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STEP=UP

Special Teachers and Exceptional Pupils = Urban Promise

Features

Important Dates

- **December 11:** Advisory Board Meeting, 4:30-6:00
- **January 14:** Classes Resume
- **January 22:** CPS Partner Professional Development , 4:00-6:00
- **February 26:** Spring FA 4:00-4:50

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Content Area Learning and Comprehension

Teaching social studies and science content to students with disabilities continues to be a challenge due to several reasons: use of abstract words and concepts, inter-related ideas not well defined vocabulary that is context specific and has several meanings, graphics and text intermingled on the same pages, organization and formatting of text that is not straightforward. For the English language learner, these elements of literacy learning can be even more complex given the need to comprehend in both the native and new language. How can teachers help?

Cooperative strategies and thematic units

Placing students in varied small group arrangements is helpful. Research on cooperative learning in social studies classrooms supports the use of various strategies as positive alternatives to traditional teaching (Hendrix, 1999). Several can be used in science and social studies, two of which are "group investigations" and "jigsaws".

Group investigation is a classroom organization plan in which students work in small groups to inquire, question, discuss, and plan projects. After the group selects a topic to study, students each research one aspect of the topic and then combine their information into a group presentation to the entire class. Teachers can draw on individuals' strengths so that students with varied abilities can succeed. In the Jigsaw method, students are placed into small "home teams" to work on material that has been divided into sections. Each student is then assigned a section to study on which he or she becomes an "expert." In the next grouping, each expert meets with experts in other groups to discuss best ways to present information to other members of their home teams. After students have learned the material, they return to the original groups to teach the material.

Combining aspects of both grouping strategies, Tasha McShan creates two – six week thematic units in science and social studies for her elementary students who also have emotional disabilities. She begins the thematic unit by sharing the content students will learn, the learning processes, and the end result and products. Laying out the end result, she says, helps students connect with *why* they are learning *what* they are learning. She identifies content for the thematic unit based on several criteria – connection to students' lives, life-skills, the curriculum goals, and IEP goals. She breaks down the information into smaller chunks and divides the work amongst her students. For example, she developed a two-week thematic unit that helped students learn ideas about US states and cities. Each student chose to work on 2-3 states. This ensures that students are not overwhelmed and could learn content on which they chose to focus. Students researched information themselves and helped their peers. They learned ways to work collaboratively. The unit ended by peers making presentations. Clearly, this approach helps students make choices, focus on smaller amounts of content and be successful, develop communications skills, and learn to be part of a team.

Helping students identify content they need to learn

A key challenge with comprehending science and social science text is to identify conceptual ideas embedded in sometimes superfluous sentences. Alex Horn-Lichtenfield, a resource teacher who works with middle schoolers, uses various strategies to teach students how text is organized and structured on a page, and how

that can be used to isolate the key concepts in dense text. She helps students understand that the way content is organized in the page can help predict where they might find information. Other teachers have used science and social studies resource books from Scholastic and National Geographic. Museums are additional resources that teachers have used in their classrooms. Museums like Museum of Science and Industry, Field Museum, and Adler Planetarium also offer educational materials that can be borrowed for use in the classrooms. All materials are listed on their websites.

Using technology

With the widespread use of the Internet several animation movies, lesson plans and online resources are available for teaching science and social studies. Many students are visual learners, and several resources for using video in content-area teaching are available. The challenge of using these resources is to scaffold students' learning through group discussions and other follow-up activities after using Internet and video resources.

Okolo (2006) shares guidelines for using video, DVD's and the web in classroom for content-area learning. Playing videos in short segments, pausing at key moments for short discussions, discussing after the movie, asking students to think about a few questions as they watch the movie, pausing to examine a particular clip in greater detail are some of the strategies that can be used to enrich learning through videos.

Helping students with disabilities learn and understand subject-area content requires authentic tasks that are structured at their cognitive level, and tasks that help them see the interconnections of the subject-specific knowledge.

References:

Hendrix, J.C. (1999). Connecting cooperative learning and social studies, *The Clearing House, 73*(1), p. 57-60.

Okolo, C.M. (2006). Using video to teach content-area information: How can the web help teachers?, *Journal of Special Education Technology, 21*(3), p. 48-51.

Digital Corner

Reading Quest

http://www.readingquest.org is a website designed for social studies teachers wanting to engage students with academic content. It provides rationales for effective comprehension strategy instruction, directions for teaching a range of strategies, and printable handouts and transparency masters. Users are invited to think about how a social studies skills framework can help teachers choose best strategies.

Teach With Movies

http://www.teachwithmovies.org offers *lesson plans* and *learning guides* to 280 movies. Movies are listed by age and topic (Science, Language Arts, Drama, History/ Social Studies, Social-Emotional Learning and ESL). Learning guides describe the benefits and possible problems with each movie, and provide background and discussion questions, projects, and vocabulary lists. The website requires a subscription fee of $11.99 per year.

Science Animation Movies

http://science.nhmccd.edu/Biol/animatio.htm is a collection of science animations, interactive tutorials and movies. The website provides links to various science animations and is categorized according to science topics such as Ecology, Plants, Animals, Anatomy and Physiology, Astronomy, Biology, Physics etc. It links to other websites such as NASA, Live Science, National Geographic and Discovery Channel in addition to having a compilation of animation movies from university websites.

Research Corner

Mastropieri, A.M., Scruggs, T.E., and Graetz, J.E. (2003). Reading comprehension instruction for secondary students: Challenges for struggling students and teachers. *Learning Disability Quarterly*, Vol. 26 (2), pp 103-116.

This article describes research on reading comprehension instruction with secondary students who have learning disabilities. The authors describe specific difficulties a teacher might see such as disparity between reading ability and required reading materials, and student struggles with texts that are dense, complex, poorly organized and not clearly structured.

The authors divide effective comprehension instruction strategies into three categories: 1) basic skill and reinforcement (strategies such as direct instruction, corrective feedback), 2) text enhancement (strategies such as imagery, illustrations, mnemonic aids), and 3) self-questioning (strategies such as summarizing, finding main ideas). These strategies emphasize how students can interact with the text. Students can use these simple strategies to make the connections with the text. The authors conclude that peer tutoring could be a powerful way to help students actually incorporate the strategies. Additionally, research using the software package "Inspiration" shows promise in aiding students to generate spatially organized graphic organizers to facilitate comprehension of content area instruction.