Chapter 1: Background

The number of English as a Second Language (ESL)[1] students in colleges and universities in the U.S. is on the rise. This is evidenced through the results of a survey carried out by NAFSA: Association of International Educators in the fall of 2007. This survey reported growth in the number of new international students at U.S. institutions of higher education (NAFSA, 2008). Of all responding institutions, 57% reported increases in international student enrollment. This is an increase from the previous year in which 45% of responding institutions reported growth in the overall number of international students.

As the number of ESL students increases, ESL teachers are faced with the challenge of preparing these students for academic content courses[2] in which they will enroll. As college students, ESL students find themselves in an environment that is new to them and consequently face a number of different challenges as they struggle to adjust to the rigors of academic life. Many feel unprepared for the academic challenges they confront in trying to meet the expectations and requirements of their classes. Because of this, identifying an approach for how to best remedy this sense of unpreparedness by transitioning ESL students quickly and effectively into the academic arena has become increasingly important for teachers in English for Academic Purposes (EAP) programs (Kasper, 1997).

The situation with ESL students at Indiana University-Purdue University Indianapolis (IUPUI) is no exception to this problem. Upon their entrance into the university, ESL students are immediately matriculated into the university academic environment. That is, they immediately begin taking academic content courses that count

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[1] English as a Second Language (ESL) is used interchangeably with English for Academic Purposes (EAP) throughout this paper.
[2] Academic content courses are defined as non-ESL courses such as psychology, history, etc., and are interchangeably referred to as content courses throughout this thesis.

toward their general electives and/or major area of study upon enrollment into the university. However, many of these students lack the academic English skills necessary in order to successfully participate in their academic courses. What is in place at IUPUI to help ESL students develop these skills is the English for Academic Purposes (EAP) program which offers ESL courses focusing on academic communication, reading and writing skills. ESL students usually take one or two of these courses concurrently with academic content courses that count toward their major area of study or general education requirements until they complete the ESL courses they are required to take.

While the current course setup (i.e., taking EAP courses alongside academic content courses) of the EAP program has been successful in developing the academic language skills of its students, it is always healthy to explore other options in order to find the best way to help ESL students make the transition into the university environment. As such, the purpose of this thesis is to propose the implementation of another option, the adjunct model of language instruction, as an alternative to the one currently in place within the EAP program. This model adds another dimension to the current course structure of the EAP program in that it proposes adding a link between an EAP course and an academic content course, which results in academic English skills being taught through the medium of a content course. The following discussion of the needs of ESL students, the perceptions of university faculty regarding ESL students and the differences between ESL and content course environments is an attempt to justify why there should be such a change in the course structure of the EAP program at IUPUI.

Academic Needs of ESL Students

To a certain extent, establishing the adjunct model as another way to develop academic English skills involves knowing which types of academic English skills (i.e., reading, writing, listening and speaking) are most important for ESL students to possess in order to pass their academic courses. Research into this topic provides some insight into what these skills might be.

A survey carried out by Kroll (1979) provides one of the earliest studies on what types of academic skills university students need in order to pass their academic courses. This study surveyed both American and international students at the University of Southern California on their past, present and future writing needs,[3] through the use of questionnaires. The most salient results from this survey indicated that students felt their most important writing needs were in the areas of reports and business letters. The findings also indicated that term papers required in classes different from their major area of study appeared to be the most challenging writing task. Ostler (1980) conducted another survey of non-native English speaking students also at the University of Southern California to determine if ESL classes were meeting the academic needs of their students. The results revealed that ESL students across different majors and class standings considered the most important skills needed for success in academic classes were the abilities to read texts and take notes. The results of this study also showed how differently students across major areas of study and class standing ranked the importance of certain academic tasks. In a survey conducted by Christison and Krahnke (1986), ESL students from five different universities ranked language skill use in an academic setting according to frequency and

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[3] Needs is referred to here and throughout this thesis as academic skills that are necessary in passing academic courses.

determined the order, from most frequent to least frequent, as listening, reading, speaking, and writing.

Johns (1981) surveyed university faculty members across the disciplines at San Diego State University on what academic skills they perceived as most important for success in their classes. The results indicated that the receptive skills, i.e., reading and listening, were more highly ranked among faculty than the productive skills of writing and speaking. Bridgeman and Carlson (1983) surveyed faculty across the disciplines and found that the most frequent types of writing assignments they required students to perform were research papers, descriptive and interpretative writing, persuasive writing, and comparing and contrasting. Horowitz (1986) also researched the types of writing tasks that were frequently assigned by studying handouts and essay examinations given to university students at Western Illinois University to determine the most frequently required writing skills. Results indicated that summarizing or reacting to a reading, reporting on a participatory experience, or connecting theory to data were ranked the highest. A survey of university faculty from four different post-secondary institutions carried out by Ferris and Tagg (1996) on what kinds of academic oral communication skills they require indicated that students are expected to participate in in-class discussion, small group work and group assignments that required working together with classmates and oral presentations and taking notes. Table 1 (see next page) provides a summary of the findings reviewed above.

