

# ELL Math Classroom Observation Form

For Use in Math Classrooms that have  
at least 1 or more ELL students

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# Overview of the Presentation

The ELL Classroom Observation Form will help math teachers to determine if their classroom has been set up to support and provide a positive learning environment for English Language Learners (ELLs). The four sections of the form will be discussed: Classroom Routines, Teaching and Learning, Pupil-Teacher Relationship, and Teacher Preparation.

# Objectives

- An Overview of Texas A&M University-Corpus Christi's ISLA Project will be provided, along with some background of the 37 districts being served by the LEP/SSI Cycle 4 Grant.
- A demonstration of the ISLA Website at <http://ell.tamucc.edu/> will be made, which can be used as a resource by ELL teachers and administrators
- An in-depth discussion of the four (4) sections of the ELL Classroom Observation Form with tips on how to prepare a math classroom for ELL students will be provided.
- An example of a completed ELL Classroom Observation Form Report will be shared with each of the participants.

# Welcome to the Institute for Second Language Achievement Texas A&M-Corpus Christi

The Institute for Second Language Achievement (ISLA) at the College of Education is supported by a Texas Education Agency grant award made to the Texas A&M University System Institute for School-University Partnerships.

ISLA is to serve as a research center for schools with a high population of English Language Learners and educational entities identified by the Texas Education Agency as English Language Learner (ELL) Student Success Initiative awardees. Foremost is our goal to provide technical assistance and support to these educational entities through provision of an intensive instructional program which will accelerate the academic achievement of English Language Learners (ELL) at those campuses.

Examples of technical assistance services to be provided by ISLA include but are not limited to the following:

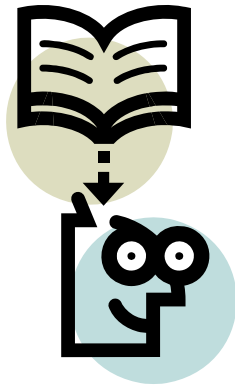
- Research on effective instruction and delivery systems for English Language Learners.
- Curriculum analysis and alignment for English Language Learners.
- Monitoring of English Language Learner students' performance analysis and instructional needs assessment.
- Professional development for teachers and administrators of all populations.
- Development of comprehensive campus improvement plans.
- Monitoring of improvement plans to support effective implementation.

# The Institute for Second Language Achievement (ISLA)

<http://ell.tamucc.edu>

:: Main ::

- Mission Statement
- Goals & Objectives
- Sheltered Instruction (SIOP)
- Online Learning Center
- Administrator Resources
- Teacher Resources
- Student Resources
- Parent Resources
- LEP SSI Resources
- Needs Assessment Design
- Useful Links



## English Language Proficiency Standards (ELPS)

The English language proficiency standards outline English language proficiency level descriptors and student expectations for English language learners (ELLs). School districts shall implement this section as an integral part of each subject in the required curriculum.

In order for ELLs to be successful, they must acquire both social and academic language proficiency in English. Social language proficiency in English consists of the English needed for daily social interactions. Academic language proficiency consists of the English needed to think critically, understand and learn new concepts, process complex academic material, and interact and communicate in English academic settings.

Classroom instruction that effectively integrates second language acquisition with quality content area instruction ensures that ELLs acquire social and academic language proficiency in English, learn the knowledge and skills in the TEKS, and reach their full academic potential.

Effective instruction in second language acquisition involves giving ELLs opportunities to listen, speak, read, and write at their current levels of English development while gradually increasing the linguistic complexity of the English they read and hear, and are expected to speak and write.

The English language proficiency levels of beginning, intermediate, advanced, and advanced high are not grade-specific. ELLs may exhibit different proficiency levels within the language domains of listening, speaking, reading, and writing.

# Why the ELPS?

Because they are required by TEA as of Dec 2007

1. English language learners benefit from content area instruction that is accommodated to their need for comprehensible input (Krashen, 1983; Echevarria, Vogt, and Short, 2008).
2. English language learners benefit from academic language instruction integrated into content area instruction (August & Shanahan, 2006; Chamot & O'mally, 1984; Crandall, 1987; Samway & McKeon, 2007; Snow et. al. 1989).
3. English language learners benefit from programs that hold high expectations for students for academic success (Collier, 1992; Lucas et al, 1990, Samway & McKeon 2007).
4. Language proficiency standards provide a common framework for integrating language and content instruction for English learners (Short, 2000).

