Universal Design in Teaching English Learners: Articulating Evidence-Based New Basics

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The University of Toronto

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The shocking recognition for the Board of Education for the City of Toronto is that within the space of a decade its CULTURAL BASE HAS BECOME INCOMPATIBLE (emphasis original) with the cultural base of the society which supports its endeavour. (p. 5)
"By awarding this prize and with our schools campaign, we aim to put the issue of integration on the agenda of education politics in Germany", explained Dr. Thielen ahead of the award ceremony in Gütersloh.

"At the same time, we want to raise awareness of the fact that there actually exist outstanding examples, internationally, for successful integration of children and young people of migrant origin."

Liz Mohn, Vice Chair of the Bertelsmann Stiftung Executive Board, presenting the Carl Bertelsmann Prize 2008 to Gerry Connelly, Director, and John F. Campbell, Chairman of the Board of Trustees of the Toronto District School Board.
Problematic Issues that Persist in Ontario and Canada

- In many schools across the province we are still a long way from ensuring that “ESL is Everybody’s Business”; this is particularly the case at the high school level.

- Faculties of Education across the province still view ESL as an “additional qualification” rather than as an integral part of teacher education.

- There is still no explicit expectation, let alone requirement, that all school principals and vice-principals have a basic knowledge of ESL instructional strategies (e.g., scaffolding); it is not a criterion for advancement within school systems.

- Finally, in Ontario, we are still in the embarrassing situation where the Education Act prohibits any bilingual program designed to develop students’ knowledge of languages other than English and French (short-term transitional programs are permitted). This contrasts with provinces such as Alberta where 50/50 bilingual programs involving heritage languages are thriving.
Universal Design
(concept created by architect Ronald L. Mace)

- Universal Design involves designing products and spaces so that they can be used by the widest range of people possible.

- Universal design for learning (UDL) is a means of creating greater accessibility to curriculum and the mastery of learning standards for students of varied ability. When we create varied and multiple pathways for students to follow to a learning outcome, it is more likely that most students will get to the destination.

Ronald L. Mace 1941 -1998 (universaldesign.com)
What Do We Know about Learning?

- **Engaging prior understandings**
  
  "new understandings are constructed on a foundation of existing understandings and experiences" (Donovan & Bransford, 2005, p. 4).

- **Integrating factual knowledge with conceptual frameworks**
  
  "deep understanding of subject matter transforms factual information into usable knowledge" (Bransford et al. p. 16).

- **Enabling students to use metacognitive strategies to take active control over the learning process**
  
  "a 'metacognitive' or self-monitoring approach can help students develop the ability to take control of their own learning, consciously define learning goals, and monitor their progress in achieving them" (Donovan & Bransford, 2005, p. 10)
All learning builds on a foundation of pre-existing knowledge and skills. Learning = the integration of new knowledge/skills with the knowledge/skills we already possess.

The language of academic success in school is very different from the language we use in everyday conversational interactions.

ELL students typically require at least 5 years to catch up academically to native-speakers; by contrast, basic conversational fluency is usually acquired within 1-2 years.

Engagement with the TL is crucial for learning oral and written skills. Extensive evidence that sustained growth in reading and writing skills is strongly related to students’ level of literacy engagement.

Students’ L1 is an important cognitive resource in scaffolding instruction – can be mobilized as a stepping stone to English academic skills.
Segment 1
Background Knowledge and Learning

Snow, Burns and Griffin (1998: 219) express the centrality of background knowledge as follows:

Every opportunity should be taken to extend and enrich children’s background knowledge and understanding in every way possible, for the ultimate significance and memorability of any word or text depends on whether children possess the background knowledge and conceptual sophistication to understand its meaning.

*Remembering: A study in experimental and social psychology* (1932)
What is the nature of academic language and how does it relate to literacy development?

We need to distinguish between:

- Conversational fluency
- Discrete language skills
- Academic language proficiency
What Is English Language Proficiency?

Conversational Fluency

- The ability to carry on a conversation in familiar face-to-face situations;

- Developed by the vast majority of native speakers by the time they enter school at age 5;

- Involves use of high frequency words and simple grammatical constructions;

- ELL students typically require 1-2 years to attain peer-appropriate levels.
What Is English Language Proficiency?
Discrete Language Skills

- Refers to the rule-governed aspects of language (phonological awareness, phonics, spelling, grammar, punctuation, etc.);

- Can be developed in two independent ways:
  (a) by explicit instruction, and
  (b) through immersion in a literacy-rich home or school environment where meanings are elaborated through language and attention is drawn to literate forms of language (e.g. letters on the pages of books);

- ELL students can learn these specific language skills concurrently with their development of basic vocabulary and conversational fluency. However, there is little direct transference to other aspects of language proficiency (e.g., vocabulary).
What Is English Language Proficiency?

