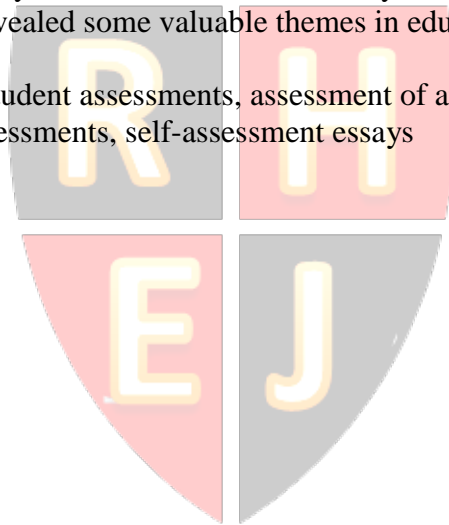


Reviewing the value of self-assessments: Do they matter in the classroom?

Brenda Logan, Ed.D.
Armstrong State University

In today's schools, teachers are constantly barraged with the question, how are the results of assessments used to drive instruction and practices in the classroom? Additionally, edTPA national portfolio guidelines for interns are not only emphasizing lesson planning but also highlights of all lesson assessments with rationales for using. Teaching videos, student work samples, and evidence of learning through data-driven graphs and charts representing the results of student learning are also aspects of this process. With an understanding of ongoing improved rigorous requirements for pre-service teachers, a college of education professor decided to closely analyze a yearly, student-required, rubric-based oral PowerPoint presentation. Upon completion of the oral presentation, students immediately wrote a personal self-assessment essay. Students were also asked to respond to two written questions: What do you now realize about self-assessments and will you use self-assessment essays in your future classroom, why or why not? Student responses revealed some valuable themes in education.

Keywords: self-assessments, student assessments, assessment of an oral presentation, themes in education, research on self-assessments, self-assessment essays



Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at <http://www.aabri.com/copyright.html>

INTRODUCTION

Education is forever evolving. Teachers are now admonished if they are not utilizing numerous methods for assessing students in the classroom, other than traditional methods, such as, a quiz or a chapter test. More and more, classroom teachers and professors in colleges of education are asked to involve students in the assessment process. Today the assessment in higher education is mobilizing towards a radical movement from conventional testing to evaluating the learning (Dochy, Gijbels, & Segers, 2006). Gallavan & Kottler (2009) declare that when students are acknowledged for expressing a point of view, offered options, and given possession of their learning, the level of interest, participation, and commitment will heighten their learning outcomes.

Self-assessments are deemed as a means to get students engaged and motivated about their own learning. According to McMillian and Hearn (2008) self-assessments are viewed as a process allowing students to evaluate their own work based on a prescribed set of requirements, for the sake of improving. Research suggests that self-assessments may prepare students for lifelong learning, the ability to self-critique, and the ability to reflect on their performance in an effort to contemplate on whether they are meeting the requirements (Johnson & Gelfand, 2013). Self-assessments fit well in today's typical classroom environment of standard-based, common-core teaching, and rubrics.

STUDIES IN HIGHER EDUCATION AND THE CLASSROOM

Forty-seven students in their fourth year in a science education program were asked to deliver a 15-minute presentation and afterwards the students filled out a checklist immediately after presenting and again after viewing the videotape of it. Eight students were also interviewed to gain additional information. The researcher wanted to determine the relationship between self-assessment and their teaching efficacy beliefs about teaching science. No significant relationship was determined but students agreed that this experience was useful for them and wished all courses had self-assessment procedures (Kahraman, 2014). Professor El-Koumy (2010) reported the results of two studies. In study one, to determine the effect of student self-assessment against no assessment control group on knowledge achievement and thinking skills in an English language methods course, he determined that there was nothing significant about the self-assessment group or the group not participating in the self-assessment. The author suggested that the students' lack of experience in self-assessment made it difficult and time-consuming. In study two; the self-plus-teacher assessment was more successful than just the self-assessment group in improving students' knowledge and academic thinking in an English methods course. The author contended that the students were more motivated due to teacher feedback and focus on strengths and weaknesses. Many assessors believe grades may interfere with this process and its purposes.