# ELL Math CLASSROOM OBSERVATION FORM

Teacher: \_\_\_\_\_ Grade/Subject: \_\_\_\_\_ Date: \_\_\_\_\_

## Classroom Routines:

- \_\_\_\_\_ Bulletin Boards in L1 (student's native language ) and L2 (English)
  - \_\_\_\_\_ Evidence of materials in L1\* and L2\*\*
  - \_\_\_\_\_ Supplementary materials available (manipulatives, etc.) in L1 and L2
  - \_\_\_\_\_ Functional orderliness; classroom routines evident
  - \_\_\_\_\_ Climate of openness and respect
  - \_\_\_\_\_ Defined discipline procedures
  - \_\_\_\_\_ State adopted textbooks in L1 and L2
  - \_\_\_\_\_ Evidence of stated content objective, language objective and ELPS\*\*\* objective
- \*L1 = Source Language; \*\*L2 = Target Language; \*\*\*English Language Proficiency Standard

## Teaching and Learning:

- \_\_\_\_\_ Evidence of positive reinforcement for effort
- \_\_\_\_\_ Evidence of literacy development in L1 and L2
- \_\_\_\_\_ Evidence of group work/cooperative learning
- \_\_\_\_\_ Evidence of use of supplementary teaching materials
- \_\_\_\_\_ Evidence of grouping for instruction based on cognitive or language ability
- \_\_\_\_\_ Evidence of continuous monitoring of language development in L1 and L2
- \_\_\_\_\_ Learning centers evident
- \_\_\_\_\_ Evidence of technology use in instruction
- \_\_\_\_\_ Cultural activities incorporated in instruction
- \_\_\_\_\_ Evidence of thematic instruction
- \_\_\_\_\_ Application of skills
- \_\_\_\_\_ Evidence of a variety of developmentally appropriate teaching activities
- \_\_\_\_\_ Student work displayed

## Pupil-Teacher Relationship:

- \_\_\_\_\_ Learning atmosphere present
- \_\_\_\_\_ Provides for individual needs
- \_\_\_\_\_ Challenges students to higher order thinking
- \_\_\_\_\_ Student active participation
- \_\_\_\_\_ Mutual respect and dignity
- \_\_\_\_\_ Positive classroom climate

## Teacher Preparation:

- \_\_\_\_\_ Evidence of consistent use of lesson plans
- \_\_\_\_\_ Evidence of consistent use of TEKS/Curriculum guides



# ELL Math Classroom Observation Form

## I. Classroom Routines:

\_\_\_\_\_ Bulletin Boards in L1 and L2

\*L1 = Source Language; \*\*L2 = Target Language

\_\_\_\_\_ Evidence of materials in L1 and L2

\_\_\_\_\_ Supplementary materials available (manipulatives, etc.) in L1 and L2

\_\_\_\_\_ Functional orderliness; classroom routines evident

\_\_\_\_\_ Climate of openness and respect

\_\_\_\_\_ Defined discipline procedures

\_\_\_\_\_ State adopted textbooks in L1 and L2

\_\_\_\_\_ Evidence of stated content objective, language objective and ELPS\*\*\* objective

\*\*\*English Language Proficiency Standard

# ELL Math Classroom Observation Form

(continued)

## II. Teaching and Learning:

- \_\_\_\_\_ Evidence of positive reinforcement for effort
- \_\_\_\_\_ Evidence of literacy development in L1 and L2
- \_\_\_\_\_ Evidence of group work/cooperative learning
- \_\_\_\_\_ Evidence of use of supplementary teaching materials
- \_\_\_\_\_ Evidence of grouping for instruction based on cognitive or language ability
- \_\_\_\_\_ Evidence of continuous monitoring of language development in L1 and L2
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- \_\_\_\_\_ Cultural activities incorporated in instruction
- \_\_\_\_\_ Evidence of thematic instruction
- \_\_\_\_\_ Application of skills
- \_\_\_\_\_ Evidence of a variety of developmentally appropriate teaching activities
- \_\_\_\_\_ Student work displayed

# ELL Math Classroom Observation Form

(continued)

## III. Pupil-Teacher Relationship:

\_\_\_\_\_ Learning atmosphere present

\_\_\_\_\_ Provides for individual needs

\_\_\_\_\_ Challenges students to higher order thinking

\_\_\_\_\_ Student active participation

\_\_\_\_\_ Mutual respect and dignity

\_\_\_\_\_ Positive classroom climate

ELL Math Classroom Observation Form  
(continued)

**IV. Teacher Preparation:**

\_\_\_\_\_ Evidence of consistent use of lesson plans

\_\_\_\_\_ Evidence of consistent use of TEKS/Curriculum guides

**Comments:**

## Accountable Conversation Questions\*

What to say instead of “I don’t know.”

