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# Advanced Proficiency Targeted by CALL

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# Problem #1: the issue of time

720 Instructional Hours ---  
> Advanced

(Malone, Rifkin, Christian & Johnson, 2003)

> 320 Hours

U.S. Foreign Language  
Programs (Higher Ed)

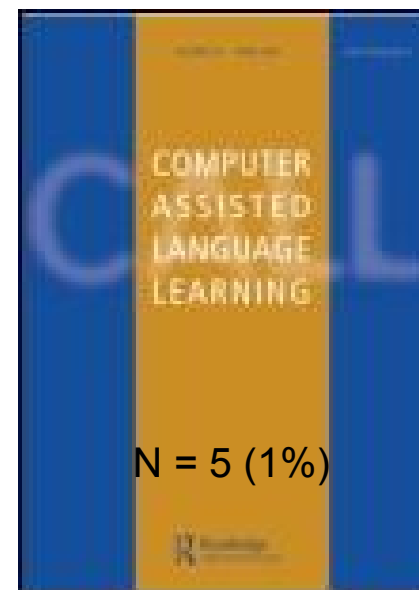
**CALL?**

(Levy & Stockwell, 2013)

**Objective: characterize advanced second language  
(AL2) studies in CALL**



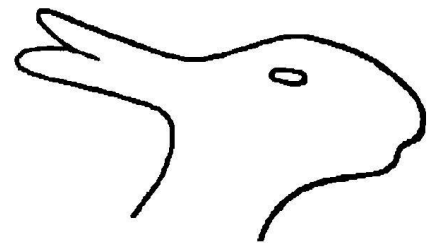
68/2000+ or 3.4%: AL2



## Problem #2: Interpretation

How to interpret what is *advanced* in the literature?

- Key-word search: LSP, ESP, ESAP, “Advanced”
- Manual search of article for keywords:  
**advanced, level, student, participation** +  
careful revision of the **methodology**



“Learners who enroll in this kind of program have **heterogenous English learning backgrounds**, but, to be admitted to the program, all must pass a **nationally standardized entrance exam** which evaluates their English proficiency. Therefore, although learners’ English learning backgrounds may differ, the learners in this study had **attained a similar level of language study.**” (Ho & Savignon, 2007, p. 275)

## **Problem #3: Paucity of CALL Research in AL2**

- 1) Limitations in Proficiency Range: beginner and intermediate (96%)
  - 2) Limited in Linguistic Focus: written language (reading, translation & writing)
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# Research Questions

1. Do the tasks in the studies appropriately align to the level of the learner (i. e.  $i + 1$  or  $i + 20$ )?
  2. Do CALL materials depicted in these studies benefit AL2 learners in terms of *proficiency*?
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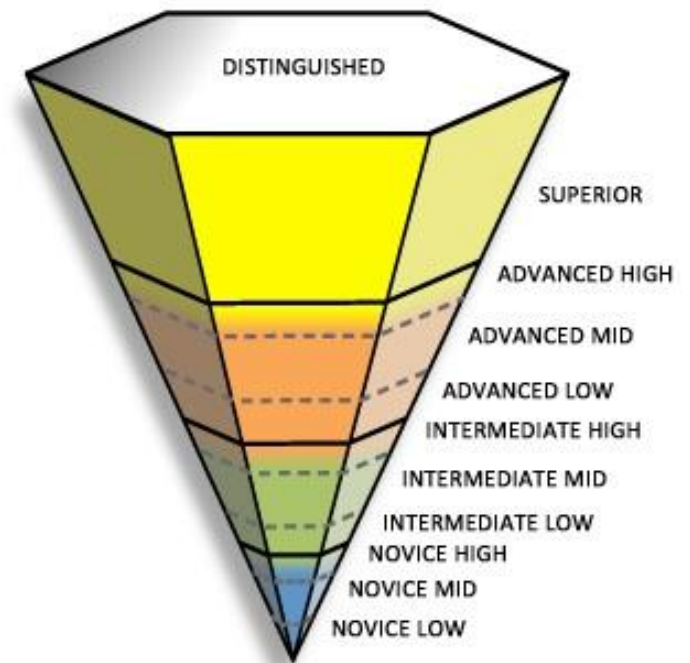
# Methodology