Academic Language Proficiency

- Includes knowledge of the less frequent vocabulary of English as well as the ability to interpret and produce increasingly complex written language;

- ELL students typically require at least 5 years to attain grade expectations in language and literacy skills;

- In order to catch up to grade norms within 6 years, ELL students must make 15 months gain in every 10-month school year;

- Because academic language is found primarily in books, extensive reading is crucial in enabling students to catch up;

- Frequent writing, across genres, is also crucial in developing academic writing skills.
### Social Studies Vocabulary (grade 5)

<table>
<thead>
<tr>
<th>amend</th>
<th>annexation</th>
<th>boundary</th>
<th>compromise</th>
<th>consultation</th>
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<tbody>
<tr>
<td>bombed</td>
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<td>colonist</td>
<td>commerce</td>
<td>convention</td>
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<td></td>
<td></td>
<td>cavalry</td>
<td>constitution</td>
<td>convince</td>
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<td>declaration</td>
<td>dissolved</td>
<td>independence</td>
<td>perpetual</td>
<td>ratify</td>
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<td>dynasty</td>
<td></td>
<td>induced</td>
<td>petition</td>
<td>rebellion</td>
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<td></td>
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<td>inference</td>
<td>preamble</td>
<td>representatives</td>
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<td>resolution</td>
<td>revolt</td>
<td>sentiments</td>
<td>statement</td>
<td>traditions</td>
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<td>revolution</td>
<td></td>
<td>siege</td>
<td>surveyor</td>
<td>treaty</td>
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<td></td>
<td></td>
<td>skirmish</td>
<td>sustain</td>
<td>tyrants</td>
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</table>
Sample of Most Frequent 150 Academic Words

<table>
<thead>
<tr>
<th>accelerate</th>
<th>contribute</th>
<th>fluctuate</th>
<th>notion</th>
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</thead>
<tbody>
<tr>
<td>achieve</td>
<td>convert</td>
<td>focus</td>
<td>obtain</td>
</tr>
<tr>
<td>adjacent</td>
<td>create</td>
<td>formulate</td>
<td>obvious</td>
</tr>
<tr>
<td>sequence</td>
<td>affect</td>
<td>criterion</td>
<td>function</td>
</tr>
<tr>
<td>series</td>
<td>alternative</td>
<td>crucial</td>
<td>generate</td>
</tr>
<tr>
<td>shift</td>
<td>analyze</td>
<td>data</td>
<td>guarantee</td>
</tr>
<tr>
<td>occur</td>
<td>signify</td>
<td>approach</td>
<td>define</td>
</tr>
<tr>
<td>passive</td>
<td>similar</td>
<td>approximate</td>
<td>definite</td>
</tr>
<tr>
<td>period</td>
<td>simultaneous</td>
<td>arbitrary</td>
<td>demonstrate</td>
</tr>
</tbody>
</table>
The Cognate Connection

speed  velocidad  velocity
sick   enfermo    infirm
meet   encontrar  encounter
How long does it take for ELL students to catch up academically?
After three years of English-only instruction, a mere 12 percent of English learners in California had acquired sufficient academic English to be re-designated as English proficient (Parrish, Merickel, Perez, & Linquanti, 2006).

Cummins (1981, below) shows why this is the case -- 5-7 years catch-up trajectory is typical.

- "Importantly, the results from the present study support the assertion that a multilingual home language environment is not the cause of low achievement among immigrant students. ... In fact, although immigrant students in multilingual home environments start with a lower performance level, within 3 to 5 years, they catch up with monolingual [English-speaking] immigrant students and, after 5 years, surpass Canadian-born monolinguals."

- However, this achievement pattern did not hold for multilingual students who were born in Canada. Their achievement level (60%) lagged behind multilingual immigrant students who had resided in Canada more than 3 years (64%) and significantly behind multilingual immigrant students who had been in Canada for 5+ years (72%).
Segment 4
The Centrality of Language and Literacy Engagement

Logic:
Academic language is found primarily in printed text rather than in everyday conversation. Thus, students’ opportunities to broaden their vocabulary knowledge and develop strong reading comprehension skills are likely to be greatly enhanced when they have abundant access to printed texts and engage actively with these texts.