Walser (2009) wanted to determine in an action-research project if students in two classes (graduate and undergraduate) at a university would unfold significant information for improving the courses from both the professor and the students' position. These self-assessments proved to be useful and the professor continues to use the feedback to improve instruction and enhance relationships with students. Milne (2009) attempted to introduce self-assessments and self-evaluation into a science methods course for middle and high school teachers. Students were to participate in self-assessment tasks and at the end of the course, write a self-evaluation narrative

with a description of a self-grade, based on evidence of learning. The author was impressed with the deep thoughts expressed by her students. The need to utilize self-reflection and to train students to become reflective practitioners is crucial. Reflections provide a technology of self, and offers students the language needed for sharing. Self-evaluation allows students to understand the difference between their learning and their experiences. Science methods courses need to provide constant use of specific actions and strategies. Cindy Steinkruger (2007) in her action research project examined students' attitudes and vocabulary in an eighth grade mathematics class. The results revealed that self-assessment had a positive impact on the group's attitude and also revealed that students developed an increased awareness of their vocabulary usage in math.

RESEARCH ON SELF-ASSESSMENTS FOR STUDENTS AND TEACHERS

A number of teachers (76%) acquiesced to using self-assessments some of the time but still questioned the usefulness and the preciseness they held (Noonan & Duncan, 2005). When teachers were asked why they included self-assessments in their student experiences, some of their responses included these (Ross, 2006):

1. Allowing students to participate in the criteria increased student involvement in assessment activities.
2. It offered a different method of assessment.
3. Additional information about student preparation for the learning activity often revealed reliability of self-assessments and valid evidence.

The consistency of self-assessments tends to be high (Ross, Rolheiser, and Hogaboam, Gray, 2002; Sung, Chang, Chiou, & Hou, 2005). For the most part, reliability is positive in terms of consistency across tasks, across items, and for short time periods. There was less consistency over longer time periods particularly involving younger children.

The evidence of validity and self-assessment tends to be mixed. Boud and Falchikov (1989) reviewed 48 studies where students and teachers were in agreement but reviewers were concerned about how studies were carried out. Overall, students rate higher than teachers when tied to students' course grade. Once students are taught the process of assessing assignments, agreement for teacher and student increases (Fox & Dinur, 1988; Ross, Rolheiser, & Hogaboam-Gray 1999; Sung, 2005).

Other Studies

Some studies without offering training to students contributed to an increase in self-efficacy, motivation, and achievement (Hughes, Sullivan, & Mosley, 1985; Schunk, 1996; Sparks, 1991). Less extensive work in helping students self-assess reported positive results in writing improvements of student writing at the high school level (Hillocks, 1986; Arter, Spandel, Culham & Pollard, 1994; Andrade & Boulay, 2003; McDonald & Boud, 2003).

TEACHER CONCERNS ABOUT SELF-ASSESSMENTS (ROSS, 2006):

1. Some teachers may fear partnering with students in assessment will lower standards and allow students the opportunity to exaggerate their grades.
2. Students may be making mistakes without knowing it.
3. Students may not comprehend the requirements of the rubric or may not have the deductive reasoning skills necessary to carry out the process.

4. Some students may intentionally indicate the incorrect data from the rubric.
5. Some students may see this process as doing the teacher's job.
6. Teachers are worried that there is no genuine student investment in the task.
7. Teachers are concerned that parents might not appreciate their children taking a serious role in the grading process.
8. Building rubrics is a serious time element and the criteria might be too broad or too detailed.
9. It may not be represented in the end of course grade.
10. Teachers must build a classroom environment of trust and positivity with emphasis on improving what students ultimately learn.

