

# Navigating Uncharted Waters: An Accelerated Content-Based English for Academic Purposes Program

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This article chronicles an English for Academic Purposes curriculum development experience of a grant-funded project to create an Accelerated, Content-based English curriculum for intermediate- and advanced-level English Language Learners.

Just as progress and change require flow, curricular design (and redesign) is also cyclical and recursive by nature. It takes shape and evolves according to students' educational needs, faculty decisions, and, ideally, workforce demands. In the same way that water currents are shaped by natural forces unseen, curriculum creation too is influenced by the context from which subject matter is drawn. In 2008, Miami Dade College (MDC) received a \$1.9 million Title V grant from the U.S. Department of Education to develop an Accelerated, Content-based English for Academic Purposes (EAP) track called Project ACE for ESL students.<sup>1</sup> The ACE curriculum is anchored by the principles of flexibility, contextualization, and faculty buy-in, critical matters given the current climate of budget cuts and attrition.

This article chronicles Project ACE's curriculum development process in creating a program for intermediate- and advanced-level EAP students. The process has included (1) investigating the expectations of college instructors for their first-year students, while paying close attention to the particular needs of English Language Learners (ELLs), (2) building and analyzing a written and spoken general education corpus, (3) aligning the new ACE curriculum with general education courses, and (4) securing EAP faculty buy-in to the approach by supporting participation in ongoing Curriculum Writers Workshops (CWWs) where instructors create corpus-informed, content-based materials tied to the ACE curriculum.

## Drawing from the Source: History and Rationale of ACE

The rationale for developing the Project ACE program that offers EAP students an accelerated learning track stemmed from educational research indicating that (1) second language learners with higher academic literacy skills in the first language more easily transfer such skills into learning a second language (Crandall and Kaufman 12; Cummins 322; Scarcella 213); (2) ELLs in college are negatively

impacted by “structural barriers” such as programmatic isolation from other college disciplines or required developmental reading and writing courses unrelated to their intended major (Ignash 23); and (3) systematic integration of content into language-learning curricula promotes efficacy by reflecting authentic academic purposes (Met 16; Bailey 11). As a result, a faculty-led team created the ACE program model to strengthen curricular connections and facilitate articulation for ELLs by aligning EAP coursework with academic disciplines and tasks.

The academic success of students in the college’s EAP program is critical to MDC since EAP credits constitute 17 percent of all credits taken at the college. Beyond the EAP program, large numbers of non-native speakers fill the rosters of mainstream college courses. Not surprisingly, some general education faculty members complain that ELLs are not prepared for the rigors of their respective disciplines. Some former EAP students also report difficulties meeting academic and socio-affective challenges (Benz 355, 394). There should not be such a gulf between EAP programs and entry-level college course experiences. Rather than feeling programmatic dissonance, students should experience that transition more seamlessly. The ACE language curriculum’s tie to general education content is supported by the belief that when students know their learning is meaningful and valuable, as well as enjoyable, they persist.

### **Bridging the Gulf: Content-Based, Corpus-Informed Curriculum**

A two-pronged approach has guided the development of the accelerated EAP program: content-based and corpus-informed instruction. First, the content-based design of this curriculum resulted from research on the academic tasks commonly required in general education classes and purposeful alignment of EAP and content classes. By way of illustration, the advanced ACE language courses are offered in a learning community with two additional academic classes, a three-credit psychology course required in all associate degrees at MDC and a one-credit elective in library Internet research. The learning community allows ACE students to earn four credits toward their degrees while receiving support for those classes from two six-credit combined skills EAP courses, one in reading and writing, and the other in speaking, listening, and grammar. Intermediate classes in the ACE curriculum are also offered within a learning community, in this case including an introductory course in microcomputers along with two intensive combined skills EAP courses.

The purposeful coordination of classes promotes integrative learning, encouraging students to see applications across different courses and reducing barriers perceived by students. For many EAP students, the opportunity to take a college-level class with mainstream students is a highly prized experience; it verifies that they can succeed in this academic environment. This is in line with the findings of other researchers that content-based instruction activates deeper learning, creates more active learners, facilitates transfer of skills (Curtain), and instills confidence (Bailey 25; Stoller).