Research:
The empirical case derives from numerous research studies carried out over the past 30 years (reviewed by Krashen, 2004; Lindsay, 2010, and others) together with findings produced more recently by the Programme for International Student Assessment (PISA) coordinated by the Organisation for Economic Cooperation and Development (OECD).

Many studies highlight the role of extensive reading in L2 development.
OECD's PISA Study

- Data on the reading attainment of 15-year-olds in 27 countries showed that “the level of a student’s reading engagement is a better predictor of literacy performance than his or her socioeconomic background, indicating that cultivating a student’s interest in reading can help overcome home disadvantages” (OECD, 2004, p. 8).

- Guthrie (2004) cites the PISA data as showing that students whose family background was characterized by low income and low education, but who were highly engaged readers, substantially outscored students who came from backgrounds with higher education and higher income, but who themselves were less engaged readers. Based on a massive sample, this finding suggests the stunning conclusion that engaged reading can overcome traditional barriers to reading achievement, including gender, parental education, and income. (p. 5)

- OECD (2010) - about one-third of the negative impact of SES is mediated through reading engagement (or lack thereof). In other words, schools can significantly reduce the negative effects of low-SES by strongly promoting literacy engagement.
Scaffold Language

*Scaffolding* refers to the provision of instructional supports that enable learners to carry out tasks and perform academically at a higher level than they would be capable of without these supports.

- Graphic organizers
- Visuals in texts
- Demonstrations
- Hands-on experiences
- Collaborative group work
- Encouraging L1 use (e.g., writing) as a means of transferring knowledge and skills from L1 to L2
- Learning strategies (planning tasks, visualisation, grouping/classifying, note-taking/summarising, questioning for clarification, making use of multiple resources for task completion)
- Language clarification (explanation, dictionary use, etc.)
Newcomer students are often in a vulnerable position – they are unable to show their intelligence, personality, sense of humour, etc. to teachers and peers.

They may have gone from a school situation where they were very competent academically to one where they now feel incompetent.

When newcomer students feel welcomed in the school and classroom by teachers and peers, they will engage academically much more actively and effectively.

Opening up the classroom space from being an “English-only zone” to being a multilingual zone can (a) enable scaffolding, (b) connect with students’ lives, (c) affirm identities, and (d) expand students’ awareness and knowledge of how language works.
Segment 5
The Role of Students’ L1 in Acquiring English

I am not always comfortable speaking Cantonese when I have to go to the office for some reason. I don’t like it because a lot of teachers are at the office and I don’t like speaking it in front of them. I know that they are listening to me. I get nervous and afraid. For example, once I didn’t feel very well in grade one. So my teacher took me to the office to call my grandma. My grandma can’t speak English and she also can’t hear very well, so I had to speak in Cantonese very loudly for her to hear. So when I spoke to my grandma, I felt very nervous.
<table>
<thead>
<tr>
<th>English</th>
<th>Arabic</th>
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</thead>
<tbody>
<tr>
<td>(1) Starts from left to right</td>
<td>Starts from right to left</td>
</tr>
<tr>
<td>(2) Noun comes after adjective e.g.</td>
<td>Noun comes before adjective e.g.</td>
</tr>
<tr>
<td>The Green apple</td>
<td>The apple green</td>
</tr>
<tr>
<td>(3) English we say “yes”</td>
<td>To our parents we say “ Philly”</td>
</tr>
<tr>
<td>To our parents and friends</td>
<td>which is more respectful and</td>
</tr>
<tr>
<td></td>
<td>serious. It means “I’m here”</td>
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<tr>
<td></td>
<td>or “I’m ready but the meaning</td>
</tr>
<tr>
<td></td>
<td>changes depending on country</td>
</tr>
<tr>
<td></td>
<td>More descriptive words and</td>
</tr>
<tr>
<td></td>
<td>details when we speak about</td>
</tr>
<tr>
<td>(4) Uses less words to describe something</td>
<td>something because one word</td>
</tr>
<tr>
<td>e.g. A short girl</td>
<td>can have more than one meaning</td>
</tr>
<tr>
<td></td>
<td>e.g. “عيد” – hullwa</td>
</tr>
<tr>
<td></td>
<td>Can mean Candy or a cute girl</td>
</tr>
<tr>
<td>(5) English capitalized for First letter of</td>
<td>You don’t capitalize the</td>
</tr>
<tr>
<td>our language group is arabic</td>
<td>First letter of the word arabic</td>
</tr>
</tbody>
</table>

Group members: Faisal, Wegdan, Osama, Ali, Osama
The NEW COUNTRY

About The Authors
We are three best friends. Our names are Madiha Bajwa, Kanta Khalid, and Sulmana Hanif. We are in grade 7 at Michael Cranny E.S. in Maple, Ontario. This story we wrote mostly describes how hard it was to leave our country and come to a new country.

