The Use of Scaffolding Strategies in the Assessment of English Learners

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Educational Testing Service

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Overview

• Background on English learners (ELs) and English language proficiency (ELP) assessment in the U.S.
• Project goals
• Sample assessment tasks
• Prototyping study
• Findings
• Implications
Contextual Background:
English Learners (ELs) in K-12 Public Schools in the U.S.

• About 5 million students are officially designated as ELs in K-12 schools in the U.S.
• In California, on average, 1 out of 4 students is an EL.
• EL students are lagging behind in their academic achievement due to their lack of English proficiency.
• EL students and their teachers are in dire need of effective tools and strategies to help improve EL students’ learning outcomes.
Contextual Background:

English Learners (ELs) in K-12 Public Schools in the U.S.

- About 5 million students are officially identified as English Learner (EL) in K-12 schools in the U.S.
- In California, 1 out of 4 students is an EL, on average.
- EL students are lagging behind in their academic achievement. EL students and their teachers are in dire need of effective tools and strategies to help improve EL students’ learning outcomes.

Quality assessments to identify students’ needs and provide actionable information for learning and teaching.
Current Practice of English Language Proficiency (ELP) Assessments for ELs

Two types of mandated, large-scale ELP assessments

**Screener ELP assessment**
- **Uses:**
  - (1) Identifying who are ELs
  - (2) Planning about students’ instructional programs and types of support
- **Target test takers:** Mainly kindergarten students and new students who first enroll in school

**Summative ELP assessment**
- **Uses:**
  - (1) Tracking annual progress of ELP attainment
  - (2) Exiting students from EL status
- **Target test takers:** EL students in Grades K-12
Challenges of ELP Assessment

• How to assess target test takers: mostly young students (e.g., kindergarteners/ages 5-6) and new immigrant students

• How to better measure the construct: students’ communicative language abilities in school settings

• How to provide more meaningful information: accurate and finer-grained information about students’ English language abilities
Speaking Task Example (Gr3-5)

**Say** I am going to show you some pictures that tell a story.

Pause to give students time to look at the pictures.

**Say** Last night, Alex was very tired when he was watching television. What happened next?

Source. California CELDT Released Items, 2012
Overall Goals of the Project

- Improving the accuracy of measuring students’ communicative language ability in school contexts
- Increasing student engagement in assessment tasks
- Providing useful information for teachers

One approach: Technology-based, innovative assessment tasks
Task Design Features Using Technology

- Scenario-based tasks
- Integrated language skills
- Interactive/dynamic
- Immediate feedback
- Scaffolding strategies
Scaffolding in EL Instruction

• Scaffolding: supports that helps students complete a given task.
• Types of scaffolding for ELs (e.g., Gibbons, 2002; Vogt & Short, 2004; Walqui, 2006; Zwiers, 2006)
## Scaffolding in EL Instruction

### EL Scaffolding Examples (Vogt & Short, 2004)

<table>
<thead>
<tr>
<th>Types</th>
<th>Technique examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Verbal Scaffolding</strong></td>
<td>• paraphrasing</td>
</tr>
<tr>
<td>(Language-development focused)</td>
<td>• developing questions</td>
</tr>
<tr>
<td><strong>Procedural Scaffolding</strong></td>
<td>• modeling</td>
</tr>
<tr>
<td></td>
<td>• role-playing</td>
</tr>
<tr>
<td><strong>Instructional Scaffolding</strong></td>
<td>• graphic organizers</td>
</tr>
<tr>
<td>(tools that support learning)</td>
<td>• manipulatives</td>
</tr>
</tbody>
</table>
Incorporating Scaffolding Strategies in Assessment

• Explore the use of scaffolding to better measure students’ English language proficiency
• Replicate an actual classroom where students have access to support from the teacher when needed
• Provide useful information for learning and teaching
  - the degree of scaffolding needed for individual students
  - the types of scaffolding
# Our Sample Scenario-Based Tasks

