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Focus: Student Engagement

Visual Interpretation in Science Strategies for English Language Learners

by Paula Johnson, M.A. and Veronica Betancourt, M.A.

Think back to your experiences learning science, math and social studies. Would you describe them as interactive? Dynamic? Memorable? Meaningful? Many people would quickly proclaim: none of the above. Now, close your eyes and think of the word *tree*. What comes to mind? Did you visualize a tree? Did your mind conjure up images of familiar trees, a park, landscape or forest? Or did you actually visualize the word *tree*? The vast majority of readers most likely brought to mind an image rather than the word itself. Research says that information processing occurs with little intentional or purposeful effort. The brain has the ability to organize and make sense of input based on past experiences and to spark emotions that drive connections, creating meaning in and about our surroundings (Vasquez, Comer & Troutman, 2010).

What does this mean for students whose first language is not English? When a concept is known or familiar, most English learners (ELs) go through the additional process of comprehending terms and concepts in their native language. In cases where the student is not familiar with the concept, the teacher must ensure that the message is delivered in such a comprehensible way that students integrate the concept in a new language.

When facilitated properly, the learning scene is set to then make the necessary cognitive connections toward proficiency in the new language

and content. Because visual development in the sciences requires that students interpret all types of information from images, charts, graphs, pictures and scenes, helping students to identify how that process would take place is where we, as educators, come in. Furthermore, science is multi-semiotic. In other words, science goes beyond words alone to communicate meanings and ideas – it relies heavily on visual representations to express the appropriate meanings (Wellington & Osborne, 2001).

In IDRA’s recent work with San Marcos CISD and Texas State University through a grant from the Texas Education Agency to improve science achievement for students in kindergarten through eighth grade, we identified seven umbrella research-supported strategies to help ELs achieve in the science classroom. This article describes one of the strategies: scaffold and spiral language and science instruction for increased comprehension and literacy development. All of the strategies are presented in detail with their research base in *Science Instructional Strategies for English Learners – A Guide for Elementary and Secondary Grades*, which is available from IDRA.

The dual-coding theory of information storage suggests that we access both linguistic and visual forms of memory to interpret our environment (Paivio, 1991). And since teaching has been *(cont. on Page 2)*

“Whether engagement is used in the context of students being captivated during lessons by powerful learning opportunities or in the larger arena of activism, engagement is a vital part of academic success for students.”

– Dr. María “Cuca” Robledo Montecel, IDRA President and CEO

(Visual Interpretation in Science – Strategies for English Language Learners, continued from Page 1)



traditionally linguistic-based, EL students have long relied on visual knowledge to understand concepts. Opportunities to benefit EL students linguistically are lost when teachers do not make language acquisition a learning objective.

We must take measures to ensure intentional opportunities for students to engage in visual interpretation with increased processing time for ELs, deliberate modeling and use of science genres to practice scientific communication skills, and whole class dialogue so students can evaluate their own justifications as they listen and compare their ideas with others.

One of the most powerful resources teachers can provide their students is the Interactive Student Notebook (ISN), a tool for tackling the large amount of content students must process to demonstrate proficiency over the duration of a course. Both visual and linguistic representations are utilized in the ISN so students can effectively process and connect new experiences with their own background knowledge about the context at hand. The ISN is designed systematically for students to preview, practice and process information as active participants in their learning of the content.

While there are linguistic and visual input modes, our purpose is to highlight the importance of visual interpretation in the learning process and the important task for science teachers to ensure that students become familiar with and use science-specific academic language. Imagery in science is used to elicit questions, provoke curiosity and provide a purpose for investigating a topic that can be presented in pictorial or graphical form. This provides opportunities for students to engage in academic dialogue about their own

interpretations of visuals so the teacher can use formative assessment measures to identify the knowledge students bring and how they apply it to science.

Specific types of graphic organizers, such as the Venn diagram, increase student achievement significantly when incorporated consistently in the classroom (Marzano, 2001). This type of compare/contrast organizer is a perfect ISN tool because it gives students the opportunity to construct their understandings when evaluating visual representations in science. Graphic organizers provide a platform for academic dialogue between students when dissecting information in science. This is accomplished when students evaluate visual representations and construct their own Venn diagram as evidence to support their arguments of understanding.