Teachers who invest in teaching students how to assess can look forward to higher motivation and achievement for students (Ross, 2006 p.10).

SOME FORMS OF SELF-ASSESSMENT

Self-Assessments could follow several examples to include the following (Intel Teach Program: Assessing Projects, 2012)

- Conference (writing)
- Discussion (whole class or small group)
- Reflection journals
- Self-Assessment Checklist
- Interviews (teacher and student)
- Rubrics

Teachers could model best examples of any of the above to teach students how to perform the strategies. It is advised that teachers collaborate with students in creating the criteria for utilizing and understanding the process of incorporating self-assessments in the classroom.

Using Self-Assessments

Teaching can be more direct with ties to student learning needs thus supporting better use of classroom time (Stiggins, 2002). Rolheiser & Ross (2001) articulate that the more specific the requirements the more specific the learning outcomes. Self-assessments serve to develop independence and learning for life (Davies, 2000). Self-assessments are the blocks that build critical thinking skills (Skillings & Ferrell, 2000). Kramer (2009) believes using self-assessments equip students with the tools needed to access what they have gained from classroom teaching while Overlie (2009) contends that students become empowered to think and verbalize their thoughts.

Building Rubrics

Research has offered many reasons to encourage teachers to engage with students in building rubrics. Ainsworth and Christinson (1998) echo how the level of participation and commitment deepens when students have some control of setting the criteria. Davies (2000) and Andrade (2000) stated that students better comprehend their progress in learning when they have participated in the rubric process. Rubrics provide clear descriptions of progress in learning and challenges for areas of improvement. If students create rubrics, they can judge what they have

learned and can work to improve the quality of the learning (Andre, Du & Wang, 2008). Parents can also benefit from student understanding of rubric creations because they can have a better understanding of how they can fit in the child's learning progress (Ainsworth & Christinson, 1998). Additionally, Olina and Sullivan (2002) reported that 189 high school students and 6 teachers in science were involved in using ratings of student projects, posttest scores, and attitude surveys from teachers and students. The findings summarized some benefits from self-assessments, while the no-evaluation group liked participating in the experiments.

STEPS IN PREPARING STUDENTS FOR SELF-EVALUATION

Rolheiser and Ross (2001) discussed steps for student participation in self-evaluation: First, explain the misconceptions of self-evaluations. Include a simple definition that may be tweaked as needed. As part of the process, discuss why self-evaluation is important. Next, use a learning outcome that students have already surpassed and take them through these five steps: 1.) Define the criteria with students to judge their performance by brainstorming, compromising, and using student language to develop standards and rubric) 2.) Teach students how to apply to their own work 3.) Provide feedback on their self-assessments and 4.) Help students create goals and an action plan.

METHOD & PARTICIPANTS

Eighty-one pre-service sophomore students in a Southeast Georgia university required education course participated in a study in Fall 2014, Spring 2014, and Spring 2015. These students participated in an oral presentation, which required a rubric for grading. Upon completion of an oral PowerPoint presentation students were asked to self-assess their performance in writing and return to the examiner immediately upon completion. There were 69 (85.1%) females, and 12 (14.8%) males, with 63 (77.7%) Caucasians, 17 (20.9%) African Americans, and 1 (1.2%) Hispanic student. Twenty-one students were asked to fill out a Student Questions Sheet to gain more information about the impact of self-assessments. The course is one that emphasizes teacher planning, general pedagogical teaching methods, and practice in utilizing and selecting assessments for the classroom. The presentation is centered around a chosen, self-selected book, per student, on a current topic in education.