The second prong of the ACE project is its corpus-informed approach.

Corpus researchers study digitally stored language collections to identify and analyze patterns associated with lexical and grammatical features (Bennett 2). The corpus-informed design of the ACE curriculum resulted from specific research on the language typical of MDC college classes. To accomplish this, the ACE team built an in-house corpus of language samples from college-entry courses including biology, humanities, English composition, and psychology. These freshmen-level courses were selected because they were deemed most representative of what students experience the first semester after exiting EAP. Identifying high-frequency language structures from the corpus has enabled EAP faculty to learn more about the authentic language of the college classroom and tailor their lessons accordingly. Juxtaposing high-frequency language structures with tasks identified as those most germane to academic success has fostered a complementary approach to course curriculum development, whereby content drives the corpus base, while at the same time corpus study results steady the content. Teacher decision making about instructional choices has become grounded by a stronger knowledge base of both the content realities students encounter and the linguistic features they really need to know.

### **Crafting the Vessel: Building the MDC General Education Corpus**

To build the MDC general education corpus, samples of class lectures and all written course materials—including complete textbook content, handouts, Power Point presentations, quizzes, and online learning resources—were uploaded into a language analysis software program called Wordsmith. Two consultants, experts in corpus linguistics from Georgia State University, analyzed the corpus data for word and phrase patterns and frequencies. They reported their findings on the language demands of the general education classroom back to the curriculum writing team. One salient finding was the sheer number of words students must read in a typical freshmen semester. The psychology textbook alone, for example, contained 200,000 words. For the four courses combined, students are expected to read approximately 770,000 words in the semester. This total reflects the recycling of 29,000 different individual words. This is a daunting task for advanced EAP students, as research indicates that they generally have vocabularies of fewer than 5,000 words, despite several years of English study (Nation and Waring 8; Schmitt).

An interesting finding from the MDC written corpus was the prominence of long, complicated noun phrases. In contrast, the traditional EAP grammar curriculum is very verb-centric, with a large percentage of instructional time devoted to the study of tenses. Regarding verb tenses, the results of the corpus study showed that certain disciplines tend to use one verb tense more than others. In the biology text, the present tense was prominent, and in the humanities, the past tense. Another important discovery was the distinct features of language use in freshman composition, where language encounters are more varied than in other typical general education classes. In English composition classes, individual faculty choices greatly influence course matter. For example, the professor in one course assigned

reading and writing assignments that drew strongly upon the local context, and hence one of the most frequent lexical words used in the course was *little*, as in “Little Havana,” the neighborhood where the campus is located.

As for the ACE spoken language corpus, the lecture transcription analysis revealed the prominence of rhetorical questioning. Many questions posed by the professor to the students were also answered by the professor. Also, the lectures were replete with recursive signposting language such as “Now we are going to look at . . .” and “All right, now . . .” and “So, okay. . .” The professors used false starts, pauses, and fillers, as can be expected. The classroom discourse was often characterized by a conversational rather than academic style; there were many instances of the informal *you* form. Also of note, general education professors did not modulate conversational speed, vocabulary choices, and cultural allusions to make the class more accessible to ELLs.

### Surveying the Crew: Identifying Key Academic Tasks through Faculty Surveys

In May–July 2009, around the same time the ACE corpus study was being conducted, a preliminary sixteen-question survey of the general education faculty was administered to investigate the language demands of high-frequency courses and the needs of ELLs. Ten faculty members completed the survey, each identifying and focusing on the language skills required in one specific course, as opposed to answering generally about their complete teaching repertoires.

One year later, during March–April 2010, a follow-up survey consisting of thirteen questions was sent out to thirty-seven professors. The purpose of this survey was to identify the most essential academic tasks required by MDC general education courses. For example, in this second survey, survey participants were asked about their preferred test formats, top writing assignments, and the weight of grades assigned to class requirements. Twenty-two professors responded, representing eleven disciplines: English, mathematics, biology, psychology, speech, computer science, philosophy, physics, sociology, history, and humanities.