Another essential graphic organizer that can be incorporated with purposeful intentionality is graphing of data in forms such as charts, scatterplots, histograms, line and bar graphs, and pie charts for evaluation and justification. Students should be given opportunities to collect and construct their own data sets so they can interpret how to display the collected information without fitting it into a pre-made, fill-in graphic worksheet that has little significance in the learning process. When graphs are produced in collective efforts, the outcomes of the joint efforts and shared academic dialogue facilitate students' communication and understandings of science in authentic settings (Roth & McGinn, 1997).

It is critical to remember that the use of visuals in science is interspersed and spiraled throughout the lesson to provide students multiple opportunities to explore, construct, dialogue and justify

current and new understandings of the science at hand. It is important to reemphasize that visuals go beyond scenarios to interpret and are inclusive of very prominent data structures in science, such as charts, graphs, tables, graphic organizers and content models. This range of capacity carries over into other content areas, especially in mathematics, and bolsters the 21st century skills that will hopefully attract more students into STEM-related fields.

When implemented consistently and with fidelity, all students benefit from the use of visual discovery and increased linguistic proficiency. But more importantly, traditionally underrepresented students, such as ELs, reap the greatest reward by learning to negotiate and expand their linguistic, visual and content competencies. This, in turn, catapults their science self-efficacy as students become more confident in their academic abilities and capable of maneuvering the scientific realm of understanding.

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IDRA South Central Collaborative for Equity

For more information about the IDRA South Central Collaborative for Equity or to request technical assistance, contact us at 210-444-1710 or contact@idra.org.

Additional resources are available online at http://www.idra.org/South_Central_Collaborative_for_Equity/

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Immigrant Students' Rights to Attend Public Schools – School Opening Alert

This alert is a reminder that public schools, by law, must serve all children.

The education of undocumented students is guaranteed by the *Plyler vs. Doe* decision, and certain procedures must be followed when registering immigrant children in school to avoid violation of their civil rights.

The U.S. Department of Justice and the U.S. Department of Education published in May 2011 a letter advising school officials that activities that deny or discourage students to attend school are unlawful. The letter begins, “Under federal law, state and local educational agencies are required to provide all children with equal access to public education at the elementary and secondary level.”

And in June of this year, the President directed the Department of Homeland Security to end the deportation of young undocumented immigrants brought here as children by their parents. An individual qualifies for this revised exercise of prosecutorial discretion if he or she:

- came to the United States under the age of 16;
- has continuously resided in the United States for a least five years before June 15, 2012, and was present in the United States on June 15, 2012;
- is currently in school, has graduated from high school, has obtained a GED certificate, or is an honorably discharged veteran of the Coast Guard or Armed Forces of the United States;
- has not been convicted of a felony offense, a significant misdemeanor offense, multiple misdemeanor offenses, or otherwise poses a threat to national security or public safety; and
- is not above the age of 30.

And in August 2012, Secretary of Homeland Security Janet Napolitano followed up by outlining the deferred action process for young people who are “low enforcement priorities.” IDRA’s website has links to these announcements and resources for undocumented students.

In *Plyler vs. Doe*, the U.S. Supreme Court ruled that children of undocumented workers have the same right to attend public primary and secondary schools as do U.S. citizens and permanent residents. Like other students, children of undocumented workers in fact are required under state laws to attend school until they reach a mandated age.

School personnel – especially building principals and those involved with student intake activities – should be aware that they have no legal obligation to enforce U.S. immigration laws.

The Supreme Court arrived at this decision because such practices that deny or discourage immigrant children and families from public schooling:

Victimize innocent children – Children of undocumented workers do not choose the conditions under which they enter the United States. They should not be punished for circumstances they do not control. Children have the right to learn and be useful members of society.

Are counterproductive for the country – Denying children access to education does not eliminate illegal immigration. Instead, it ensures the creation of an underclass. Without public education for children, illiteracy rates will increase and opportunities for workforce and community participation will decrease. Recent research has proven that for every \$1 spent on the education of children, at least \$9 is returned.

Waste valuable time while losing sight of principal goals of public education – Rather than teaching students, school officials would spend their time asking our millions of school children about their citizenship status. States would be forced to spend millions of dollars to do the work of the U.S. Immigration and Customs Enforcement (ICE) agency.

