ELPA Validity Evaluation Instrument:

Teacher Survey on ELL Content Instruction and Assessment
(Science Content Area)

Washington
Idaho
Indiana
Montana
Oregon

edCount, LLC
Center for Assessment
UCLA
Synergy Enterprises, Inc
PIRE

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About EVEA

The U.S. Department of Education funded Enhanced Assessment Grant *Evaluating the Validity of English Language Proficiency Assessments* (EVEA; CFDA 84.368) was awarded to the Office of the Superintendent for Public Instruction of the State of Washington in fall 2009. The project brought together five states – Idaho, Indiana, Montana, Oregon, and Washington – to work on collaborative and independent validity plans for English language proficiency assessments (ELPAs) over an 18-month period. During the EVEA funding period, none of the partner states belonged to an existing ELPA consortium; rather each had worked with commercial test developers to create state-wide ELPAs that are aligned with their state English language development (ELD) standards. The main project goal was for each state to create a validity argument for its ELPA system. Additional project outcomes included:

- Building individual State Interpretive Arguments for the validity of each state's ELPA,
- Building a Common Interpretive Argument for any ELPA;
- Designing a set of studies and instruments to support and pilot test these arguments; and
- Making instruments publically available at the close of the project for the wider education community to access.

This research instrument is one product of these efforts.

Collaborating institutions

edCount, LLC
The National Center for the Improvement of Educational Assessment (NCIEA, the Center for Assessment)
The Graduate School of Education and Information Studies (GSE&IS) at the University of California, Los Angeles (UCLA)
Synergy Enterprises, Inc. (SEI)
The Pacific Institute for Research and Evaluation (PIRE)

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Research Objective

States may be interested in learning how instructors use ELPA scores to inform their instruction. The design of the state's ELPA and larger assessment system may support specific score uses but not others; states may also benefit from knowing how teachers would like to use scores, or are already using scores, in case the ELPA or assessment system could be modified to make such uses more valid.

This document outlines the claims, underlying assumptions, and research questions that can begin to lay the foundation for a state's efforts to determine whether and how teachers are using the scores from its ELPA. In addition, it provides sample research questions for a survey that may be used to collect information from teachers about their use of ELPA scores. The sample questions focus on science instruction; states that are interested in collecting information about other subject areas could modify the questions accordingly.

Claim

ELPA scores/performance levels are used appropriately to inform decisions related to the assessment system goals.

Underlying Assumptions

Teachers accurately interpret their state ELPA and use the results appropriately for class placements so that students are acquiring the academic language skills necessary to participate fully in instructional discourse (science content area example) conducted in English.

The interpretation of ELPA scores, and the conversion of these scores into levels of ELP, is done accurately by teachers and school administrators so that students acquire the academic English necessary for school achievement (science example).

The level of proficiency set by the ELPA is a performance level commensurate with proficient English abilities.

Example Research Questions

Research Question 1: In what ways do teachers use the information yielded by the state ELPA for instruction of ELL students? And are these ways different for bilingual/ESL program teachers teaching science versus general education teachers teaching science?

Research Question 2: As a result of being identified as achieving at a proficient level on the ELPA, do former ELL students have the academic language skills necessary to participate fully in instructional discourse conducted in English?

Method

States may begin to address the research questions above by circulating a survey to collect descriptive information about teachers' instructional practices and uses of ELPA scores. The survey included here could be administered to all teachers who teach science with EL students in their classrooms. Teachers are prompted for information about their instructional and assessment practices and to indicate if they make adaptations to their practices for ELL students specifically. Questions consist of forced-choice and multiple-option questions along with a series of likert scales (0-5 scales) eliciting teacher ratings of the

frequency, importance and emphases they place on their various assessment and instructional practices. Teachers are encouraged to write in responses that do not match any of the prepared answer with an "other" option for most questions. The different sections of the survey request responses on: (1) teacher and student demographic information; (2) assessment practices; (3) teacher beliefs about language proficiency; (4) instructional practices. A final question elicits open-ended commentary on the instruction and assessment of ELL students in the science field.

The 29-question survey takes approximately 20-25 minutes to complete.

Unlike other EVEA instruments, the Teacher Survey on ELL Content Instruction and Assessment is an adaptation of the Opportunity to Learn and Academic Language Exposure Survey developed by the National Center for Research on Evaluation, Standards & Student Testing (CRESST) in 2010. The original CRESST survey was piloted[1] and the results that focused on the factor structure of items and correspondences with a small number of researcher observations of classrooms can be found at http://www.cse.ucla.edu/products/reports/R767.pdf.