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>Receptive listening tasks:</th>
<th>Productive speaking tasks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade K</td>
<td>- Comprehension</td>
<td>- Retelling</td>
</tr>
<tr>
<td></td>
<td>- Vocabulary</td>
<td>- Describing</td>
</tr>
<tr>
<td>Grades 1 - 2</td>
<td>🗓 School Day</td>
<td>🗓 Playground</td>
</tr>
<tr>
<td></td>
<td></td>
<td>🗓 Mixing Paint</td>
</tr>
<tr>
<td>Grades 3-5</td>
<td>🗓 School Day</td>
<td>🗓 Playground</td>
</tr>
<tr>
<td></td>
<td></td>
<td>🗓 Melting Ice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>🗓 Lemon Juice</td>
</tr>
</tbody>
</table>
Our New Playground

School Day Scenario

Listening, Learning, Leading.
Sample Task 1

Mixing Paint

- Grade K
- Listen and Speak
- Retell and describe
Mixing Paint

First
Retell
Tell me what happened.

Scaffolding Questions
Tell me what happened first.
Tell me what happened next.
Tell me what happened in the end.

Second
Retell
Tell me again what happened.
Sample Task 2

Lemon Juice Task, Gr 3-5
Sample Tasks (cont.)

- Listen and Speak
- Retell and describe
Prototyping Study

• Purpose: To examine the potential benefits and usability of our design principles
• Four rounds of individual cognitive lab and group-administration data collection in Grades K-12, in 2012-2013
• Qualitative analysis
Participants

Students in Grades K-5 (age: 5 – 11)

<table>
<thead>
<tr>
<th>Grade</th>
<th>EL</th>
<th>Non-EL</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>28</td>
<td>20</td>
<td>48</td>
</tr>
<tr>
<td>1</td>
<td>15</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>65</td>
<td>45</td>
<td>110</td>
</tr>
</tbody>
</table>
Discussion Points about Scaffolding in Assessment

• Eliciting more responses from students
• Helping students retell events
• Using different types of scaffolding
• Enhancing learning and teaching
**Elicit More Information**

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>First retell: “Tell me everything the teacher did.”</td>
<td>Oh, he was playing with some colors. And we mix it up with green. And that’s it.</td>
</tr>
<tr>
<td><strong>Scaffolding questions:</strong></td>
<td></td>
</tr>
<tr>
<td>S1: “What did the teacher just do?”</td>
<td>S1: Pick...put...<strong>yellow paint</strong> on table.</td>
</tr>
<tr>
<td>S2: “What did the teacher just do?”</td>
<td>S2: Put the <strong>blue on a plate</strong>.</td>
</tr>
<tr>
<td>S3: “What did the teacher just do?”</td>
<td>S3: <strong>Mix the two different colors and make green</strong>.</td>
</tr>
<tr>
<td>Second retell: “I was late and missed class. Can you tell me what the teacher did?”</td>
<td>The teacher did the <strong>yellow paint. Put it on a plate.</strong> And <strong>blue</strong> put it on a plate. <strong>And mix both colors and make green.</strong> And that’s it.</td>
</tr>
</tbody>
</table>
### Elicit More Information

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<tr>
<td>First retell: “Tell me everything the teacher did.”</td>
<td>[No response]</td>
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<tr>
<td>Scaffolding questions:</td>
<td></td>
</tr>
<tr>
<td>S1: “What did the teacher just do?”</td>
<td>S1: She paint right there.</td>
</tr>
<tr>
<td>S2: “What did the teacher just do?”</td>
<td>S2: Paint</td>
</tr>
<tr>
<td>S3: “What did the teacher just do?”</td>
<td>S3: Make green</td>
</tr>
<tr>
<td>Second retell: “I was late and missed class. Can you tell me what the teacher did?”</td>
<td>Yellow, blue, and green!</td>
</tr>
</tbody>
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## Elicit More Information

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Scaffolding questions:
- S1: “What did the teacher just do?”
- S2: “What did the teacher just do?”
- S3: “What did the teacher just do?”

S1: She paint right there.
S2: Paint
S3: Make green

Second retell: “I was late and missed class. Can you tell me what the teacher did?”

