Lastly, the pre- and post-survey may not have been the most appropriate to use. As it was, it included some items from a validated scale and others that were interesting to the researchers. An appropriate survey should be developed and piloted to ensure that it is the most appropriate to use for a particular group of students.

Conclusion

Implementing goal-setting within the classroom has yielded important results within our study of three weeks, but there is much refinement required. Future research should consider allowing for a much longer period of time in order to teach the participants about goal-setting, self-reflection, and self-regulation as well as to collect data. Additionally, examining correlations between academic success and self-regulation would allow for much more in-depth data. Further research should also consider a closer look at performance goals versus mastery goals, giving participants an opportunity to excel by becoming mastery-oriented.

References

- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.
- Cooper, J. E., Horn, S., & Strahan, D. B. (2005). If only they would do their homework: Promoting self-regulation in high school English classes. *High School Journal*, 88(3), 10-25.
- Costa, A. L., & Kallick, B. (2000). Getting into the habit of reflection. *Educational Leadership*, 57(7), 60-62.
- Crocker, J., Brook, A. T., Niiya, Y., & Villacorta, M. (2006). The pursuit of self-esteem: Contingencies of self-worth and self-regulation. *Journal of Personality*, 74(6), 1749-1772.
- Eggen, P., & Kauchak, D. (2007). *Educational psychology: Windows on classrooms* (7th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Guerra, N. S., Hsieh, P., & Sullivan, J. R. (2007). A closer look at college students: Self-efficacy and goal orientation. *Journal of Advanced Academics*, 18(3), 454-476.
- Kitsantas, A., Winsler, A., & Huie, F. (2008). Self-regulation and ability predictors of academic success during college: A predictive validity study. *Journal of Advanced Academics*, 20(1), 42-68.
- Malmivuori, M. (2006). Affect and self-regulation. *Educational Studies in Mathematics*, 63(2), 149-164.
- Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E., Anderman, L., Freeman, K. E., ...Urdu, T. (2000). *Manual for the patterns of adaptive learning scales (PALS)*, Ann Arbor, MI: University of Michigan.
- Ommundsen, Y., Haugen, R., & Lund, T. (2005). Academic self-concept, implicit theories of ability, and self-regulation strategies. *Scandinavian Journal of Educational Research*, 49(5), 461-474.
- Pintrich, P. R. (1995). Understanding self-regulated learning. In P. R. Pintrich (Ed.), *New Directions for Teaching and Learning*, 63, 3-12. San Francisco: Jossey-Bass.
- Plaks, J., McNichols, N., & Fortune, J. (2009). Thoughts versus deeds: Distal and proximal intent in lay judgments of moral responsibility. *Personality & Social Psychology Bulletin*, 35(12), 1687-1701.
- Seifert, T. L. (2004). Understanding student motivation. *Educational Research*, 46(2), 137-149.
- Stevenson, R. J. (1994) *Learning: Principles, processes and practices*, in R. Stevenson and J. Palmer (Eds.). Children, teachers & learning series (pp. 179-191) New York: Cassell Educational Ltd.
- Suk-Hyang, L., Palmer, S. B., & Wehmeyer, M. L. (2009). Goal setting and self-monitoring for students with disabilities: Practical tips and ideas for teachers. *Intervention in School & Clinic*, 44(3), 139-145. Retrieved from Education Research Complete database.
- Suskie, L. (2009). *Assessing student learning: A common sense guide*. San Francisco: Jossey-Bass.
- Zimmerman, B. J., Bonner, S., & Kovach, R. (1996). *Developing self-regulated learners*. Washington, DC: American Psychological Association.