- May I please have some more information?
- May I have some time to think?
- Would you please repeat the question?
- Where could I find information about that?

Please speak in complete sentences.

\*Seidlitz and Perryman, 2008

# Resources

## Suggested Strategies and Resources

Use of the following teaching and learning strategies will support literacy development and enhance the understanding of math concepts: Think Alouds, graphic organizers, word problems, brainteasers, math journals, Inquiry Models, Quick Writes, Word Walls, concept maps, flow charts, computer or graphic programming, creation of texts, Socratic Questioning, and WebQuests.

Specific examples of how many of these strategies can be directly integrated into the high school math classroom include the following: A good rationale for using an interactive process for solving word problems, along with links to word problems across the math curriculum, can be found at <http://www.hawaii.edu/suremath/literacy.html> .

For some suggestions on how to motivate students in the mathematics classroom, see <http://mathforum.org/~sarah/Discussion.Sessions/biblio.motivation.html> .

For a list of WebQuests for high school students in various content areas, including math, see <http://webquest.sdsu.edu/matrix.html> .

For some excellent mathematical quotations that connect words to mathematical concepts, see <http://www.mathacademy.com/pr/quotes/index.asp> .

For a listing of best practices in the mathematics classroom, see <http://instech.tusd.k12.az.us/balancedlit/handbook/BLHS/blmathhs.htm>.  
Problems of the week, arranged by math topic, can be found at <http://mathforum.org/pow/> .

This link describes three reading comprehension strategies shown to be helpful with mathematics textbooks: <http://www.nade.net/documents/SCP97/SCP97.2.pdf>.

For strategies on how to read a math textbook, see <http://wc.pima.edu/~carem/Mathtext.html> or <http://acunix.wheatoncollege.edu/jsklensk/suggestions.html> .

For a series of books that link math and reading, see <http://www.mathgoodies.com/books/> .

For suggestions on how to create a more responsive math classroom, see [http://www.mathgoodies.com/articles/safe\\_math.html](http://www.mathgoodies.com/articles/safe_math.html) .

An overview of strategies for teaching vocabulary in the math classroom can be found at [http://www.eduplace.com/state/pdf/author/chard\\_hmm05.pdf](http://www.eduplace.com/state/pdf/author/chard_hmm05.pdf) .

This website is designed for educators and students. Here you will find numerous sites that have been recently updated, added or deleted. Many link to others. <http://www.uni.edu/becker/Spanish3.html> .

Using The Knowledge Loom: Ideas and Tools for Collaborative Professional Development <http://knowledgeloom.org/index.jsp> .

Dave's Math Tables: *English-Spanish Dictionary*  
<http://math2.org/math/spanish/eng-spa.htm> .

The National Library of Virtual Manipulatives is a math resource provided by Utah State University. Here you and your students have access to a large (almost unlimited) number of virtual math manipulatives. The manipulatives are categorized by grade level as well as the five standards of mathematics: number & operations, algebra, geometry, measurement, and data analysis & probability. If you have Spanish speaking students, they can select to read the site in their first language. Electronic whiteboard users or even facilitators with only a single computer and LCD projector can use these resources to demonstrate how to use the classroom manipulatives or as whole group instruction of the concept. <http://nlvm.usu.edu/en/nav/vlibrary.html> .

Welcome to at Home with Math: Ten Math Activities for Parents and Kids  
<http://athomewithmath.terc.edu/> .

Choose a subject area that interests you, and then browse through thousands of learning activities. All of these games and quizzes were created by educators using Quia's tools and templates. <http://www.quia.com/shared/>

Math Lessons that are Fun  
<http://math.rice.edu/~lanius/Lessons/> .

# ELL Math Classroom Observation Form

If you would like to receive a revised “ELL Math Classroom Observation Form”, please email one of us at the following:

- Dr Candelario Huerta – [DrCandelario@gmail.com](mailto:DrCandelario@gmail.com)
- Cecilia G Huerta – [CeciliaGHuerta@gmail.com](mailto:CeciliaGHuerta@gmail.com)