3 References:

- 1) ACTFL Performance Descriptors (PD)
- 2) NCSSFL-Can-Do Statements (CD)
- 3) Appendices & Methodology/Procedure

Code data:

- Mode (PD)
- Domain (PD)
- Functions (CD)
- Theoretical construct



### ADVANCED LOW

I can participate in conversations about familiar topics that go beyond my everyday life. I can talk in an organized way and with some detail about events and experiences in various time frames. I can describe people, places, and things in an organized way and with some detail. I can handle a familiar situation with an unexpected complication.

**I can participate in conversations on a wide variety of topics that go beyond my everyday life.**

- ☐ I can explain absentee and sick leave policies and answer questions about them.
- ☐ I can explain current issues, such as leash laws, school dress codes, drinking age, or speed limits.
- ☐ I can discuss what is currently going on in another community or country.
- ☐ I can \_\_\_\_\_

**I can compare and contrast life in different locations and in different times.**

- ☐ I can explain how life has changed since I was a child and respond to questions on the topic.
- ☐ I can compare different jobs and study programs in a conversation with a peer.
- ☐ I can explain how technology has changed our lives while discussing this topic with another.
- ☐ I can \_\_\_\_\_

**I can resolve an unexpected complication that arises in a familiar situation.**

- ☐ I can rearrange my itinerary, such as flights, pick-up times, and appointments when I experience travel delays.
- ☐ I can tell a friend how I'm going to replace an item that I borrowed and broke/lost.
- ☐ I can explain why I was late to class or absent from work and arrange to make up the lost time.
- ☐ I can \_\_\_\_\_

**I can conduct or participate in interviews.**

- ☐ I can interview for a job or service opportunity related to my field of expertise.
- ☐ I can interview someone about his/her professional interests and activities.
- ☐ I can \_\_\_\_\_

### SUPERIOR

I can write about complex and abstract issues ranging from topics of broad general interests to areas of specialized expertise using standard structure, lexicon, and writing protocols.

**I can write effectively about complex and abstract issues of general interest.**

- ☐ I can write an analysis piece for a literary magazine or other similar publications.
- ☐ I can write a comprehensive policy statement challenging readers to consider multiple perspectives.
- ☐ I can write personal imaginative texts, such as a film or drama script, following established conventions of the genre.
- ☐ I can \_\_\_\_\_

**I can write about complex and abstract issues on academic and professional topics.**

- ☐ I can write extensively on a concept or trend in my field of specialization.
- ☐ I can write an article for submission to a professional or specialized journal.
- ☐ I can write using specialized or professional vocabulary.
- ☐ I can write an academic thesis or dissertation.
- ☐ I can \_\_\_\_\_

**I can develop an argument using the writing mechanics and organizational style of the target language and culture.**

- ☐ I can accurately apply the standard punctuation of the target language.
- ☐ I can write using appropriate grammatical structures of the target language.
- ☐ I can structure my prose to reflect the way in which arguments are structured and elaborated in target language writing.
- ☐ I can \_\_\_\_\_