The results of the two surveys showed that the primary focus of instruction of the general education curriculum is to impart content-area knowledge; thus, the corresponding language skills most critical for success in the general education classroom are receptive—listening and reading. One hundred percent of the faculty respondents expected the students to engage in a seemingly obvious task of listening. However, detailed follow-up questions revealed variety in the types of listening tasks required and the combinations of linguistic skills needed to successfully participate in courses. For example, some of the listening tasks involved following lectures, while other tasks ranged from simple response to one’s name during roll call to jumping into a fast-moving, and sometimes controversial, class discussion. The latter can be particularly challenging to ELLs, as stated by a former student who reflected on his performance in a recent class: “It was pretty difficult to express my doubts to the teacher without having to repeat it at least twice; same thing happened in my composition course, even though I got better grades

on my essays than some of my other native speaking classmates. I consider that my participation in the class wasn't that good as others. The classes were type of polemic in which the instructor just to come out with a topic, a movie, a painting. He wanted to discuss those topic and express our ideas, whether we agreed or not with the topic, and I feel that my English might be in a good level, but it doesn't come out fluent" (Fulano). Clearly, the receptive skills, listening and reading, used in the acquisition of new information are the language abilities most required of students in the classroom; however, students need to develop their oral language proficiency in order to produce accurate language on demand. Moreover, students are expected to demonstrate that they have learned the course material through speaking and writing.

Most faculty survey respondents (62 percent) reported that students are expected to read 10–20 pages of text or roughly 2,500 to 5,000 words per class meeting. A little more than a third of the professors expected students to read considerably more, 20–30 pages a week. Because reading requires a high level of vocabulary knowledge, and the ACE corpus study showed vocabulary to be inextricably linked to particular academic disciplines, the curriculum team has prioritized instruction to include a focus on the acquisition of academic vocabulary.

The data from both of the faculty surveys provide a window into the general education classroom at MDC and are, in the words of the project's external evaluator, "marching orders" for what EAP students *must learn* to be ready for college classes. The academic *tasks* that general education faculty identified as most important in the surveys led to the definition of a portfolio of tasks for students in the ACE program. These tasks may be thought of as a kind of dress rehearsal for the "real show" that comes later when students matriculate to their programs of study.

### **Charting New Territories: Producing Material through Curriculum Writers Workshops**

In response to all the data from the ACE corpus study, the general education faculty surveys, and the need to develop materials for this new content-based, corpus-informed EAP curriculum, the project team formed a Curriculum Writers Workshop (CWW) that initially met five times in the summer of 2010 and has continued into the 2010–2011 and 2011–2012 academic years. Participants have received modest stipends for creating engaging content-based, corpus-informed learning materials. Their collective and independent work has greatly benefited the project because participating faculty have been systematically examining the data collected and shaping the resulting curriculum and materials repository based on their findings.

The initial workshop in 2010 started out with seven full-time and part-time faculty members synthesizing the results of the surveys and generating a preliminary list of instructional implications garnered from the corpus and surveys. Some of the highlights of this list include the need to teach the language of tests and to provide more practice with choice-based tests since that is the most common type of assessment in general education classes. Other general findings showed that

EAP instructors should prepare students to make oral presentations in class, write e-mails to their instructors in the proper register, initiate their own self-help when struggling, use interactive technology, develop basic technology skills, create useful and organized notes for study and participation, reflect critically, and contribute to large and small class discussions. To date, a total of 282 CWW materials have been created and archived for faculty use. A more comprehensive look at the general implications for teaching EAP follows.

### Checking Coordinates: Identifying Implications for Teaching EAP

These implications have been parsed out into three modes of communication—Interpersonal, Interpretive, and Presentational—based on a framework developed by the National Assessment for Educational Progress in 2000 with input from ACTFL (American Council on the Teaching of Foreign Languages) and the American Institutes for Research.