Based on the findings of that pilot work, EVEA project members created an adapted version of the survey on which they reduced the number of questions, reduced item choices within questions, simplified wording, and created several new questions about English language proficiency specifically for the EVEA project.

Analysis

States can start by calculating descriptive statistics from the teacher responses they collect. Where applicable, states may wish to test for statistical significance between response patterns from various subgroups on various demographic variables. In addition, tests of statistical significance can be conducted to determine whether certain subgroups of interest differ (e.g., Bilingual/ESL teachers and general educators with ELLs in their science classes) in their reports of providing instructional and assessment adaptations specific to ELL students. States may also run qualitative analyses of responses to the open-ended final question of the survey ("*As a final step, we would like to ask if you have any further comments and suggestions for the important topics of ELL instruction, assessment and/or science learning"*). Such analyses may help the state to identify themes and provide sample comments to exemplify the range of comments the survey engendered.

[1] Martinez, J-F., Bailey, A.L., Kerr D., Huang B. H.-H., & Beauregard S., (2010). Measuring Opportunity to Learn and Academic Language Exposure for English Language Learners in Elementary Science Classrooms. IES PR/Award Number R305A050004. (Currently available as CSE Tech. Report No. 767). Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).

Background Information

1. **How long have you been teaching?**

   Number of years _____

2. **Highest degree attained: (Please check one)**

   ___Associate

   ___Bachelor

   ___Master

   ___PhD

   ___EdD

   ___Other (please specify)_____

3. **Major area of study for that degree: (Please check one)**

   ___Humanities

   ___Social Sciences

   ___Mathematics

   ___Physical Sciences

   ___Biological Sciences

   ___Other (please specify)_____

4. **Teaching credential(s) held: (Please check all that apply)**

   ___Elementary

   ___Secondary

   ___Bilingual

   ___ESL

   ___Emergency

   ___Other (please specify)_____

5. **Number of in-service professional development hours focusing on:**

   General pedagogy/teaching methods (hours) _____

   Science content/curriculum (hours) _____

   1. Science teaching methods (hours) _____

   2. ELL teaching methods (hours) _____

6. **Which grade do you currently teach? (If teaching multiple grades and classes, please choose one grade and class to respond to throughout)**

   Grade_____

7. **Which of the following best describes the program or classes in which you currently teach? (Please check one)**

   ___Teach general education science and DO NOT have English language learners (ELLs) in my regular classes

   ___Teach general education science and DO have ELLs in my regular classes

   ___Teach ELL or bilingual content area classes (including science)

   ___Teach in ELL pull out program only (no science teaching): SKIP TO QUESTION 29

   ___General education teacher but do not engage in any science teaching: SKIP TO QUESTION 29

   ___Other (please specify) _____

8. **How long have you been teaching science at this grade?**

   Number of years _____

9. **How many years have you been teaching with ELL students in your classes? (If never, please enter 0)**

   Number of years _____

10. **Are you proficient in a language other than English? (Please check all that apply)**

    ___ No

    ___ Spanish

    ___ Cantonese

    ___ Mandarin

    ___ Vietnamese

    ___ Russian

    ___ Other (please specify)_____

Student Demographics

11. How many students in your science class are girls/boys?

Number of girls _____

Number of boys _____

12. How many students in your science class are ELL students? (If none, please enter 0)

Number of ELL students _____

13. How many students in your science class are from economically disadvantaged backgrounds? (If none, please enter 0)

Number of students _____

14. Based on your "State Achievement Test for Reading," what percentages of students in your science class are at the following performance levels (or equivalent levels in your state):

Below basic (Level 1) (%) _____

Basic (Level 2) (%) _____

Proficient (Level 3) (%) _____

Advanced (Level 4) (%) _____

15. If relevant, what percentage of your current students who exited language services (former ELL students) have acquired the academic English language skills necessary to participate fully during your science instruction?