## ACTFL Performance Descriptors for Language Learners | **Presentational**

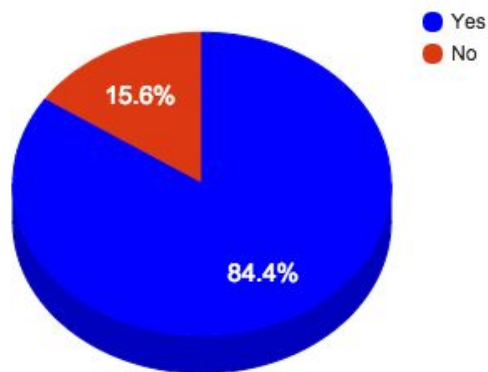
<b>Domains</b>	<b>Novice Range</b>	<b>Intermediate Range</b>	<b>Advanced Range</b>
	<b>Communicates information on very familiar topics using a variety of words, phrases, and sentences that have been practiced and memorized.</b>	<b>Communicates information and expresses own thoughts about familiar topics using sentences and series of sentences.</b>	<b>Communicates information and expresses self with detail and organization on familiar and some new concrete topics using paragraphs.</b>
<b>Functions</b>	<p>Presents simple, basic information on very familiar topics by producing words, list, notes, and formulaic language using highly practiced language.</p> <p>May show emerging evidence of the ability to express own thoughts and preferences.</p>	<p>Expresses own thoughts and presents information and personal preferences on familiar topics by creating with language primarily in present time.</p> <p>May show emerging evidence of the ability to tell or retell a story and provide additional description.</p>	<p>Produces narrations and descriptions in all major time frames on familiar and some unfamiliar topics.</p> <p>May show emerging evidence of the ability to provide a well-supported argument, including detailed evidence in support of a point of view.</p>
<b>Contexts/ Content</b>	<p>Creates messages in some personally relevant contexts on topics that relate to basic biographical information.</p> <p>May show emerging evidence of the ability to create messages in highly practiced contexts related to oneself and immediate environment.</p>	<p>Creates messages in contexts relevant to oneself and others, and one's immediate environment.</p> <p>May show emerging evidence of the ability to create messages on general interest and work-related topics.</p>	<p>Creates messages fully and effectively in contexts both personal and general.</p> <p>Content areas include topics of personal and general interest (community, national, and international events) as well as work-related topics and areas of special competence.</p> <p>May show emerging evidence of the ability to create messages in more abstract content areas.</p>
<b>Text Type</b>	Produces words and phrases and highly practiced sentences or formulaic questions.	Produces sentences, series of sentences, and some connected sentences.	Produces full paragraphs that are organized and detailed.