Promote misinformation – Incorrect assumptions and inappropriate figures have been used to blame immigrants and their children for

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More Information

For assistance in ensuring that your programs comply with federal law, you can contact the Department of Justice, Civil Rights Division, Educational Opportunities Section, at 877-292-3804 or education@usdoj.gov, or the Department of Education Office for Civil Rights (OCR) at 800-421-3481 or ocr@ed.gov. You may also contact the OCR enforcement office that serves your area.

For more information or to report incidents of school exclusion or delay, call:

META (Nationwide)

617-628-2226

MALDEF (Los Angeles)

213-629-2512

MALDEF (San Antonio)

210-224-5476

NY Immigration Hotline (Nationwide)

212-419-3737

MALDEF (Chicago)

312-427-0701

MALDEF (Washington, D.C.)

202-293-2828

Get a copy of this alert in English and Spanish to share with others at www.idra.org.

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economic problems.

Encourage racism and discrimination – In turbulent, financially troubled times, immigration often becomes a focal point of public discourse. Many consider a preoccupation with the immigration status of children of undocumented workers to be a form of discrimination and racism.

As a result of the *Plyler* ruling, public schools may not:

- deny admission to a student during initial enrollment or at any other time on the basis of undocumented status;
- treat a student differently to determine residency;
- engage in any practices to “chill” the right of access to school;
- require students or parents to disclose or document their immigration status;
- make inquiries of students or parents intended to expose their undocumented status; or
- require social security numbers from all students, as this may expose undocumented status.

Students without a social security number should be assigned a number generated by the school. Adults without social security numbers who are applying for a free lunch and/or breakfast program for a student need only state on the application that they do not have a social security number.

The *Family Education Rights and Privacy Act* prohibits schools from providing any outside agency – including the ICE agency – with any information from a child’s school file that would expose the student’s undocumented status. The only exception is if an agency gets a court order (subpoena) that parents can then challenge. Schools should note that even requesting such permission from parents might act to “chill” a student’s *Plyler* rights.

At IDRA, we are working to strengthen schools to work for all children, families and communities. Help us make this goal a reality for every child; we simply cannot afford the alternatives. Denying children of undocumented workers access to an education is unconstitutional and against the law.

You can also visit IDRA’s website for a printable flier in English and Spanish as well as a copy of the letter from the U.S. Department of Justice and the U.S. Department of Education (May 2011) and the Department of Homeland Security Memorandum (June 2012).

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Listen to IDRA’s Classnotes Podcast episode on “Immigrant Children’s Rights to Attend Public Schools”

www.idra.org/Podcasts. Also available from iTunes. Free!

Serving Low-Income Students

Applying Research and IDRA's Quality Schools Action Framework™

by Kristin E. Grayson, M.Ed.

While there is a lot of research that correlates students from low-income families with low levels of academic achievement, there also are examples of students who break this pattern and achieve at high levels despite their circumstances. What is it that makes a difference? What does research show needs to happen to provide quality education to low-income students?

IDRA has put forth the Quality Schools Action Framework™, which takes into account the many facets required at the system level for student success (Robledo Montecel & Goodman, 2010). These components are in line with what is available in the current scholarly research base. Some examples follow.

Silins & Milford (2008) describe a school environment that supports low-income student success as one where there are professional relationships that promote trust and cooperation. Teachers and students are supported by the school's capacity for growth and success. Both are treated with respect and are involved in accomplishing goals of the school and of the community. The organizational paradigm shifts in this type of environment, and teacher leadership extends beyond the classroom, and benefits the students.

Quality student-teacher interactions and smaller class sizes (Merritt, et al., 2011) also are pinpointed as having significant effects on student achievement of low-income students. Findings from these and other studies align with IDRA's Quality Schools Action Framework school system indicators of *student engagement* and *teaching quality*.

Henderson & Mapp (2002) synthesized research showing that families of all cultural backgrounds, education and income levels can and often do have a positive influence on their children's learning. Other research found that organized initiatives to build parent and community leadership aimed at improving low-performing schools are leading to promising results in low-income urban areas and the rural South. To be most effective, family and

community involvement efforts should be linked to student learning and must engage diverse families recognizing cultural and class differences, addressing needs and building on strengths. They must embrace a philosophy of partnership where power is shared. This guide and other new research align with IDRA's innovative approach to *parent involvement and community engagement* conveyed in IDRA's framework.