#### IMPLICATIONS FOR TEACHING INTERPERSONAL SKILLS

- > EAP students need to be taught how to initiate self-help (seeking tutoring, office hours, using social skills concerning office hours, knowing resources available, asking professors for clarification on assignments). For many ELLs, self-advocacy is an unknown concept; a lot of coaching is needed for them to gain the confidence and wherewithal to succeed in a foreign educational system.
- > EAP students have to be able to contribute to large group or classroom discussions as well as small group discussions, but they also need to know the unspoken rules of turn-taking, linguistic strategies to participate and deal with sidebar conversations, verbal and nonverbal cues, and appropriate politeness markers.
- > EAP students need to know how to use interactive technology. Instructors cannot assume that they are automatically familiar with technology. In addition, vocabulary related to computers and technology should be taught, as these are specialized words that usually are not highlighted in the traditional ESL books.

#### IMPLICATIONS FOR TEACHING INTERPRETIVE SKILLS (LISTENING AND READING)

- > EAP students do not necessarily know how to read and follow syllabi, which are culturally bound documents. Because many students do not regard the syllabus as anything more than first-day-of-class-paperwork, the Curriculum Writers created several quizzes on different general education course syllabi to emphasize the importance of this classroom ritual.
- > EAP students need to be taught the common organizational patterns of textbooks (table of contents, glossary, appendixes, answer keys, questions at the end of the chapters, subheadings, graphics, etc.), as it is important for students to make the best use of their books and, ultimately, the course and its particular learning experience.

- > EAP students have to be prepared to think critically. The general education instructors noted that they expect their incoming students to be able to reflect critically. This skill is essential at all levels of a student's education and beyond. EAP students often are expected to detect inferences in reading, but brainstorming in a group could be a precursor to critical thinking in writing.
- > Many times EAP students have differing notions of what constitutes plagiarism. The Curriculum Writers suggested that instructors should provide real-life scenarios that can be discussed in class. Different case studies could be studied in class to see what grades a student would get given certain circumstances. Students could also act out role plays in which they practice disputing a grade or charges of academic dishonesty. Finally, another simulation could have students sign a rights and responsibilities form (another culturally bound ritual) in the class confirming that they understand the plagiarism policy, due dates, and grading expectations.

#### IMPLICATIONS FOR PRESENTATIONAL SKILLS (WRITING AND SPEAKING)

- > EAP students need practice in writing professional correspondence. The ubiquity of texting and instant messaging (IM) has influenced how some students write e-mail messages. Faculty members have been aghast at the register reflected in the messages they have been receiving, grammar notwithstanding. One of the Curriculum Writers created several exercises on how to write formal e-mail messages that are more appropriate for academic correspondence.
- > EAP students will have to give presentations that are accurate in structure and content in front of their classmates and professors. Oral presentations are a common expectation in the general education curricula.
- > EAP students have to learn a new type of writing assignment. Surprisingly, the most frequently assigned writing requirement of the general education classes at MDC was the "R" paper, as the Curriculum Writers came to call it. The *R* stands for the reflection or response or reaction paper. This type of paper was a new finding for the workshop participants, as EAP instructors are used to teaching rhetorical modes such as the argument, description, cause-effect, and comparison-contrast papers that are typically found in EAP texts. The Curriculum Writers worked hard to figure out ways to incorporate the "R" genre, often overlooked in EAP textbooks.
- > EAP students must be prepared to properly cite and report on the findings of researchers. While the survey showed that the research paper was not assigned as frequently as the "R" paper, the students will inevitably write research papers in some classes, and certainly will do so if they continue on to a four-year university.

#### Anchoring the Ship: The Creation of Portfolio of Academic Tasks

Once implications were identified, the Curriculum Writers proposed a portfolio of required academic tasks for EAP students to complete before progressing to their mainstream college classes. Discrete language skills and key grammatical features

were subsequently tagged to the different academic tasks. Also, grammar points were specified in terms of their frequency in the corpus and their relationship to authentic academic tasks. For example, in preparation for the task of group discussion in the intermediate portfolio, the students learn the language of interruption and the modal verb forms that are used when trying to join in a conversation. Also, when using technology, the students inevitably encounter phrasal verbs (*shut down, boot up, etc.*). In the advanced level, students have to employ discovery and existence verbs (*indicate, seem, appear*) when writing research papers. (See tables 1 and 2 for a sample of the portfolio of tasks identified per level.)