Instrument

Students were graded on an oral presentation using a rubric with requirements including the following items: poise 0-6, personal reflections 0-4, handout of PowerPoint 0-10, enthusiasm 0-4, proper attire/dress 0-4, basic grammar 0-10, legible and operational PowerPoint 0-10, format followed 0-6, delivery 0-15, time limit 0-6, book distributed 0-10, and content 0-15. The second instrument was a Student Questions Sheet with two questions: 1. After participating in an oral presentation graded with a rubric and being asked to write a self-assessment immediately afterwards, what do you now realize about self-assessments? 2. Would you use the self-assessment technique in your future classroom? Why or Why not?

PURPOSE

This information will guide practices in explaining and executing rubrics. It will reinforce a consistent practice in implementing student assessment essay results and will demonstrate a greater understanding of how students perceive course practices.

There are two questions that the author wishes to answer from this project: 1. Will a teacher-generated rubric for an oral presentation demonstrate any commonalities with a student-written assessment completed immediately after the presentation? 2. Can students discuss the value of self-assessments from a series of questions following an oral presentation?

ANALYSIS & RESULTS

This study is tied to the work of Glaser & Strauser, (1967). This constant comparative method analyzes each set of field notes (essays) after they have been turned in. The data is coded and compared and then examined with the previous data. The words of the students embody the themes and findings of this research. All data was identified and tallied. Each essay was examined for characteristics mentioned in the rubric with colored pencils used for labeling. There were 11 out of 12 areas discussed by students from the rubric: Poise, reflections, enthusiasm, attire/dress, format followed, operational PowerPoint, grammar, delivery, distribution of book, time limit, and content.

The first and most prevalent theme was poise. Sixty-five or 80.2% of the students wrote about whether they were in control. Often words such as not nervous, shaking, calm, or confident were addressed.

An example was a line from an essay- "When I actually presented, I was nervous and spoke quickly."

The second theme was delivery. There were 62.9% or 51 students who said they knew the material, did not look at notes or could elaborate on the topic.

An example like this said, "I am glad I did not have to use my notes or read directly off the slide."

The third theme was content. There were 49 or 60.4% who mentioned covering key items from the book, highlighting important aspects of the book, giving great examples, or describing ideas and points in the book. Two specific student examples retorted, "I could have elaborated a little bit more on the topic." "I believe I did a great job of describing the book."

The fourth theme (at 12 or 14.8%) was format followed. As part of this project, students were required to follow instructions pertaining to font size, slide number, and specific topics per slide. Phrases, such as, stayed within guidelines and correctly organized were addressed.

Two specific examples made these points: "I need to work on summarizing a little better, making sure slides are not too lengthy." "I stayed well within the guidelines of the assignment and hit most points that were emphasized in it."

The fifth theme (at 9 or 11.1%) was operational PowerPoint, legible and easy to follow. Phrasing such as, set up PowerPoint correctly, easy to read, font size right, and opened easily were articulated. This line was written in one essay, "Every slide was precise and easy to read and understand."

The sixth theme (at 8 or 9.8%) was time limit. Students were concerned about time limit and made reference to it with happy about finishing on time, and tried not to spend too much time on one slide. This comment should be noted as an example: "I have no idea how long I took. I feel like I didn't talk long enough."

Other themes mentioned were enthusiasm (7.4% or 6 students), thoughtful reflections and proper attire or dressed for presentation (4.9% or 4 students), and grammar and distribution of book at (3.7% or 3 students).

Next, The Student Questions Sheets were examined for common themes. These themes were categorized separately by examples of specific descriptive data tabulated under each. There were three overarching areas that dominated the descriptive data.