In a survey of 50 college students (Martinez, 2011), who had received the Ron Brown Scholarship for high-need students, including those from low-income families, six themes emerged as contributors to their literary achievement. The themes expressed what the students believed helped them achieve in public schools and then in college. These themes were parents/caregivers, mentors, public and school libraries, Internet, media (television and movies), and extracurricular literacy-related activities, such as debate clubs. These themes also coincide with indicators in IDRA's Quality Schools Action Framework, especially within the *school system indicators*.

Some school districts in the country have turned to specialized magnet programs that provide enriching and/or integrated activities (music, foreign language, the arts, etc.) into the curriculum as a way to engage students and build complex cognitive skills that support academic achievement in the core curriculum (Gullatt, 2008). This exemplifies the school system indicators of *student engagement*, *access to quality curriculum*, and *teaching quality*.

IDRA, working in many capacities with many public school districts across the country, also has observed and contributed to individual student and school success, regardless of socioeconomic status. One example is the IDRA Coca-Cola Valued Youth Program, a cross-age tutoring program. This dropout prevention program works by identifying middle high and high school students who are considered at-risk (*cont. on Page 6*)

While there are many factors that lead to student success in school, it is never acceptable to expect students from low-income backgrounds to be low-achievers.

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of dropping out and enlisting them as tutors for elementary school youngsters who are also struggling in school. Given this role of personal and academic responsibility, the Valued Youth tutors learn self-discipline and develop self-esteem and schools shift to the philosophy and practices of valuing students considered at-risk. Results show that tutors stay in school, have increased academic performance, improved school attendance and advanced to higher education. (Robledo Montecel, 2009)

IDRA has worked with one South Texas school district where the turn-around from low-income students failing and dropping out of school has changed to one where students have returned to school, earned dual high school and college credit, and graduated from high school and enrolled in college. In this district, several initiatives have made this possible, including individualized counseling support that continues with high school counselors located on the local university campus. This exemplifies the components under the framework's levers of change: *accountable leadership*, and *enlightened public policy*. It also demonstrates elements of the Quality Schools Action Framework's change strategies: *community capacity building*, *coalition building* and *school capacity building*. (Listen to IDRA's Classnotes Podcast interview with Superintendent King, "Connecting Every Student to a Meaningful Future" March 10, 2011.)

While there are many factors that lead to student success in school, it is never acceptable to expect students from low-income backgrounds to be low-achievers. By reviewing the IDRA Quality Schools Action Framework, one can see that individuals (teachers, assistants, counselors, parents, etc.) and organizations (school districts, community organizations, civic groups, etc.) can each make a difference in the lives of students. Together that difference can be even greater!

Resources

- Gullatt, D. "Enhancing Student Learning through Arts Integration: Implications for the Profession," *High School Journal*. (2008), 91:4.
- Martinez, G. "Literacy Success: Fifty Students from Areas throughout the United States Share their Stories," *Journal of Adolescent & Adult Literacy* (2011) 55:3.
- Merritt, E., Rimm-Kaufman, S., & Berry, R. "The Contribution of Mathematics Instructional Quality and Class Size to Student Achievement for Third Grade Students from Low-Income Families," *Society for Research on Educational Effectiveness* (2011).
- Robledo Montecel, M. Continuities – Lessons for the

Future of Education from the IDRA Coca-Cola Valued Youth Program (San Antonio: Intercultural Development Research Association, 2009).

Robledo Montecel, M., & Goodman, C.L. (eds). *Courage to Connect – A Quality Schools Action Framework* (San Antonio, Texas: Intercultural Development Research Association, 2010).

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(Visual Interpretation in Science, continued from Page 2)

Resources

- Marzano, R.J., & D. Pickering, E. Pollock. (2001). *Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement* (Alexandria, Va.: Association for Supervision and Curriculum Development, 2001).
- Paivio, A. "Dual Coding Theory: Retrospect and Current Status," *Canadian Journal of Psychology* (1991), 45(3), 255-287.
- Roth, W.M., & M.K. McGinn. "Graphing: Cognitive Ability or Practice?" *Science Education* (1997), 81(1), 91-106.
- Villarreal, A., & V. Betancourt, K. Grayson, R. Rodriguez. *Science Instructional Strategies for English Learners – A Guide for Elementary and Secondary Grades* (San Antonio, Texas: Intercultural Development Research Association, 2012).
- Vasquez, J.A., & M.W. Comer, F. Troutman. *Developing Visual Literacy in Science K-8* (Arlington, Va.: NSTA Press, National Science Teachers Association, 2010).
- Wellington, J., & J. Osborne. *Language and Literacy in Science Education* (New York, N.Y.: Open University Press, 2001).