- More data points
- Better opportunity for students to demonstrate language abilities
## Retelling an Event

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Response</th>
</tr>
</thead>
</table>
| **First retell:**  
“Tell me everything the teacher did.” | **With the brush, she used to make the writing on the paper.** |

| Scaffolding questions:  
S1: “What do I do first?”  
S2: “What do I do next?”  
S3: “What happens then?”  
S4: “What do I do then?”  
S5: “Then what happens?” | S1: You squeeze the juice.  
S2: Dip, write.  
S3: Um, he waits for the paper to dry.  
S4: In front of the light.  
S5: Then in front of the light see what she wrote on the paper. |

| **Second retell:**  
“I was late and missed class. Can you tell me what the teacher did?” | **Squeeze the lemon in the bowl and then she got, she picked the brush and put it in the lemon juice and then write in the paper and then put on um the light and it showed the, the word.** |
### Retelling an Event

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<tr>
<td>First retell: “Tell me everything the teacher did.”</td>
<td>With the brush, she used to make the, the writing on the paper.</td>
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**Scaffolding questions:**
- S1: “What do I do first?”
- S2: “What do I do next?”
- S3: “What happens then?”
- S4: “What do I do then?”
- S5: “Then what happens?”

S1: You squeeze the juice.
S2: Dip, write.
S3: Um, he waits for the paper to dry.
S4: In front of the light.
S5: Then in front of the light see what she wrote on the paper.

**Second retell:**
“Tell me everything the teacher did.”

Squeeze the lemon in the bowl and then she got, she picked the brush and put it in the lemon juice and then write in the paper and then put on um the light and it showed the, the word.

- The scaffolding questions serve as a model or guide for retelling an event.
- Scaffolding helps some students retell the event:
  - Sequencing
  - Key details
  - Relevant vocabulary
Type of Scaffolding Questions

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Retell</td>
<td>[No response]</td>
</tr>
<tr>
<td>S1: “Look at the first picture. What do you see?”</td>
<td>A truck.</td>
</tr>
<tr>
<td>S2: “Look at the second picture. What is Luis doing?”</td>
<td>Talking and a boy.</td>
</tr>
<tr>
<td>S3: “Look at the third picture. What is Luis doing now?”</td>
<td>Planting the flower.</td>
</tr>
<tr>
<td>S4: “Look at the fourth picture. What is happening here?”</td>
<td>Now they’re playing.</td>
</tr>
</tbody>
</table>
Scaffolding questions should elicit the kind of information needed to perform the specific task.

In the case of retelling a story
- Characters, setting
- Beginning, middle and end
Suggested Revisions

• Include scaffolding questions that elicit the following information:
  – Who the characters in the story are
  – Where the story takes place (setting)
  – What happened at the beginning
  – What happened next (in the middle)
  – What happened at the end
### Enhancing Teaching

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>S1: Tell me what materials we need.</strong></td>
<td>Ice, plate</td>
</tr>
<tr>
<td><strong>S2: What do we do first?</strong></td>
<td>S: What’s this? T: It’s a spoon S: First you get the spoon, then you get the ice, then you put on a plate.</td>
</tr>
<tr>
<td><strong>S3: What do we do next?</strong></td>
<td>Then you wait a few seconds.</td>
</tr>
<tr>
<td><strong>S4: What happens at the end?</strong></td>
<td>The ice gets like water.</td>
</tr>
<tr>
<td><strong>Retell:</strong> “I was late and missed class. Can you tell me what the teacher did?”</td>
<td>The teacher put a ice cube on the plate. Then they, they wait for a few second, then the ice will put like water.</td>
</tr>
</tbody>
</table>
Scaffolding provides useful information to enhance teaching:

- what the student knows
- what the student doesn’t know
- what needs to be learned
- what needs to be practiced
Summary

• Scaffolding in ELP assessment has potential to increase the measurement accuracy on what students know and can do.
• Scaffolding in assessment can be used as a means of capturing a wider range of information about student abilities.
• Score reports from an assessment with scaffolding may have more useful information for students and teachers.
• More empirical research is needed to realize the benefits of scaffolding in assessment (e.g., scoring in large-scale assessment settings).
Implications for LOA

• Develop assessment tasks as learning tasks.
  Learning tasks:
  – are aligned to instruction
  – are authentic
  – are engaging
  – provide support (scaffolding)
  – provide useful information to students and teachers
Implications for LOA (cont.)

• Provide relevant and timely feedback to students and teachers
  – to promote and support future learning, so students can self-management skills for learning
  – to allow them to engage with it and act upon it to become independent learners
  – to understand the type of support their students need
  – to help their students monitor their progress towards meeting the intended learning goals
Thank you!

Acknowledgements

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