### Setting Sail: The Materials Creation Process

Equipped with the information from the corpus analysis, the survey results, and the development of portfolios of tasks per level, the CWW participants examined the textbooks and syllabi from several general education classes. They first experimented with aligning different combinations of EAP and general education classes, blended the competencies of the two classes and their associated language demands, and then designed EAP syllabi. Faculty submitted their redesigned syllabi to peer review;

**TABLE 1. Portfolio of Academic Tasks: Intermediate Level**

Students should be able to:

1. Participate in group discussions.
2. Use common Microsoft Office-type software (Excel, Word, PowerPoint) for assignments and projects.
3. Read and follow a syllabus.
  - a. Ask questions about the syllabus.
  - b. Clarify doubts about assignments.
4. Write a respectful, linguistically appropriate e-mail to an instructor or supervisor.
5. Write a reaction/response or reflection paper.
6. Deliver short oral presentations individually and as part of a group.

**TABLE 2. Portfolio of Academic Tasks: Advanced Level**

Students should be able to:

1. Use common Microsoft Office-type software (Excel, Word, PowerPoint) for assignments and projects.
2. Deliver oral presentations in teams.
3. Ask questions about the syllabus and clarify doubts about assignments.
4. Collaborate as a group and work as a team.
5. Write a basic research paper.



the feedback, in turn, drove the refinement of existing classes, even resulting in the third-year creation of a new learning community of an intermediate EAP with an introductory course in microcomputers.

Employing the concepts from Understanding by Design (Wiggins and McTighe), the Curriculum Writers produced assessments in a “backward” fashion: They first identified the desired outcomes and selected the acceptable evidence to confirm that students could perform the targeted academic tasks. One sample assessment includes a quiz on students’ comprehension of the syllabus and course requirements for introductory courses in psychology and microcomputers. Another assessment has students compare and contrast relevant psychology class concepts such as positive psychology and traditional psychology, determinism and free will, superiority and inferiority complexes, assertiveness and aggression, Type A and Type B personalities, and stress in women and men.

From these assessments, the team planned engaging instructional activities based on materials from actual content areas (syllabi, competencies, and textbooks) and data from not only MDC’s local corpus collection but also various frequently referenced corpora such as COCA (Corpus of Contemporary American English), MICASE (Michigan Corpus of Academic Spoken English), and Cambridge English Corpus. For example, the CWW participants created a prewriting exercise to teach transitions and connectors most commonly used in cause–effect essays. The most frequent transition signals derived from the COCA database were incorporated into this activity, so the students could develop their writing skills from an authentic, relevant, and current language base. Rather than learning a lengthy list of transition words and sentence types, corpus findings allowed instructors to prioritize learning, have students practice with the most typical transition expressions, and demonstrate models from authentic text samples. Another CWW participant created exercises teaching appropriate registers of e-mail communication to instructors, including illustrations with mock student e-mail messages.

The third and last stage of the CWWs has been the creation of lesson plans integrating technology tools. As technology can sometimes be off-putting, the facilitators strove to make the atmosphere as non-intimidating as possible. The CWW participants worked hands-on with new corpus-informed technology tools. They experimented with websites and software such as the COCA website (<http://corpus.byu.edu/coca/>), Just the Word ([www.just-the-word.com](http://www.just-the-word.com)), Wordle ([www.wordle.net](http://www.wordle.net)), TED videos ([www.ted.com](http://www.ted.com)), and Compleat Lexical Tutor’s Vocabulary Profiler ([www.lextutor.ca](http://www.lextutor.ca)). The capstone task for CWW participants resulted in the creation of a technology-enhanced activities and assessments.