% of ELL students with skills to participate _____

Instructional Resources

16. Which of the following resources are available to you during science classes? (Please check all that apply)

___ Science textbooks

___ Worksheets

___ Science trade books/newspapers/magazines

___ Lab equipment/materials

___ Science-specific videos/software/Internet

___ Science vocabulary charts

___ Concept or Procedure posters

___ Dictionaries or Thesauri

___ Teaching assistant

___ ESL/bilingual aide

___ District provided lesson plans

___ A progression of language skills for science

___ Science assessments to guide instruction

___ Other (please specify)_____

Instructional Practices

17. Approximately how frequently do students in your science class do the following? (Please choose from 0-5 for each reply and check corresponding boxes if you make any kinds of adaptation for ELs)

(0 = Never; 1 = Less than once a month; 2 = 1-2 times a month; 3 = Once per week; 4 = Several times a week; 5 = Every day)

	0	1	2	3	4	5	EL*
Listen to lecture/teacher-directed instruction							
Read a science textbook							
Read science articles (magazine, newspaper, on-line)							
Complete worksheets							
Manipulate materials; hands-on activities							
Discuss science topics and ideas							
Complete homework tasks							
Watch science-related videos							
Explain their thinking							
Formulate questions							
Provide constructive feedback to one another							
Present oral science reports							
Write science reports							
Use science-related software or internet resources							
Create graphic representations (diagrams, models, simulations)							
Work on individual projects							
Collaborate on group projects							
Work one-on-one with a teacher or an aide							
Other (please specify below)							

***EL = Make EL Adaptations**

IMPORTANT: If you checked any boxes for EL ADAPTATIONS, please briefly explain below:

18. How frequently do you rely on the following academic English instructional strategies during science (e.g., language needed to access and engage in the curriculum)? (Please choose from 0-5 for each reply and check corresponding boxes if you make any kinds of adaptation for ELs)

	Never					Always	
	0	**1**	**2**	**3**	**4**	**5**	**EL***
Provide explicit language objectives, in tandem with science knowledge/skill objectives							
Provide explicit links between new concepts and students' background experiences and past learning							
Provide opportunities to practice academic language in science writing							
Provide opportunities to practice academic language orally and participate in scientific discourse (e.g., mock debates)							
Provide opportunities to witness the authentic discourse of scientists (e.g., video, classroom visits from botanists, etc.)							

***EL = Make EL Adaptations**

IMPORTANT: If you checked any boxes for EL ADAPTATIONS, please briefly explain below:

19. Considering your lesson plans or other preparation for science classes, how frequently do you include the following academic language functions (i.e., the ways in which you use language during science teaching)? (Please choose from 0-5 for each reply and check corresponding boxes if you make any kinds of adaptation for ELs)

	Never					Always	
	0	**1**	**2**	**3**	**4**	**5**	**EL***
Defining scientific vocabulary and phrases							
Describing scientific processes or phenomena							
Explaining scientific processes or phenomena							
Classifying scientific information and phenomena							
Casual reasoning with scientific phenomena (cause and effect)							
Labeling of scientific processes or objects							
Enumerating (listing) of science facts and processes							
Generating hypotheses							
Justifying claims							
Comparing and contrasting data							
Presenting analyses and results (oral and written)							
Debating ideas							
Predicting scientific outcomes							
Generalizing scientific processes or facts to other scientific phenomena							

***EL = Make EL Adaptations**

IMPORTANT: If you checked any boxes for EL ADAPTATIONS, please briefly explain below:

Student Learning

20. To what extent do you emphasize the following for students during science? (Please choose from 1-5 for each reply and check corresponding boxes if you make any kinds of adaptation for ELs)

	No emphasis 0	1	2	3	4	Strong emphasis 5	EL*
Knowing science facts and terminology							
Understanding science concepts							
Practicing test-taking skills or memorizing test items							
Developing an interest in science							
Learning the relevance of science for society and everyday-life applications							
Explaining connections between different scientific concepts							
Handling instruments, developing lab skills							
Learning and practicing the scientific method (set up hypothesis, collect and analyze data)							
Using technology as a scientific tool							
Generating hypotheses and inferences based on scientific knowledge							
Developing general academic vocabulary (e.g., analyze, predict)							
Developing specialized scientific vocabulary (e.g., pollination, lava)							
Developing comprehension skills (listening and reading)							
Developing necessary grammatical structures to talk and write about science							
Essay writing skills using science topics							
Explaining basic scientific concepts accurately and effectively							
Using evidence to explain and justify scientific notions and ideas							
Asking questions							
Using problem-solving strategies							
Making deductions from evidence							
Providing constructive feedback to peers							
Using constructive feedback from peers							
Oral building on other students' ideas							
Drawing connections among other students' ideas							
Other (please specify below)							