The Student Questions Sheet contained two major questions. Question #1 asked students to discuss what they realize about self-assessments after this experience. There were three themes that surfaced from this question: self-improvement, preparation, and reflection. Under self-improvement, the following comments resulted:

- Know right away what you need to improve; likely to learn from mistakes; help you realize mistakes
- How I did and how I can improve
- Pick out good and bad qualities; to be honest with yourself
- Think about what you liked and didn't like; realize what exactly you could improve
- What you did right; to identify problem areas
- Aware of specifics they did or did not do well on
- What needs to be improved or changed
- Makes you think about how you did; what could be improved

The second theme evolving was preparation. Students conveyed comments such as these:

- Could have prepared better
- Key tools in preparation of a presentation
- How you prepared for the presentation
- Information can be used in future presentation
- Zero in on items missed or not understood in the rubric
- Key to improving presentations in the future
- Help prepare for next assessment

The third theme pertained to reflection. The reflective theme was evidenced in these words:

- Allows you to reflect on your work
- Make you think about what you just did
- Reflect back on areas on rubrics and importance of them
- Reflect on skills and what you could have done better
- Chance to reflect from personal view
- Can reflect on your assignment
- Great way for students to reflect back on their performance

The second question pertained to whether students would use this self-assessment technique in their future classrooms. The big ideas/themes expressed were ways of grading, getting feedback, and giving students more responsibility for their learning. These were the comments voiced in their responses:

- To help with grading or doing math work to know how they feel about it
- It's feedback for me to know what my students think their strengths and weaknesses are.
- To give students a bigger sense of responsibility for their grades
- May be for math class to help improve student confidence
- For reading student ideas of how they feel about their work and could compare my thoughts

- To get students to recognize their strengths and weaknesses on whatever project they're doing
- After students receive grades as a way of them coming up with a plan of improvement
- In some areas as students reflecting on their writing
- As feedback so they can compare the pros and cons of their classwork
- As a preparation tool
- In 3-5th grades when students really start presenting projects
- Useful strategy for evaluating progress and if something works or not
- To know how students feel about themselves and their work
- Useful in letting students take full ownership of their grade from start to finish
- Would definitely use for group work that is to be presented
- Would use to force them to think critically about what they've done and what they need to fix for next time
- Would use for students to find their own mistakes before they receive any feedback from me the teacher
- Would allow students to use their upper level thinking skills

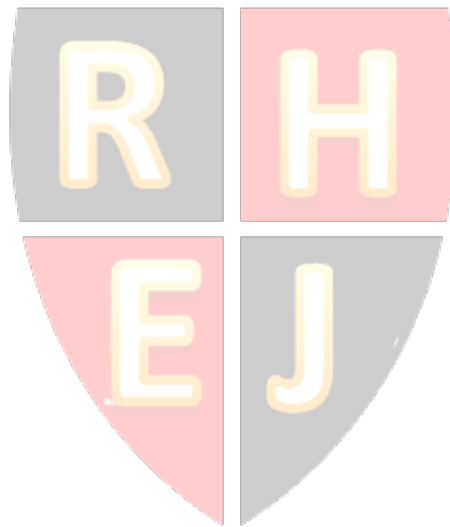
DISCUSSION

The six most prevalent themes in the student self-assessment essays were poise, delivery, content, format followed, operational PowerPoint, and time limit. This list is directly related to the rubric utilized in evaluating the oral PowerPoint presentations in this study. Students did pay attention to the characteristics listed on the rubric. As college faculty and public educators, it would be beneficial to spend deliberate time discussing and emulating how vital it is for pre-service teachers to incorporate in their repertoires that they must become graceful in presentations and must deliver meaty content. At the same time, students must prepare presentations that follow requirements and adhere to time limits.

The use of self-assessments is essential in our movement towards edTPA Portfolios for student interns. Today's interns must create portfolios that are evidenced-based to include student assessments utilized directly in planning lessons. Student work samples, an understanding and sample of how data drives instruction, as well as, classroom videos with details explaining why instruction is delivered the way it is, all comprise newly required portfolios. These will ultimately lead to the final certification process. Interns are expected to implement theories and research to explain practices. Blooms' taxonomy of higher levels of teaching such as, synthesizing and evaluating, are parallel to the themes discussed here. It would be remiss to not acknowledge Piaget's concept of constructivist learning, for it is through self-assessment essays, where educators can decipher how students are notably constructing their own knowledge and view of the classroom world. The responses from the Student Questions Sheet imply that students do understand the practice of self-discovery and the significance of deliberately requiring students to be accountable for their own learning. There are school systems now requiring public school students to evaluate teachers. Our pre-service teachers must become masters at self-assessing classroom instruction and practices.