Hello!!
Madiha’s Reflections on *The New Country*

- I am proud of *The New Country* because it is our story. Nobody else has written that story.
- And when we showed it to Ms. Leoni she said it was really good. She said “It’s about your home country, and family, and Canada, it’s all attached, that’s so good.”
- I like that because it means she cares about our family and our country, not just Canada. Because she cares about us, that makes us want to do more work.
- My parents were really happy to see that I was writing in both Urdu and English; my mother was happy because she knows that not everyone has that chance. (Cummins & Early, 2011, p. 52).
1. When I am allowed to write story in class using Urdu, I feel very confident and very spashall and very important. I feel good that people see my Urdu and English story. I feel very confident because I no how to write in Urdu and I no why we write Urdu because we learn more English. I feel spashall because I don’t want to For get my language.

2. I like reading story in Urdu because I like my language and I like reading into my language because it’s really easy for me. I like to read Urdu stories because I understand my language. I like Urdu stories because some story is true.

3. When I am allowed to use Urdu inclass it helps me to reed and write English. When I have to learn new English words I remember them faster if I study the words in Urdu. Like this:

New words

<table>
<thead>
<tr>
<th>English</th>
<th>Urdu</th>
<th>Pickeur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lungs</td>
<td>عَلَقَةٌ</td>
<td>📜</td>
</tr>
<tr>
<td>Kidneys</td>
<td>كِرِيَةٌ</td>
<td>📜</td>
</tr>
<tr>
<td>Heart</td>
<td>قَلْبٌ</td>
<td>📜</td>
</tr>
</tbody>
</table>
Kanta's Perspective

- And how it helped me was when I came here in grade 4 the teachers didn't know what I was capable of.

- I was given a pack of crayons and a coloring book and told to get on coloring with it. And after I felt so bad about that—-I'm capable of doing much more than just that. I have my own inner skills to show the world than just coloring and I felt that those skills of mine are important also. So when we started writing the book [*The New Country*], I could actually show the world that I am something instead of just coloring.

- And that's how it helped me and it made me so proud of myself that I am actually capable of doing something, and here today [at the Ontario TESL conference] I am actually doing something. I'm not just a coloring person—I can show you that I am something.
Design Principles

TL Attainment

Active Engagement with the TL
(input and output - listening, viewing, reading + speaking, emailing, texting, and writing)

Scaffold Meaning (input and output)

Connect to students' lives / Activate prior knowledge

↔ ↔↔

Affirm identity

↔ ↔↔

Extend language
Dear Ann: I’m a 26-year-old woman and feel like a fool asking you this question, but—should I marry the guy or not?

Jerry is 30, but sometimes he acts like 14...

Jerry is a salesman and makes good money but has lost his wallet three times since I’ve known him and I’ve had to help him meet the payments on his car.

The thing that bothers me most, I think, is that I have the feeling he doesn’t trust me. After every date, he telephones. He says it’s to “say an extra goodnight,” but I’m sure he is checking to see if I had a late date with someone else.

One night I was in the shower and didn’t hear the phone. He came over and sat on the porch all night. I found him asleep on the swing when I went to get the paper the next morning at 6.30 a.m. I had a hard time convincing him I had been in the house the whole time.
Now on the plus side: Jerry is very good-looking and appeals to me physically.

Well – that does it. I have been sitting here with this pen in my hand for 15 minutes trying to think of something else good to say about him and nothing comes to mind.

Don’t bother to answer this. You have helped more than you will ever know.
Project Fresa: An Outstanding Example of Implementing Design Principles Effectively

- This cross-age project was initiated in 1999 by third-grade teacher Amanda Irma Pérez and fifth-grade teacher Michelle Singer in Mar Vista Elementary School in Oxnard, California. The school is surrounded by strawberry fields and a large majority of students (45 out of 50) had family members who worked picking strawberries.

- The two classes met on a weekly basis to pursue the project. Students initially brainstormed about what they knew and would like to know about strawberries. The students generated questions such as “I wonder why the seeds are on the outside” and “I wonder why the people who pick the strawberries wear scarves across their noses and mouths”.