## ACTFL Performance Descriptors for Language Learners | **Presentational**

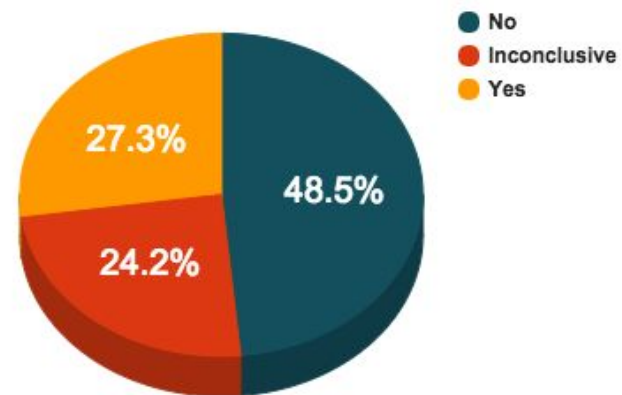
	Novice Range	Intermediate Range	Advanced Range
<b>Language Control</b>	<p>Produces memorized language that is appropriate to the context; limited language control may require a sympathetic audience to be understood.</p> <p>With practice, polish, or editing, may show emerging evidence of Intermediate-level language control.</p>	<p>Control of language is sufficient to be understood by audiences accustomed to language produced by language learners.</p> <p>With practice, polish, or editing, may show emerging evidence of Advanced-level language control.</p>	<p>Control of high-frequency structures is sufficient to be understood by audiences not accustomed to language of language learners.</p> <p>With practice, polish, or editing, shows evidence of Advanced-level control of grammar and syntax.</p>
<b>Vocabulary</b>	<p>Produces a number of high frequency words and formulaic expressions; able to use a limited variety of vocabulary on familiar topics.</p>	<p>Produces vocabulary on variety of everyday topics, topics of personal interest, and topics that have been studied.</p>	<p>Produces a broad range of vocabulary related to topics of personal, public, and community interest, and some specific vocabulary related to areas of study or expertise.</p>
<b>Communication Strategies</b>	<p>May use some or all of the following strategies to communicate, able to:</p> <ul style="list-style-type: none"> <li>• Rely on a practiced format</li> <li>• Use facial expressions and gestures</li> <li>• Repeat words</li> <li>• Resort to first language</li> <li>• Use graphic organizers to present information</li> <li>• Rely on multiple drafts and practice sessions with feedback</li> <li>• Support presentational speaking with visuals and notes</li> <li>• Support presentational writing with visuals or prompts</li> </ul>	<p>May use some or all of the following strategies to communicate and maintain audience interest, able to:</p> <ul style="list-style-type: none"> <li>• Show an increasing awareness of errors and able to self-correct or edit</li> <li>• Use phrases, imagery, or content</li> <li>• Simplify</li> <li>• Use known language to compensate for missing vocabulary</li> <li>• Use graphic organizer</li> <li>• Use reference resources as appropriate</li> </ul>	<p>May use some or all of the following strategies to communicate and maintain audience interest, able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate conscious efforts at self-editing and correction</li> <li>• Elaborate and clarify</li> <li>• Provide examples, synonyms, or antonyms</li> <li>• Use cohesion, chronology and details to explain or narrate fully</li> <li>• Circumlocute</li> </ul>
<b>Cultural Awareness</b>	<p>May use some memorized culturally appropriate gestures, formulaic expressions, and basic writing conventions.</p>	<p>Uses some culturally appropriate vocabulary, expressions, and gestures. Reflects some knowledge of cultural differences related to written and spoken communication.</p>	<p>Uses cultural knowledge appropriate to the presentational context and increasingly reflective of authentic cultural practices and perspectives.</p>

Do the tasks in the studies appropriately align to the level of the learner (i.e.  $i + 1$  or  $i + 20$ )?

RQ 1



RQ 2



N = 33

Do CALL materials depicted in these studies benefit AL2 learners in terms of *proficiency*?

Do CALL materials depicted in these studies benefit AL2 learners in terms of *proficiency*?

RQ 2 (Total Frequency / Successful)	Int. High	Advanced Low	Advanced Mid	Advanced High	Superior
Interpersonal communication (24% / 1 of 9)	○ ○ ●	○ ○	○ ○	○	○
Interpretive reading (18% / 1 of 7)	○ ○ ○ ●		○ ● ●		
Presentational writing (45% / 5 of 17)	○	○ ○ ● ● ●	○ ○ ● ●	○ ●	● ● ● ● ●



# Example 1: Interpersonal Communication via Blogs

Mompean (2010)

Master's students in France studying English (B1/B1+ and B2/C1 / IH-S;  
Goldfield, 2009-2010)

Pedagogical value to meet CEFR principles (task-based learning,  
authentic interactions + collaborative learning)

Interactions, blog participation profiles, motivation for writing, survey  
driven data

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## RQ1: At level?

“The blogs represented a real challenge of argumentation for the students who chose quite unexpected topics, which required a certain level of language proficiency in order to express and understand sarcasm, anger, humour or revolt” (p.382)

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Table 1 *List and typology of the different blogs*