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- Repository of Resources for Undocumented Students, by the College Board
- Info on the resource: *Science Instructional Strategies for English Learners – A Guide for Elementary and Secondary Grade*
- Classnotes podcasts about teaching science to English learners
- Information about IDRA's highly successful Science Smart! professional development program

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Coca-Cola Valued Youth Program High School Winning Essay

Editor's Note: IDRA sponsored a national essay competition among participants in the Coca-Cola Valued Youth Program, a nationally-recognized cross-age tutoring program of IDRA. Coca-Cola Valued Youth Program tutors wrote about how the program had helped them do better in school and how they had helped their tutees to do better. Six students received prizes. Below is the essay of the first place winner at the high school level.



**Lanala
Hayes**

*9th Grade, Phillis
Wheatley High
School, Houston*

Like the first rocket to land on the moon, something changed. I was a kid with no thought of what I would be doing after high school, a kid who didn't care about my grades. But just like a flower trying to stay nourished in a desert or a flower trying to bloom in concrete, it seemed impossible. But soon enough the Coca-Cola Valued Youth Program helped to change me.

I walked into the elementary classroom thinking: "Easy as cake, all I have to do is tutor a few kids and I get some money? Ha, I could do this with my eyes closed and my hands tied behind my back." I came as cocky as they could have come. I knew I had all the knowledge I needed to tutor second grade, and that just made me think I was like Captain Crunch: "All the kids want me." I was confident that I could teach second grade.

The first day I walked into Alexandra's* school, I felt a different atmosphere. Like fireflies attracted to a porch light, a bunch of kids came before me with nothing but smiles. I felt like it was cool to be smart even if it was just to a bunch of 10 year olds. We walked into the classroom we were supposed to tutor in, and the teacher then assigned the students that she thought needed us to help. Before I could even say anything else other than my name, Alexandra asked, "How do you spell though?" And I told her without even a hesitation to think of how you spell it. She looked at me in somewhat wonder and awe. I left her school that day

trying to shake a feeling that I can't describe but secretly wish it would follow me forever like my own shadow.

Like a glass slowly cracking, I was starting to get the concept of school. I was starting to think of what would happen if I didn't get my high school diploma or if I didn't get enough credits. What type of job or college would I get into? If I didn't go to a good college would it affect the type of job I could apply for? Would I have to work at a fast food place all my life? The more I went to Alex's school, the more I thought about this kind of stuff. I started trying harder in school, striving for A's and B's, and my teachers took notice. They were always trying to help me, but now that I actually wanted their help and was accepting their help, my grades were getting better. That glass that was lightly cracking, I was no longer afraid to let it break.

I've been tutoring Alex for almost two semesters now, and I can honestly say she's made progress. Alex can now spell though without needing any help. Helping Alex at her school also helped me at my school. The Coca-Cola Valued Youth Program helped me with my grades and my future. Though its purpose may have been to help a little bit younger students, I think it helped me more than Alex. The Coca-Cola Valued Youth Program and Alex landed my rocket that was going off course and helped keep my flower nourished in the desert. It's helped me more than I could give thanks for. And that glass that was cracking? It didn't only break, it shattered.

*name changed for privacy

For more information on the Coca-Cola Valued Youth Program contact IDRA at 210-444-1710 or contact@idra.org or visit www.idra.org/Coca-Cola_Valued_Youth_Program.htm

"I was a kid with no thought of what I would be doing after high school, a kid who didn't care about my grades... But soon enough the Coca-Cola Valued Youth Program helped to change me."

Scan this code to read all of the winning essays and learn more about the Coca-Cola Valued Youth Program.





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Focus: Student Engagement

“Broad-scale student disengagement points to the need for systems-level changes that have us ensure that students of all backgrounds encounter a curriculum that is challenging and relevant, teaching that engages them and supports them to succeed in learning, and the sense that they are valued in school.”

– Dr. María “Cuca” Robledo Montecel, IDRA President and CEO

Intercultural Development Research Association

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- “Creating a STEM Focused School Part 1,” featuring Andres Urby
- “Science for English Learners #1,” featuring Veronica Betancourt, M.A.,
- “Data and Vocabulary in Math and Science,” featuring Paula Johnson, M.A., and Veronica Betancourt, M.A.

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