CONCLUSION

It is past time to rethink assessment opportunities offered in the classroom. Self-assessments are about intellectual growth and creating life-long learners. With an understanding of the research, educators must overtly train students to become experts at self-assessing. In this age of technological advancements, educators must prepare students who can think, evaluate, and self-assess. Future studies must include larger populations with longitudinal and short-term timeframes. Furthermore, with what is known about self-assessments, adding individual conferences to this process should be a pivotal consideration. Though the research is mixed on self-assessments, there are enough studies suggesting that self-assessments can elevate the affective domain of learning in the classroom.



REFERENCES

- Ainsworth, L. & Christinson, J. (1998). *Student generated rubrics*. Orangeburg, NY: Dale Seymour.
- Andrade, H. (2000, February). What do we mean by results? Using rubrics to promote thinking and learning. *Educational Leadership*, 57 (5), 13-18.
- Andrade, H. G., & Boulay, B. A. (2003). Role of rubric-referenced self-assessment in learning to write. *Journal of Educational Research*, 97 (1), 21-34.
- Andrade, H. L., Du, Y. & Wang, X. (2008). Putting rubrics to the test: The effect of a model, criteria generation, and rubric-referenced self-assessment on elementary school students' writing. *Educational Measurement: Issues and Practice*, 27 (2), 3-13. Retrieved from <http://search.ebscohost.com/>
- Arter, J., Spandel, V., Culham, R., & Pollard, J. (1994, April). *The impact of training students to be self-assessors of writing*. Paper presented at the annual meeting of American Educational Research Association, New Orleans.
- Board of Trustees of the Leland Stanford Junior University. (2014, September). *Making good choices: A support guide for edTPA candidates*. Stanford, CA: Author.
- Boud, D., & Falchikov, N. (1989). Quantitative studies of student self-assessment in higher education: A critical analysis of findings. *Higher Education*, 18, 529-549.
- Davies, A. (2000). *Making classroom assessment work*. Courtenay, British Columbia, Canada: Connections.
- Dochy, F., Gijbels, D., & Segers, M. (2006). Learning and the emerging new assessment culture. In L. Verschaffel, F. Dochy, M. Boekaerts, & S. Vosniadou (Eds.), *Instructional psychology: Past, present, and future trends*. Oxford, Amsterdam: Elsevier.
- El-Koumy, A. (2010). *Student self-assessment in higher education: Alone or plus*. Paper presented at the CPLA Conference Lebanese American University, Lebanon.
- Fox, S., & Dinur, Y. (1998). Validity of self-assessment: A field evaluation. *Personnel Psychology*, 41, 581-592.
- Gallavan, N. P., & Kottler, E. (2009). Constructing rubrics and assessing progress collaboratively with social studies students. *The Social Studies*, 154-158.
- Glaser, B. N., & Struass, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Hillocks, G. (1986). *Research on written composition; New directions for teaching*. Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills.
- Hotard D. J. (2010). *The effects of self-assessments on student learning of mathematics* (Unpublished master's thesis). Louisiana State University, Louisiana.
- Hughes, B., Sullivan, H., & Mosley, M. (1985). External evaluation, task difficulty, and continuing motivation. *Journal of Educational Research*, 78 (4), 210-215.
- Intel Teach Program Assessing Projects. (2012). *Encouraging self-direction and collaboration: Self-assessment and reflection*.
- Johnson, C. S., Gelfand, S. (2013, July). Self-assessment and writing quality. *Academic Research International*, 4.4, 571-580.
- Kahraman, N. (2014, July). Investigating the relationship between self-assessment and self-efficacy of pre-service science teachers. *International Journal of Education and Research*, 2 (7), 77-90.
- Kramer, V. K. (2009). Engaging the Nintendo generation. In T. G. Guskey (Ed.), *The teacher assessment leader* (pp 227-247). Bloomington, IN: Solution Tree Press.