	Title of the blog and URL	Typology based on Cardon & Delaunay- Teterel (2006)	Argumentation
1	European prejudices, there's no smoke without fire <a href="http://europeanprejudices.blogspot.com">http://europeanprejudices.blogspot.com</a>	Citizen blog	Blog « gueuloir »
2	FLE blog expat' <a href="http://fleblogexpat.blogspot.com">http://fleblogexpat.blogspot.com</a>	Expert blog	Informative
3	Fu***ed up actually <a href="http://fuckedupactually.blogspot.com">http://fuckedupactually.blogspot.com</a>	Familiar blog	Sarcastic
4	Save the children soldiers in the world <a href="http://www.worldchildrenfutur.blogspot.com">http://www.worldchildrenfutur.blogspot.com</a>	Personal blog	Emotional
5	Introduction to JCVD's philosophy <a href="http://jcvdfle.blogspot.com">http://jcvdfle.blogspot.com</a>	Familiar blog	Humorous
6	The MJBs present <a href="http://themjbspresentdanielmorin.blogspot.com">http://themjbspresentdanielmorin.blogspot.com</a>	Familiar blog	Humorous
7	Come visit India with us <a href="http://edwinaandcaro.blogspot.com">http://edwinaandcaro.blogspot.com</a>	Expert blog	Informative and humorous
8	David's blog <a href="http://davelecteur.blogspot.com">http://davelecteur.blogspot.com</a>	Metablog	Informative

## Interpersonal Communication

### ADVANCED HIGH

I can express myself freely and spontaneously, and for the most part accurately, on concrete topics and on most complex issues. I can usually support my opinion and develop hypotheses on topics of particular interest or personal expertise.

I can exchange complex information about academic and professional tasks.

- ☐ I can exchange complex information about my academic studies, such as why I chose the field, course requirements, projects, internship opportunities, and new advances in my field.
- ☐ I can exchange complex information about my work responsibilities, such as the hiring process, my work schedule, the nature of my tasks, how I interface with other employees, opportunities for advancement, and new directions in my field.
- ☐ I can exchange complex professional or academic information to engage in collaborative work with my counterparts in different regions or countries.
- ☐ I can \_\_\_\_\_

I can exchange detailed information on topics within and beyond my fields of interest.

- ☐ I can exchange detailed information about my personal and professional interests.
- ☐ I can exchange detailed information on technological advances.
- ☐ I can participate in conversations on social or cultural questions relevant to speakers of this language.
- ☐ I can \_\_\_\_\_

I can support my opinion and construct hypotheses.

- ☐ I can give a supported argument about work-related processes that would benefit me and my employer.
- ☐ I can give a supported argument about social reform, such as daycare and elder care.
- ☐ I can usually defend my views in a debate.
- ☐ I can \_\_\_\_\_

ACTFL Performance Descriptors for Language Learners | **Interpersonal**

Domains	Novice Range	Intermediate Range	Advanced Range
	Expresses self in conversations on very familiar topics using a variety of words, phrases, simple sentences, and questions that have been highly practiced and memorized.	Expresses self and participates in conversations on familiar topics using sentences and series of sentences. Handles short social interactions in everyday situations by asking and answering a variety of questions. Can communicate about self, others, and everyday life.	Expresses self fully to maintain conversations on familiar topics and new concrete social, academic, and work-related topics. Can communicate in paragraph-length conversation about events with detail and organization. Confidently handles situations with an unexpected complication. Shares point of view in discussions.
Functions	Can ask highly predictable and formulaic questions and respond to such questions by listing, naming, and identifying. May show emerging evidence of the ability to engage in simple conversation.	Can communicate by understanding and creating personal meaning. Can understand, ask, and answer a variety of questions. Consistently able to initiate, maintain, and end a conversation to satisfy basic needs and/or to handle a simple transaction. May show emerging evidence of the ability to communicate about more than the "here and now."	Can communicate with ease and confidence by understanding and producing narrations and descriptions in all major time frames and deal efficiently with a situation with an unexpected turn of events. May show emerging evidence of the ability to participate in discussions about issues beyond the concrete.
Contexts/ Content	Able to function in some personally relevant contexts on topics that relate to basic biographical information. May show emerging evidence of the ability to communicate in highly practiced contexts related to oneself and immediate environment.	Able to communicate in contexts relevant to oneself and others, and one's immediate environment. May show emerging evidence of the ability to communicate in contexts of occasionally unfamiliar topics.	Functions fully and effectively in contexts both personal and general. Content areas include topics of personal and general interest (community, national, and international events) as well as work-related topics and areas of special competence. May show emerging evidence of the ability to communicate in more abstract content areas.
Text Type	Understands and produces highly practiced words and phrases and an occasional sentence. Able to ask formulaic or memorized questions.	Able to understand and produce discrete sentences, strings of sentences and some connected sentences. Able to ask questions to initiate and sustain conversations.	Able to understand and produce discourse in full oral paragraphs that are organized, cohesive, and detailed. Able to ask questions to probe beyond basic details.