- They reviewed the questions they had generated and decided what questions would be most appropriate to ask their parents. Students then analyzed the questionnaire responses they received and looked for patterns that emerged across the responses.
Cummins Brown and Sayers (2007) summarized some of the students’ findings as follows:

They saw how long people had worked in the fields and how it had affected their health.

“My dad used to work in the fields but he can’t work now because of his back,” one child said. “Really?” said another. “That same thing happened to my grandfather.”

Many of the most disturbing answers mentioned fertilizantes, the Spanish word the parents used for pesticides. “Why do you have so many headaches?” the children had asked their parents. “Por los fertilizantes” (because of the “fertilizers,” one father said). Another child responded, “No wonder my mom always has a headache. I didn’t know that was why.” (p. 133)
As the project continued over the course of the school year, students engaged in inquiry that ranged right across the curriculum (science, social studies, math, language arts). They tracked the life-span of strawberries from seeds to export markets. In addition to interviewing parents and other family members, students used the Internet for additional research and invited community experts (from the Environmental Defense League and the California Rural Assistance League) to speak to their class. The teachers created a web site that contained students’ poetry, artwork, graphs, and the results from their community investigations.

Students also engaged in dialogue on local economics and profit analysis as part of their math curriculum.
Project FRESA (continued)

- The students also examined the websites of the major strawberry companies that operated in the Oxnard area. On the basis of their research, they wrote letters to several of these companies, asking questions such as “How often do the workers receive breaks?” and “Are there clean bathrooms on site?”

- They also decided to write letters to California’s Governor, Gray Davis, to express their concerns about the use of pesticides and the working conditions their family members were experiencing in the fields. Throughout the project, each student wrote in their “FRESA Journal” and the response received from the governor’s office that encouraged them to continue “to take an active role in public policy development” was photocopied for inclusion in each student’s journal (although many students were skeptical about the sincerity of the governor’s promise to investigate their concerns).
It is clear that the pedagogy incorporated within Project FRESA addressed all of the instructional components of the Literacy Engagement framework and also responded explicitly to many of the causal factors related to the underachievement of low-SES, immigrant background, and marginalized group students.

Literacy engagement was pursued across the curriculum and the language forms and discourse conventions necessary for effective academic communication were taught in the context of students’ use of language to effect social change.

Students’ identities as competent, engaged and intellectually powerful individuals were affirmed as were their bilingual abilities which enabled them to discuss immediately relevant social issues with their family members and peers in Latin American countries.
## Collaborative Pedagogical Inquiry: Articulation Choices and Taking Collective Action

<table>
<thead>
<tr>
<th>Instructional Options</th>
<th>Current Realities: Where Are We?</th>
<th>Vision for the Future: Where Do We Want to Be?</th>
<th>Getting It Done: How Do We Get There?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Literacy Engagement</strong></td>
<td>How can we maximize the students’ interest in and engagement with reading, writing, and other forms of cultural expression (e.g., art)?</td>
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<tr>
<td><strong>Content</strong></td>
<td>How do we adapt curriculum materials to link with students’ existing knowledge and cultural background?</td>
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<tr>
<td><strong>Cognition</strong></td>
<td>How can we modify instruction to evoke higher-order thinking among students learning the school language?</td>
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<tr>
<td><strong>Tools</strong></td>
<td>How can we use tools such as computers, digital cameras, camcorders, web pages, etc., to enhance academic engagement and achievement?</td>
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<tr>
<td><strong>Assessment</strong></td>
<td>How can we complement mandated provincial/state assessments in order to present to students, parents, and administrators an accurate picture of students’ academic progress?</td>
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<tr>
<td><strong>Language/Culture</strong></td>
<td>What messages are we giving students about the value of their languages and cultures?</td>
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<tr>
<td><strong>Parental Involvement</strong></td>
<td>How can we engage parents effectively as co-educators in such a way that their cultural knowledge and experience can support their children’s academic progress?</td>
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Resources

- **ell.stanford.edu** (Understanding Language Project, Stanford University; highly relevant articles on the nature of academic language and how to teach it)


Recent book:

  http://www.pearsoncanadaschool.com/index.cfm?locator=PS1zPe&PMDbSiteId=2621&PMDbSolutionId=25862&PMDbSubSolutionId=&PMDbCategoryId=25875&PMDbSubCategoryId=26207&PMDbSubjectAreaId=&PMDbProgramId=138781

- Available in the United States through California Association for Bilingual Education (http://www.bilingualeducation.org/resources_cabe.php).