

Research Rationale/Question

As a middle and high school social studies teacher, I have long embraced the importance of disciplinary literacy and engaged students in reading a variety of texts relevant to the topics of the courses I teach. Together we have explored various texts including sections of textbooks as well as newspaper articles, journal articles and primary source documents relevant to our study.

The implementation of the Common Core State Standards (CCSS) (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010) has increased educators' awareness of the need to not only focus on student reading, but also students' ability to write across the disciplines. As of the 2014 – 2015 school year, students in Wisconsin will take several assessments that include an evaluation of their writing including: The Badger Exam (during grades 3 – 8), ACT Aspire (grades 9 and 10) and ACT (grade 11); all exams include a writing requirement (Wisconsin Department of Public Instruction, 2015). Writing has increased in importance both in our Standards and in the assessments that evaluate students' ability to meet them.

In order to help students increase their ability to meet the expectations set forth by the Standards and to prepare them for the assessments that they will take each year, an increase in student writing across the disciplines is prudent. In collaboration with the sophomore biology teacher and the literacy coach, the researcher and her colleagues will increase the expectations for student writing by embedding at least five persuasive disciplinary writing assignments per class during the course of the semester. Each assignment will ask students to write in response to a prompt that requires them to summarize several pieces of disciplinary text and evaluate them in

order to write an evaluative argument. This work will help the researcher and her colleagues to determine if increased engagement with writing helps students improve their disciplinary writing performance. The research question is as follows: Will students who write persuasively across two disciplines monthly increase their ability to summarize, synthesize and evaluate text in their disciplinary writing tasks?

Review of Research

The CCSS place equal importance between reading and writing. The CCSS “present the most sweeping reform of the K-12 curriculum that has ever occurred in this country” (Calkins, Ehrenworth, & Lehman, 2012, p. 1). One of the most important changes in the CCSS is that the purpose of educating students is not to cover course content, but rather to lift the level of student achievement as defined by their ability to comprehend, interact with and write text.

The reading of informational texts should be spread across the curriculum and be taught by teachers of various subjects (Buehl, 2011; NGA & CCSSO, 2010). Language, including reading, is best learned when it is a part of other purposes, activities and learning efforts (Pearson, 2009); literacy development in the disciplines strengthens students’ abilities to demonstrate literacy demands across disciplines. This is no easy task as literacy demands vary from one discipline to another (Buehl, 2011).

The work of developing students’ literacy should ground the focus of all teaching and, thus, all teachers need to assume this responsibility. The CCSS emphasize both developing reading and writing skills in addition to creating a spiral curriculum aligned to both of these core instructional concepts. “Students need to become strong writers...they also must become proficient readers of more complex texts” (Calkins et al., 2012, p. 18). Students are expected to

compete nationally and globally when they leave K12 education and the CCSS are internationally benchmarked so that all students who meet them will be prepared to succeed globally (NGA & CCSSO, 2010).

The expectation of the CCSS is that students will be provided instruction in literacy development across the curriculum and not just in their English/Language Arts classes. While not intended to replace content standards in history/social studies, science and technical subjects, the CCSS should serve as another layer of expectations for the content standards already in place (NGA & CCSSO, 2010).

The CCSS emphasize a shared responsibility across the content areas for the literacy development of students. In part this is due to the 21st century society in which these students will grow and develop. Twenty-first century skills (Partnership for 21st Century Skills, 2011) required for success in today's world include: the ability to process and comprehend a vast amount of information in an era with mass amounts of information readily available, the ability to use higher level thinking skills, and proficiency at comprehending a variety of text structures and types. Informational literacy development, including both reading and writing, is also important to students who go on to a four-year college, a technical school or immediately enter the workforce, military or trades ((NGA & CCSSO, 2010).

Methods

Participant selection

This study will be conducted in a Midwestern suburban school district. The school district serves a population of 3,174 students, 1650 female and 1524 male students. The high school where the study will take place serves a population of 984 students, 511 female and 473

male students. Across the high school, 6.9% of the students reported themselves as Asian/Pacific Islander, 10.2% as Black, 3.7% as Hispanic, 0.9% as American Indian/Alaskan Native and 78 % as White. Of the total district population, 24.3% receives free or reduced lunch. Student participants will be enrolled in both a section of 10th grade social studies taught by the researcher and a section of 10th grade biology taught by the collaborator. Of the total students enrolled in the classes taught by the researcher and the collaborator, 127 are enrolled in both courses. All 127 possible participants are in the 10th grade and are either 15 or 16 years of age. Nine of the possible participants have Individual Education Plans. The researcher and collaborator will obtain both parent consent and student assent for those participating.

Data collection

The researcher will apply a quantitative research study design to determine if there are gains in student writing as measured using a modified 6-trait rubric. All students' writing ability will be measured during a persuasive pre-writing assessment in response to an evaluation-based prompt before the implementation of the study. Likewise, all students' writing ability will be measured again during a post-writing assessment after completion of the study. Only those students who receive parental consent and gave assent to participate will be included in the results of the study. Individual student participant growth as well as overall collective student participant growth will be reported.

During the study, the researcher, collaborator and literacy coach will engage all students enrolled in the representative 10th grade social studies and biology courses in at least five persuasive writing activities. All students will engage in writing across the disciplines' lessons,

activities and writing prompts. All students will receive teacher/coach feedback and engage in small group lessons based on areas of student need.

Data analysis

Students will receive scores on a four-point scale for each of the six traits outlined on the 6-trait rubric. For both the pre- and post-writing assessments, students' writing will be evaluated by two of the three teachers/coach participating in this study. An inter-rater reliability session will be conducted prior to the grading session. During the grading session, students whose two scores reported from each of the graders reflect more than one point difference will be reevaluated by the third scorer. The average of each score for each trait will be reported for each student for both the pre- and post-assessment.

Both individual student scores and the average (mean) student score for all student participants will be shared for both the pre and post-assessment. A comparison of the pre and post-assessment scores, both by trait and overall score, will be made. Results will indicate change in student writing scores as well as greatest and least areas of improvement.

Feasibility/Budget Allocation

In order to conduct inter-rater reliability and grading sessions with the two participating teachers and the literacy coach, the researchers submit a request for funds to support pay for substitutes during their absences from class to conduct this work. A full day substitute pay is \$126. The literacy coach does not require a substitute, but the social studies and biology teacher both do. This request is for \$504: $\$126/\text{day per teacher for two teachers} = \252 . The inter-rater reliability/grading sessions will occur twice, so this request is for \$504 ($\252×2).

References

- Buehl, D. (2011). *Developing readers in the academic disciplines*. Newark, DE: International Reading Association.
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