## ACTFL Performance Descriptors for Language Learners | Interpersonal

Domains	Novice Range	Intermediate Range	Advanced Range
<b>Language Control</b>	<p>Can usually comprehend highly practiced and basic messages when supported by visual or contextual clues, redundancy or restatement, and when the message contains familiar structures.</p> <p>Can control memorized language sufficiently to be appropriate to the context and understood by those accustomed to dealing with language learners, however at times with difficulty.</p>	<p>Understands straightforward language that contains mostly familiar structures.</p> <p>Control of language is sufficient to be understood by those accustomed to dealing with language learners.</p>	<p>Language control is sufficient to interact efficiently and effectively with those unaccustomed to dealing with language learners.</p> <p>Consistent control of basic high-frequency structures facilitates comprehension and production.</p>
<b>Vocabulary</b>	<p>Able to understand and produce a number of high frequency words, highly practiced expressions, and formulaic questions.</p>	<p>Communicates using high frequency and personalized vocabulary within familiar themes or topics.</p>	<p>Comprehends and produces a broad range of vocabulary related to school, employment, topics of personal interest, and generic vocabulary related to current events and matters of public and community interest.</p>
<b>Communication Strategies</b>	<p>May use some or all of the following strategies to maintain communication, able to:</p> <ul style="list-style-type: none"> <li>• Imitate modeled words</li> <li>• Use facial expressions and gestures</li> <li>• Repeat words</li> <li>• Resort to first language</li> <li>• Ask for repetition</li> <li>• Indicate lack of understanding</li> </ul>	<p>Uses some of the following strategies to maintain communication, but not all of the time and inconsistently, able to:</p> <ul style="list-style-type: none"> <li>• Ask questions</li> <li>• Ask for clarification</li> <li>• Self-correct or restate when not understood</li> <li>• Circumlocute</li> </ul>	<p>Uses a range of strategies to maintain communication, able to:</p> <ul style="list-style-type: none"> <li>• Request clarification</li> <li>• Repeat</li> <li>• Restate</li> <li>• Rephrase</li> <li>• Circumlocute</li> </ul>
<b>Cultural Awareness</b>	<p>May use culturally appropriate gestures and formulaic expressions in highly practiced applications. May show awareness of the most obvious cultural differences or prohibitions, but may often miss cues indicating miscommunication.</p>	<p>Recognizes and uses some culturally appropriate vocabulary, expressions, and gestures when participating in everyday interactions. Recognizes that differences exist in cultural behaviors and perspectives and can conform in familiar situations.</p>	<p>Understands and uses cultural knowledge to conform linguistically and behaviorally in many social and work-related interactions. Shows conscious awareness of significant cultural differences and attempts to adjust accordingly.</p>

## RQ1: At level?

“The blogs represented a real challenge of argumentation for the students who chose quite unexpected topics, which required a certain level of language proficiency in order to express and understand sarcasm, anger, humour or revolt” (p.382)



## RQ2: Does CALL benefit AL2 proficiency?

“...a linguistic analysis of the corpus of productions needs to be done, to better describe the added value of such a setting for language production” (p.392)



## Example 2: Presentational Writing

Lirola & Cueuas (2008)

Advanced Low (Course level)