Although it is necessary for ESL students to possess the academic skills listed in Table 1 in order for them to be successful in their classes, research indicates that students often do not feel they are capable of carrying out these tasks. Smoke (1988) found that Table 1

Studies Examining the Academic Needs of University ESL Students

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Study/Method	Subject/Focus	Conclusions
Kroll, 1979 Survey	American and international students were surveyed to determine their past, present, and future writing needs.	Writing business letters and reports were ranked among the most important writing tasks. Writing term papers in academic disciplines not related to the student's major was the most challenging academic writing task.
Ostler, 1980 Survey	International students were surveyed to determine academic needs most important for success in academic classes.	International students indicated that reading academic texts and note-taking skills were most important for success in academic classes.
Johns, 1981 Survey	University faculty members were surveyed to determine the types of academic needs most important in academic classes.	Listening and reading were ranked more important than writing and speaking.
Bridgeman & Carlson, 1983 Survey	University faculty members were surveyed to determine most frequently assigned writing tasks.	Research papers, descriptive, interpretive and persuasive writing, comparing and contrasting were the most frequently assigned tasks.
Horowitz, 1986 Task analysis	Essay exams and handouts given to students were studied to determine writing tasks most frequently given to students.	Most frequently given writing tasks were summarizing or reacting to a reading, reporting on a participatory experience or connecting theory to data.
Christison & Krahnke, 1986 Survey	ESL students were surveyed to determine the most frequently used academic skills in an academic setting.	ESL students ranked academic skills used from most to least frequent as listening, reading, speaking and writing.
Ferris & Tagg, 1996 Survey	University faculty members were surveyed to determine academic communication skills requirements and expectations.	Students are expected to participate in-class discussions, small group work and group assignments that require working together with classmates, oral presentations and taking notes.

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ESL students who had completed required ESL classes or who were enrolled in advanced

ESL courses felt that their ESL classes helped them improve their English language skills;

however, they did not feel that their ESL classes had adequately prepared them for their

academic content courses (Smoke, 1988). Students in this study perceived their weaknesses

to be in the areas of reading and studying textbooks, writing research papers, talking to

professors and taking notes. Ostler (1980) found that students were most concerned with

academic tasks such as understanding academic texts and journals, note taking, and

research paper writing that are required of them in academic classes. In researching the

perceived needs of ESL students, Valentine and Repath-Martos (1997) found that students

had additional concerns with writing, reading comprehension, listening comprehension,

note-taking, grammar and reading speed. These perceived needs are summarized in Table 2

below.

Table 2

Perceived Academic Weaknesses of ESL Students

Study	Subject/Method/Focus	Conclusions
Smoke, 1988	ESL students were surveyed to determine their perceptions of their language learning experience.	ESL classes helped with English skills, but did not help in preparing for college courses; ESL students expressed perceived weaknesses in the areas of knowing how to read and study textbooks, writing research papers, talking to professors and taking notes.
Valentine & Repath-Martos, 1997	ESL students were observed, given questionnaires and interviews to determine the perceived needs of ESL students.	ESL students expressed concerns with writing, reading comprehension, note-taking and grammar.
Ostler, 1980	International students were surveyed to determine the academic needs perceived as most important for academic writing success.	International students expressed concerns with understanding academic texts and journals, note-taking and research paper writing.

Perceptions of Content Instructors

Content area faculty members have also expressed frustration with the language

skills and academic preparedness of ESL students (Ferris & Tagg, 1996; Johns, 1991;

McGarry, 1998; Rosenthal, 2000). The results of research into what the perceived problem

is vary according to the "particular academic discipline, the pedagogical approach used by

the instructor, and certain characteristics of the faculty members themselves (such as gender, age, and whether they are native or nonnative speakers of English)" (Rosenthal, 2000, p. 75). Brooks (1988) also found that content area teachers held the widespread assumption that ESL classes should take care of the language concerns of the students. In other words, once ESL students completed a sequence of ESL courses they should be "proficient and confident users of English" (Benesch, 1988, p. 3). That is, their academic English skills should be on the same level as their native English speaking peers.

Differences Between Academic Content Classes and ESL Classes

Research shows significant differences between content classes and ESL classes, in terms of the type of material presented and how teachers present it to their students. Contrasting the two environments offers insight into what each class has to offer ESL students in developing academic English skills. An examination of these differences has much to contribute to the discussion of the adjunct model as the most effective way to transition students into colleges and universities.

In a study comparing ESL classroom environments to content classroom environments, Harklau (1994) found a number of differences in the input ESL students received. Content classes were full of authentic input (i.e., oral or written input such as speech or textbooks not purposely adjusted to make it more comprehensible to ESL students) which "served a genuine communicative purpose –to transmit the content of school subject matter" (Harklau, 1994, p. 266). However, since the input was mainly addressed to native speakers, it was deficient in that it was not adjusted to make it

comprehensible to second language learners. In contrast, authentic input in ESL classes was not as plentiful. It was, however, adjusted to make it comprehensible.

