

# PROFESSIONAL DEVELOPMENT: LITERACY LEARNING

BY BEVERLY STUCKWISCH



## **Beverly Stuckwisch**

is a 2012 KSTF Teaching Fellow

who teaches chemistry, AP Chemistry, and algebra at Licking Valley High School in Newark, Ohio. Beverly is also the advisor for the National Honor Society and the co-sponsor for the Gay Straight Alliance. Beverly was part of a group of teachers that piloted standards-based grading and helped roll it out schoolwide in 2014. She is currently helping the local middle school to develop standards-based grading practices.

Beverly can be reached at [beverly.stuckwisch@kstf.org](mailto:beverly.stuckwisch@kstf.org).

**Course name:** TE 846-Accommodating Differences in Literacy Learners

**Quick info:** This course is centered around designing and implementing a case study of at least one student with identified literacy struggles. The majority of course readings come from *Best Practices in Literacy Instruction*, 5th edition (Gambrell and Morrow, 2014), with the rest being online articles that can be accessed for free within the course. Since the course is taught online, the majority of collaboration takes place on an online discussion board. Lesson plans and literacy strategies are shared and discussed online. Pre- and post-assessments are administered to the case study student(s) to see if implemented literacy strategies have an effect.

**Who should consider this PD?** The course is offered to all teachers K-12, in any content area, and can be used to meet part of the reading education requirement to proceed to the professional license in Michigan. It can also be counted toward completion of a master's program at Michigan State University. One obligation for the course is access to two K-12 students for a course requirement to conduct two case studies. However, the section I completed only required work with one student.

**Provider:** Michigan State University

**Location:** Offered online

**Duration:** One semester

**Cost:** \$2226.25 (three graduate level credits).

**Read more about this PD at this link:**

<https://reg.msu.edu/courses/Search.aspx> (Course TE 846)

As my fourth year of the KSTF Fellowship and my third year of teaching full-time came to a close, I began to focus more on equity in my classroom, specifically when it came to my literacy instruction in chemistry. While I felt access to content was quite equitable in my

Headshot by Andrea Cipriani Mecchi



Photo by Andrea Cipriani Mecchi

classroom, I was concerned that when students moved beyond my room they wouldn't have the literacy skills necessary to access complex science texts. Working in a 1:1 setting had led me away from using textbooks and, ultimately, away from having my students read almost any scientific texts at all. I had good intentions—I tried to make the content as accessible to my students as possible.

I quickly realized, however, that I wasn't doing my students any favors in the long run. When they reached AP Chemistry, they struggled to decode lab procedures and lengthy free-response questions on the test because they weren't used to reading for understanding in science. I wanted my students to read and write more frequently in chemistry, but I didn't have much experience in literacy instruction, and I didn't know where to start. In taking this course, I hoped to compile some best practices, try some new strategies with a case study student, and learn from others' experiences as well.

I decided to take this online course, intrigued by how the structure would allow me to communicate with teachers across the nation via the online discussion board. The major goal of the course was to identify various differences that could cause literacy difficulties for students and then research or develop strategies to accommodate them in the classroom. Regardless of when teachers take the course, they learn about literacy by developing a case study of one or more students who struggle with literacy. Because I took the course in the summer, I worked with only

one student and we met on only three occasions. The intention was to use pre-assessments to diagnose literacy struggles for that student, teach two lessons utilizing strategies from the course, and then give a post-assessment to see if those strategies improved the student's literacy skills.

Reading about different literacy strategies led me to realize that I had already been implementing some in my teaching, just not as intentionally as I could have. For example, I used a Predict-Explain-Observe-Explain (PEOE) model for writing scientific explanations when I taught the gas laws, but I didn't focus directly on developing students' writing skills in each of these categories. I also learned strategies for reading that were very simple to implement. One example is using an "insert" note tool. On a small piece of paper, students have four columns: ? for items that are unclear, - for things the reader disagrees with, + for important ideas, and ! for surprising ideas. In an ideal setting, the student would fill out their own note tool as they read the new text and then share what they've written in a small group. This strategy helps students process the text further before moving onto the next activity, which requires them to apply what they've read to a new situation.

I tried implementing both of these strategies with my case study student. While I found it useful to see these tools in action, there were several reasons why I didn't get the results I hoped for. First, I was working with a middle school student for the first time and, therefore, had no personal experience with that reading and writing level. Most of the activities I used were too high-level for him to access without a lot of help from me, making it difficult for me to assess the usefulness of the literacy strategies themselves. Additionally, due to the short time frame of the course, we were only able to meet on three occasions. In those three meetings, I had to get to know the student, diagnose his struggles, attempt to address them in only two lessons, and then assess his progress. I don't believe two lessons were enough for me to really establish whether the tools made a real difference.

Since the course has finished, however, I've been able to start implementing these tools in my classroom. PEOE is now the central theme of my gas laws unit, and I have seen a huge improvement in the quality of student writing. Also, I am finding the "insert" note-taking tool is much more useful when students are able

to discuss what they've read with each other, rather than one student using the tool solo. For example, as my students begin researching historical models of the atom, I've noticed that a lot of great background information can be found in our textbook. In the past, I would have decoded this information for students and presented it to them in a more easily accessible way. This year, however, I wanted to place the responsibility of decoding the information on the students. In small groups, students were assigned to one of the models, read the information individually, and took notes on the insert. They then shared their notes with the rest of their group before putting together a presentation for the rest of the class. Their understanding of the models and how they progressed was much deeper than in years past, and students were better able to access the information in the text. Instead of lowering my expectations to meet students where they were, I realized I could achieve more equitable conditions in my classroom by giving all students the tools needed to reach the same high expectation.

Ultimately, I found the course beneficial, but I regret taking it over the summer. It would have been far more helpful to implement these strategies and discuss them with others taking the course during the school year. The course would have felt much less rushed had it been spread out over 12 weeks instead of six, and I would have learned more from other teachers in the course if online discussions were structured better. Despite these shortcomings, I think all teachers can benefit from professional development focused on literacy, and after my work in this course, I believe in fact it is our duty to teach students to read and write in our math and science courses so that they have equitable access to math and science content beyond our classrooms.

## REFERENCES

Gambrell, L.B., & Morrow, L.M. (2014). *Best practices in literacy instruction* (5th ed.). New York: Guilford Publications.

## CITATION

Stuckwisch, B. (2016). Professional development: Literacy learning. *Kaleidoscope: Educator Voices and Perspectives*, 3(1), 27–29.