Error correction in writing (Markin Program); Genre Theory

Teacher centered---> learner centered, autonomous writing & editing

Genre Theory in combination with CALL allows “students to be aware of the different genres or text types, which implies that students are aware of the social purpose, text structure and key grammatical features of each text type” (p. 80)

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Key grammatical features (Droga & Humphrey, 2003:142):

- Use of general, abstract, technical, non-human nouns
- Factual and classifying adjectivals to describe phenomenon
- Action verbs in the simple present to express events; relating verbs to do with cause/effect
- Use of time conjunctions, time/sequencing connectives and time adverbials (as themes) to sequence events in sequential explanations
- Use of causal conjunctions, causal connectives and causal adverbials (as themes in causal explanations
- Use of passive voice to foreground the object undergoing the process
- Use of nominalisation to summarise events and name abstract phenomena

Lirola & Cuevas (2008, p. 77)

## **RQ 1: Yes**

Iterative stages allowed for researchers to model different genres in writing, have students select a topic tied to a certain genre that was then tied to the CALL tool for appropriate error-analysis based on what was modeled.

## **RQ 2: Yes**

Clear theoretical construct in tandem with CALL tool was successful in elucidating how learners need to approximate advanced level writing based on the genre

# Discussion

- In the literature, where AL2 studies do exist, most do **not** elucidate linguistic complexities related to advanced level proficiency
  - Lack of evidence of learning outcomes (over-abundance of self-reporting)
  - Corpus linguistics and genre studies are most successful in detailing linguistic, proficiency-related improvements
  - Many studies are still comparative in nature and as such leaves much to be determined
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# Moving Forward: What are the gaps?

- < AL2 papers
  - Need to incorporate explicit linguistic objectives
  - Need to justify those objectives based on some type of learning outcomes (standards-based)
  - Need more studies that look at interpersonal communication (24%) and/or presentational speaking (0%)
  - What about Adaptive CALL?
  - How can tasks be more flexible to fit AL2 proficiency ranges (i.e. interpersonal blogs with an IH track and an AL track)
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# Thank you!

Please email us for (long) list of references!

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# Successful Practices

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# Detailed Participant Information

Table 1. Overview of Case Study Participants

	<b>Wol<sup>2</sup> (28, F)</b>	<b>Chan (29, M)</b>	<b>June (24, F)</b>	<b>Sung (32, M)</b>	<b>Nick (29, M)</b>	<b>Ming (29, M)</b>
L1	Korean	Korean	Korean	Korean	Romanian	Chinese
Program of study	M.Ed., Special Education	Ph.D., Natural Resources Education	M.S., Aerospace Engineering	Ph.D., History	M.S., Nuclear Engineering	Ph.D., Molecular Genetics
Years of English learning <sup>3</sup>	12	13	13	14	5	10+
Months in U.S. at the start of the study	12	1	1	1	12	1
TOEFL (TWE) scores <sup>4</sup>	240 (4.0)	270 (4.5)	240 (3.5)	253 (4.0)	217 (3.5)	607 (3.5)
Unique experiences affecting English/literacy skills	Korean language teacher (3 ½ years)	Military service at US Army base MEd qualitative research thesis		MA in Japan	Took previous writing classes in the ESL program	Published a paper in English
L2 writing experience	TWE	TWE & Took a class in Korea	TWE	TWE	1 yr coursework in US & previous writing classes	TWE & Published a paper in English
Computer skills	Low	Intermediate	High	Low	High	High



# **Detailed Task Implementation (Procedure & Appendices)**

## **APPENDIX B: TOPICS FOR DISCUSSION**

### **Week 1 - Modern Medicine/Biotechnology**

Once we have mapped the human genome, we can use our knowledge to control the sort of babies we have. We will be able to purchase medical treatments that will ensure our babies are healthy, "normal" in appearance, and intelligent. Biotechnology can be used to detect a genetic predisposition to certain diseases, and perhaps, to manipulate the DNA into a more desirable sequence. Biotechnology can also be used for more conventional purposes such as increasing food production and supply. Other possibilities include growing custom organs for transplant patients. What possible effects on society could this technology have? Should limits be placed on the use of this technology?