- McDonald, B., & Boud, D. (2003). The impact of self-assessment on achievement: The effects of self-assessment training on performance in external examination. *Assessment in Education*, 10 (2), 209-220.
- Milne, C. (2009). Assessing self-evaluation in a science methods course: Power agency, authority and learning. *Teaching and Teacher Education*, 25, 758-766. Retrieved from www.elsevier.com/locate/tate
- McMillian, J. H. & Hearn, J. (2008, Fall). Student self-assessment: The key to stronger student motivation and higher achievement. *Educational Horizons*, 40-49.
- Noonan, B., & Duncan, C. R. (2005). Peer and self-assessment in high schools. *Practical Assessment, Research and Evaluation*, 10 (17).
- Olina, Z. & Sullivan, H. J. (2002). *Effects of teacher and self-assessment on student performance*. Paper presented at the annual convention of the American Educational Research Association, New Orleans.
- Otero, V. K., & Nathan, M. J. (2008). Preservice elementary teachers' views of their students' prior knowledge of science. *Journal of Research in Science Teaching*, 45 (4), 497-523.
- Overlie, J. (2009). Creating confident, capable learners. In T. R. Guskey (Ed.), *The teacher assessment leader* (pp. 181-201). Bloomington, IN: Solution Tree Press.
- Rolheiser, C., & Ross, J. A. (2001). Student self-evaluation: What research says and what practice shows. Retrieved from http://www.cdl.org/resource-library/articles/self_eval.php
- Ross, J. A. (2006). The reliability, validity and utility of self-assessment. *Practical Assessment, Research and Evaluation*, 11 (10), 1-13.
- Ross, J. A., Rolheiser, C., & Hogaboam-Gray, A. (1999). Effect of self-evaluation on narrative writing. *Assessing Writing*, 6 (1), 107-132.
- Ross, J. A., Hogaboam-Gray, A. & Rolheiser, C. (2002). Student self-evaluation in grade 5-6 mathematics: Effects on problem solving achievement. *Educational Assessment*, 8 (1), 43-58.
- Ross, J. A., Hogaboam-Gray, A., & Rolheiser, C. (2002). Self-evaluation in grade 11 mathematics: Effects on achievement and student beliefs about ability. In D. McDougall (Ed.), *OISE Papers on Mathematical Education*. Toronto: University of Toronto, Canada.
- Schunk, D. H. (1996). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal*, 33 (2), 359-382.
- Skills, M. J. & Ferrell, R. (2000). Student-generated rubrics: Bringing students into the assessment process. *Reading Teacher*, 53 (6), 452-55. Retrieved from <http://search.ebscohost.com>
- Sparks, G. E. (1991). *The effect of self-evaluation on musical achievement, attentiveness and attitudes of elementary school instrument students*. Unpublished doctoral dissertation, Louisiana State University and Agriculture and Mechanical College.
- Steinkruger, C. (2007, July). *Do students progress if they self-assess? A study in small-group work* (Unpublished master's thesis). University of Nebraska, Lincoln.
- Stiggins, R. J. (2002). Assessment crisis: The absence of assessment for learning. *Phi Delta Kappan*, 83 (10), 758-765. Retrieved from <http://search.ebscohost.com/>
- Sung, Y. T., Chang, K. E., Chiou, S. K., & Hou, H. T. (2005). The design and application of a web-based self-and peer-assessment system. *Computers and Education*, 45 (2), 187-202.
- Walser, T. M. (2009). An action research study of student self-assessment in higher education. *Innovative Higher Education*, 34, 299-306. doi:10.1007/s10755-009-9116-1