There were many noteworthy examples of the CWW products using technology, including an exercise that analyzes the word *global* with guiding questions on its use and derivatives and a mind map that displays a colorful constellation of prepositions in phrasal verbs. One faculty member used the Compleat Lexical Tutor website to make an exercise in which the students can instantly access sound, fifty concordance lines, and definitions upon clicking on a word in a given text. Another lesson was created using corpora (COCA and MonoConc Pro) and key words in

context as a resource for academic writing; these tools are particularly useful for students to be able to employ a variety of verbs when incorporating information into their writing from outside sources. One step is creating technology-enhanced exercises and assessments; another is implementing these ideas in real classrooms. Evaluating their usefulness is the next step.

### **Ripping through the Currents: Material Writers at the Helm**

The CWWs empowered the instructors to believe that they do not necessarily have to look to published books and already made materials for their classes; they could actually be the authors. The environment was very encouraging in that the participants had the chance to show off their products and receive peer feedback. Undoubtedly, the impact of the products created out of the CWWs lays the groundwork for further development and evolution of instructional practices of ACE and general EAP classes alike. These CWWs have propelled forward the institutionalization of ACE. EAP instructors have come to believe in the ACE model because they have used it and have added their own works to the ACE repository of curriculum products open for all faculty to see and borrow.

How have these workshops influenced the participants in their own teaching? Two professors who had taught ACE sections for a semester and had participated in the CWWs were asked specifically about their experience with technology in the workshops. One instructor informed us that she learned a lot more about technology and expanded her technology repertoire to include a learning management system called ANGEL, YouTube videos, Google docs, Wordle, and interactive PowerPoints due to her participation in the CWWs. The other professor noted that as a result of ACE and the CWWs, she started using the Corpus of Contemporary American English (COCA) website, Just the Word, ANGEL, and TED videos, primarily to include collocations for teaching vocabulary. She stated that she would like to see all the students with access to laptops in the classroom, so they could work within ANGEL, type their essays, and access online sources. The next step in evaluating the effectiveness of the CWWs could be to compare faculty member use of technology before and after participating in the CWWs.

### **Conclusion**

Reflecting back on the initial studies conducted in the general education classroom at the beginning of the curriculum development process, one ACE team member recalled the startling realization that the language of general education is strikingly different from the language used in typical EAP classrooms. EAP instructors sometimes adopt the register of a “caretaker,” modulating speech to accommodate the comprehension needs of the ELL audience (ZhonggangGao). General education faculty, on the other hand, deliver class lectures using a more conversational style often replete with rhetorical questions, sidebar comments, and even pop-culture references. Similarly, researchers have found that EAP texts often do not emphasize enough the language demands that are typical of the college classroom (Biber and

Reppen 200). ACE faculty saw firsthand how language instruction itself can be a barrier to participation in academic pursuits, when language training is taught in isolation from other academic disciplines. EAP should be a tributary that flows into the larger river of the academy. Content-based instruction brings the two bodies closer.

The MDC general education corpus and other corpora are vessels that allow professors to help ELLs navigate the waters of postsecondary education. Corpora are instruments that reveal the coordinates of vocabulary and grammar, whereas the surveys of general education faculty marked the route to college-level courses. The curriculum writers harnessed the powers of both instruments—the corpus and the survey analysis—to steer the newly designed accelerated English program closer to the larger ship. As a result of the research, EAP faculty can rely less on language textbooks' idiosyncrasies to drive what is taught and can focus more on targeted language structures and academic tasks; they can be more secure knowing that what they are teaching is preparing ELLs for college completion.

The ACE initiative has empowered faculty to become active agents of the new accelerated English track through the Curriculum Writers Workshop. Materials developed under the auspices of this group are but one outcome of their work. Other products include the evaluation of different textbooks, an evaluation of technology resources, revision of pretests and post-tests used in the program, and experimentation with endorsement post-testing of ELLs for college placement. The CWW has cultivated a culture of inquiry among members of this group, a culture that fosters ongoing research and development and has influenced other curricular innovations at MDC. These innovations are part of the reason the Bill and Melinda Gates Foundation recently awarded MDC the Completion by Design grant, an initiative whose larger goal is to “reduce leakage points” (Edgcombe 12), condense time to completion, and advance students toward graduation from degree programs. ◀

## Note

1. EAP (English for Academic Purposes) is a branch of ESL (English as a Second Language) study that focuses on developing language competency for the purpose of being able to study academic subject areas in English medium institutions.