***EL = Make EL Adaptations**

IMPORTANT: If you checked any boxes for EL ADAPTATIONS, please briefly explain below:

ELL-Specific Practices

21. In your opinion, how reliant is student science learning on the following aspects:

	Not reliant 0	1	2	3	4	Very reliant 5
A student's oral language proficiency in English						
A student's reading and writing skills in English						
A teacher's oral language proficiency in English						
A teacher's reading and writing skills in English						

22. Are students in your science classroom grouped based on language background? (Please check all that apply)

___ Yes, each ELL student is paired with a native English speaker

___ Yes, ELL students are grouped together by language proficiency level

___ Yes, all ELL students are placed in one group regardless of proficiency and native language

___ Yes, ELL students with the same language (e.g., all Spanish-speakers) are placed in one group

___ Yes, ELL students are given science instruction in their primary language

___ No, students are not grouped differently because of language

23. Do you have access to your state "English Language Proficiency Assessment" scores or ELD levels of your ELL students?

___ Yes

___ No

24. If yes, in what ways do you choose to rely on your state "English Language Proficiency Assessment (EL-PA)" scores/ELD levels for your science instruction? (Please check all that apply)

___To group student by oral language abilities

___To group students by literacy abilities

___To group students by overall English proficiency level

___To form ELL and Non-ELL groups

___I do not rely on the ELPA for science instruction

___Other (please explain)_____

25. To what extent do you choose to rely on the following English-as-a-second-language (ESL) instructional strategies in your science class? (Please choose from 0-5 for each reply)

	Never 0	1	2	3	4	Always 5
Use deliberate pauses (wait time) to allow students to respond						
Use scaffolding techniques to support students' understanding of English (e.g., progression from closed to open-ended questions, think-aloud/modeling, graphics, realia)						
Provide opportunities for student-to-teacher interactions that encourage elaborated responses						
Provide opportunities for student-to-student interactions that encourage elaborated responses						
Provide opportunities for students to clarify English vocabulary in their primary language						
Provide opportunities for self- or peer-assessment of English proficiency						
Explicitly teach language structures and vocabulary						
Use supplementary ELL materials (e.g., glossaries, bilingual dictionaries)						
Adapt my speech to all levels of English proficiency						
Adapt texts to all levels of English proficiency						
Provide feedback about students' weaknesses in English language (e.g., vocabulary, grammar)						
Explicitly incorporate students' home culture and background experiences						

Assessment Practices

26. Approximately how frequently do you use the following to assess student achievement in science? (Please choose from 0-5 for each reply and check corresponding boxes if you make any kinds of adaptation for ELs)

(0 = Never; 1 = Less than once a month; 2 = 1-2 times a month; 3 = Once per week; 4 = Several times a week; 5 = Every day)

	0	1	2	3	4	5	EL*
Quiz/short tests							
Chapter/end-unit tests							
District tests or benchmarks							
Student responses to teacher questions during instruction							
Student work (e.g., homework, journals, logs, portfolios, representations)							
Student questions							
Observation of students							
Student discussions							
Peer-assessment							
Self-assessment							
Released standardized tests or items							
Other (please specify below)							

***EL = Make EL Adaptations**

IMPORTANT: If you checked any boxes for ELL ADAPTATIONS, please briefly explain below:

27. How important are the following for evaluating students in your science class? (Please choose from 0-5 for each reply and check corresponding boxes if you make any kinds of adaptation for ELs)

	Not important 0	1	2	3	4	Very important 5	EL*
Knowing scientific facts or vocabulary							
Understanding of scientific concepts							
Achievement/progress relative to the rest of the class							
Achievement/progress relative to State Standards							
Achievement/progress relative to the child's previous learning (or performance)							
Producing science language							
Effort, participation, behavior							
Other (please specify below)							

***EL = Make EL Adaptations**

IMPORTANT: If you checked any boxes for EL ADAPTATIONS, please briefly explain below:

28. In what ways do you use assessment information? (Please check all that apply)

___ Instructional planning for class

___ Instructional planning for individual students

___ Monitor progress

___ Progress reports for parents

___ Progress reports for administrator

___ Diagnostic reports for Student Study Teams/referrals

___ Grade-level planning with colleagues

___ Other (please explain)_____

29. As a final step, we would like to ask if you have any further comments and suggestions for the important topics of ELL instruction, assessment and/or science learning: THANK YOU FOR YOUR TIME AND VALUABLE INPUT!