

## The Language of Science in the WIDA Framework –

### *What Science Teachers Need to Know about Academic Language and WIDA*

Bonnie Baer-Simahk      MATSOL, 2013

#### **Next Generation Science Standards**

<http://www.nextgenscience.org/next-generation-science-standards>

*(Website – All standards documents available for free download. Note Appendix D: All Standards All Students)*

<http://nextgenscience.org/framework-k%E2%80%9312-science-education>

#### **Framework for K-12 Science Education**

#### **Language Demands and Opportunities in Relation to Next Generation Science Standards for English Language**

**Learners: What Teachers Need to Know**, Helen Quinn, Okhee Lee Guadalupe Valdes, Stanford University

<http://ell.stanford.edu/sites/default/files/pdf/academic-papers/03->

[Quinn%20Lee%20Valdes%20Language%20and%20Opportunities%20in%20Science%20FINAL.pdf](http://ell.stanford.edu/sites/default/files/pdf/academic-papers/03-Quinn%20Lee%20Valdes%20Language%20and%20Opportunities%20in%20Science%20FINAL.pdf)

*(Full article available as of 5/1/13)*

#### **Science and Language for English Language Learners: language Demands and Opportunities in Relation to Next Generation Science Standards**, Okhee Lee, Helen Quinn, Guadalupe Valdes, 2013 AERA. <http://er.aera.net>

<http://intl-edr.sagepub.com/content/early/2013/04/08/0013189X13480524.abstract>

*(Abstract available as of 5/1/13 – Full article available by subscription; trial subscriptions available)*

<http://www.wida.us/>

#### **WIDA Standards**

<https://itunes.apple.com/us/app/language-central-for-science/id416215863?mt=8>

Language Central for Science – Free App for Life Science – *(Retrieved 5/1/13)*

<https://itunes.apple.com/us/app/language-central-for-science/id416221292?mt=8>

Language Central for Science – Free App for Physical Science – *(Retrieved 5/1/13)*

<https://itunes.apple.com/us/app/language-central-for-science/id416219211?mt=8>

Language Central for Science – Free App for Earth Science – *(Retrieved 5/1/13)*

[http://www.pearsonschool.com/index.cfm?locator=PS13Jt&acornRdt=1&DCSext.w\\_psvanitul=http%3A%2F%2Fwww.pearsonschool.com%2FLanguageCentralScience](http://www.pearsonschool.com/index.cfm?locator=PS13Jt&acornRdt=1&DCSext.w_psvanitul=http%3A%2F%2Fwww.pearsonschool.com%2FLanguageCentralScience)

Language Central for Science – Program Information – *(Retrieved 5/1/13)*

#### **Additional References**

- Center for Applied Linguistics – <http://www.cal.org/topics/ell/sheltered.html>
- Chamot, A., O'Malley, J. (1994) The CALLA Handbook. Addison-Wesley
- Gibbons, P. (2002) Scaffolding Language Scaffolding Learning: Teaching Second Language Learners in the Mainstream Classroom.
- Marulis, L. & Neuman, S. (2010) The Effects of Vocabulary Intervention on Young Children's Word Learning: A Meta-Analysis *Review of Educational Research, Vol. 80, No. 3, pp. 300–335*
- Schleppegrell, M. (2008) Reading in Secondary Content Areas. University of Michigan Press
- Short, D., Vogt, M. & Echevarria, J., (2011) The SIOP Model for Teaching Science to English Learners. Pearson
- Zwiers, J. (2008) Building academic language: Essential Practices For Content Classrooms. Jossey-Bass