## Works Cited

Bailey, Kathleen M. “Shifts in Focus: Examining Language Instruction in Content-Based ESL Lessons.” *Research on ESL in U.S. Community Colleges: People, Programs, and Potential*. Ed. Kathleen M. Bailey and Maricel G. Santos. Ann Arbor: U of Michigan P, 2010. 11–25. Print.

- Bennett, Gena. "Using Corpora in the Language Learning Classroom: Corpus Linguistics for Teachers." U of Michigan P, 2010. Web. 9 Dec. 2011. PDF file.
- Benz, Cheryl M. "Entering an Academic Discourse Community: A Case Study of the Coping Strategies of Eleven English as a Second Language Students." Diss. Florida International U, 1996.
- Biber, Douglas, and Randi Reppen. "What Does Frequency Have to Do with Grammar Teaching?" *Studies in Second Language Acquisition* 24 (2002): 199–208. Print.
- Crandall, JoAnn, and Dorit Kaufman. *Content-Based Instruction in Higher Education Settings*. Alexandria: TESOL, 2007. Print.
- Cummins, Jim. "BICS and CALP: Origins and Rationale for the Distinction." *Sociolinguistics: The Essential Readings*. Eds. Paulston, Christina B. and G. Richard Tucker. Malden: Blackwell Publishing, 2003. 322–327. Print.
- Curtain, Helena. *Integrating Language and Content Instruction*. NFLRC Second Language Teaching and Curriculum Center, U of Hawai'i at Manoa, 1995. Video.
- Edgecombe, Nikki. "Accelerating the Academic Achievement of Students Referred to Developmental Education." *Community College Research Center*. Community College Research Center, n.d. Web. 20 Aug. 2011. PDF file.
- Fulano, Jose. Message to the author. 5 Aug. 2011. E-mail.
- Ignash, Jan M. "Linguistic Diversity, Immigration, and Today's Undergraduates: Demographics." *Handbook of Undergraduate Second Language Education*. Ed. Judith Rosenthal. Mahwah: Lawrence Earlbaum, 2000. 3–27. Print.
- Met, Mryiam. "Teaching Content through a Second Language." *Educating Second Language Children: The Whole Child, the Whole Curriculum, the Whole Community*. Ed. Fred Genesee. New York: Cambridge UP, 6–19. Print.
- Nation, Paul, and Robert Waring. "Vocabulary Size, Text Coverage, and Word Lists." *Vocabulary: Description, Acquisition and Pedagogy*. Ed. Norbert Schmitt and Michael McCarthy. Cambridge: Cambridge UP, 6–19. Print.
- Scarcella, Robin. "Some Key Factors Affecting English Language Learners' Development of Advanced Literacy." *Developing Advanced Literacy in First and Second Languages*. Ed. Mary J. Schleppergreff and M. Cecilia Colombi. Mahwah: Lawrence Earlbaum, 2002. 209–26. Print.
- Schmitt, Diane. "Academic Writing: Ideas in Flux." *International Students, Academic Writing and Plagiarism Conf*. Lancaster U. 6 Sept. 2007. Web. 8 Dec. 2011.
- Stoller, Fredericka. "Content-Based Instruction: A Shell for Language Teaching or a Framework for Strategic Language and Content Learning?" *Annual meeting of Teachers of English to Speakers of Other Languages*. Marriott Downtown Hotel, Salt Lake City. 10 Apr. 2002. Address.

Wiggins, Grant, and Jay McTighe. *Understanding by Design*. Alexandria: Association for Supervision and Curriculum Development, 1998. Print.

Zhonggang Gao, Carl. "Second Language Learning and the Teaching of Grammar [1]." *Education* 122.2 (2001): 326. *Academic Search Complete*. Web. 8 Dec. 2011.

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**<Other two bios to come.>**