Fitze, 2006, p. 82

### **Week 2 - Cross-Cultural Marriages**

The invention of the airplane and communication technologies have revolutionized travel and made the world a smaller place. People are coming together in ways that were never previously possible. These new opportunities for travel and communication have accompanied an increase in marriages among people from different cultural backgrounds. How do you feel about cross-cultural marriages? What may be the advantages and disadvantages of cross-cultural marriages for couples and for their children? Do you think cross-cultural marriages can work? Can a cross-cultural marriage be as successful as a marriage of people from the same culture? Under what conditions can and do these marriages work?

### **Week 3 - The Environment**

We have heard much lately about the greenhouse effect. Carbon monoxide in the atmosphere is causing depletion of the layer of ozone that protects us from much of the harmful ultraviolet radiation from the sun. In addition, increased levels of carbon dioxide (as a result of industrial processes) are causing the world's temperature to increase, leading to more water in the atmosphere and more violent storms. Moreover, the population is increasing at an alarming rate. Can we feed, clothe, and provide medical care for all these people? Should governments and countries (continue to) take steps to control population growth? Are we headed for much more poverty and suffering in our world or will our technology solve our problems? What advice do you have for governments who face these problems?

Do the tasks in the studies appropriately align to the level of the learner (i.e. i +1 or i + 20)?

RQ 2	Advanced Low	Advanced Mid	Advance High	Superior
Interpersonal communication	○ ●	○ ●	●	●
Interpretive reading		○ ● ●		
Presentational writing	● ● ● ● ●	○ ● ● ●	● ●	● ● ● ● ●
Other	●	●	●	●

## Example 2: Interpretive reading

Kol & Schcolnik (2000)

“The subjects were 47 **EAP students** in two classes of an **advanced course** of English for the Exact Sciences at Tel Aviv University. Placement in this course was based on a **high mark on the national psychometric test**. Students placed at this level have a **good working command of English** and the course prepares them to read long academic texts independently.”

Instrument: **a four page text on brain research** was taken from a popular science magazine and presented in two different modes (paper and on the screen). A comprehension test was then administered.

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### SUPERIOR


I can follow academic, professional, and literary texts on a wide range of both familiar and unfamiliar subjects. I can sometimes infer complex meaning that requires analysis and deep understanding of the culture.

I can analyze the primary argument and supporting details.

- ☐ I can interpret editorials.
- ☐ I can read a position statement and understand the inferences.
- ☐ I can understand a detailed analysis.
- ☐ I can understand a literary review.
- ☐ I can \_\_\_\_\_

I can comprehend complex texts on abstract topics of interest to me.

- ☐ I can read an article advocating for educational reform to meet global needs.
- ☐ I can read an editorial on international environmental policies.
- ☐ I can read texts about comparative religious or political philosophies.
- ☐ I can \_\_\_\_\_



I can understand detailed information within and beyond my fields of interest.

- ☐ I can understand a technical report within my field.
- ☐ I can understand a journal article in my field.
- ☐ I can read most academic or professional articles unrelated to my field.
- ☐ I can \_\_\_\_\_

## Discussion

In general, the test results were very high in both modes. We feel that the high scores can be explained by

- 1) the high reading level of students in the Exact Sciences, particularly at the end of the course;
- 2) the high level of motivation to succeed since students knew that a good grade on the test would count;
- 3) the background knowledge on the subject of the brain provided by the practice test; and
- 4) the familiarity with test format and question types.

Kol & Schcolnik (2000, p. 74)

**RQ 1: Inconclusive**

**RQ 2: Yes? (Ex post-facto)**

### Language Activity Level (ACTFL)