In separate studies, Harklau (1994) and Verplaetse (1998) found differences in how content teachers interact with ESL students. Harklau (1994) found that content teachers elicited output from ESL students less frequently than the native English speakers in their classes. In contrast, ESL classes provided more opportunities for interaction and participation. Turn allocation was evenly distributed among all students and the nature of the questions that the teacher asked were open-ended, giving time for extended interaction.

Verplaetse (1998) found that when addressing ESL students, content teachers had a tendency to issue directives rather than ask questions. When content teachers did ask them questions, they were usually lower cognitive questions, such as recall information (e.g.,"How do you calculate mass?") (p. 25). This is in contrast to those directed towards non-ESL students, which were of higher cognitive level, such as synthesis or prediction (e.g., "What would happen if you put 10 of those on the scale?") (p. 25). Additionally, content teachers asked ESL students more non-open ended questions than open-ended questions (Verplaetse, 1998).

There were also differences in the type and amount of reading material for each class. In the content class studied by Harklau (1994), ESL students were exposed to large amounts of reading material, which is a valuable source of input for second language learners. Reading activities in the content classes "required an academically oriented, technical lexicon spanning several subject areas" (p. 253). Students in ESL classes were also exposed to a large amount of reading material as well. However, ESL teachers frequently gave the ESL students texts that were either adapted especially for use by ESL

students or texts that were written for younger students. This was problematic in that the texts were "stripped of metaphoric language" (Harklau, 1994, p. 255).

Explicit language instruction also varied between the two types of classrooms. Content teachers did not seem to know how to deal with grammatical errors in the written work of ESL students. Additionally, these teachers lacked the knowledge needed to explain grammatical errors, and when they did correct errors they did so inconsistently. Pronunciation errors were ignored. In contrast, ESL teachers provided explicit language instruction for their students, as they were able to give their students specific feedback on both written and oral production, using techniques that are helpful to ESL students. For example, students learned to recognize their own "grammatical and mechanical" errors (e.g., incorrect use of verb tenses, prepositions) through proof reading exercises (Harklau, 1994, p. 260).

The two environments offered different socializing functions for ESL students in terms of what interaction with their peers offered them (Harklau, 1994). The content classroom provided opportunity for ESL students to interact with non-ESL students. The value of the socializing function of ESL classrooms was that it helped ESL students in their adjustment to U.S. life.

As summarized in Table 1, there is a wide range of academic language skills university students need to posses in order to be successful in academic content classes. Table 2, however, projects the gaps that many ESL students often perceive in what they are able to do and what they need to do. Table 3 (see next page) shows the differences in instruction and materials that exist between content classrooms and ESL classrooms. In Table 3

Differences in Instruction and Materials between Content and ESL Classrooms

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Content Classrooms	ESL Classrooms
Abundant in authentic input	Not abundant in authentic input
Insufficient feedback on written and oral production	Sufficient feedback on written and oral production
	Instruction in both academic and everyday language
Abundant in linguistic interactions through the written mode	
More opportunities for social interaction with native English speaking peers	Few opportunities for social interaction with native English speaking peers
Teachers do not adjust input to make it comprehensible to ESL students	Teachers adjust input to make it comprehensible to ESL students
Teachers elicit output from native speakers more than non-native speakers	
Teachers issue more directives than questions to ESL students	
Teachers asked ESL students more non-open ended questions	Teachers frequently ask ESL students open ended questions
Teachers asked ESL students low cognitive level question	
	ESL students have more opportunity for participation and interaction.

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Note. Adapted from "ESL versus mainstream classes: Contrasting L2 learning environments," by L. Harklau, 1994, *TESOL Quarterly*, 28(2), pp. 241-262, and "How content teachers interact with English language learners," by L. Verplaetse, 1998, *TESOL Journal*, 7(5), pp. 24-28.

examining these tables it appears that there needs to be a better connection between ESL

classrooms and content classes in order to more effectively address the academic needs

ESL students have in making the transition into the college and university environment.

Such a connection can be found in the implementation of the adjunct model.

Thesis Outline

The second chapter of this thesis will review existing literature on the adjunct model. Included in the literature review of the adjunct model is a discussion of the factors that play into its effectiveness, its benefits, and identification of possible problems that may surface in its implementation. Finally, it will discuss several examples of adjunct models from other colleges and universities in the U.S. and how they have been adapted to meet the needs of a specific context. The third chapter will include guidelines for adjunct model program design and planning. The last chapter will propose an adjunct model for IUPUI, following the guidelines delineated in Chapter Three.

Chapter 2: Literature Review

Because of the increase of ESL students in colleges and universities, ESL educators have looked into different ways to successfully transition these students into academic classes. Research into this indicates a clear need to integrate both content and language instruction. Such integration can be found in an instructional method referred to as content-based instruction (CBI) (Brinton, Snow & Wesche, 1989; Kasper, 1997).

Content-based Language Instruction

Brinton et al. (1989) define CBI as the "integration of particular content with language-teaching aims" (p. 2). Within a postsecondary context, they define it more narrowly as "the concurrent teaching of academic subject matter and second language skills" (p. 2). In this instructional method, the academic and second language skills that second language students need to possess to pass their content courses form the basis for the curriculum of CBI courses. These skills are developed through "acquiring information" from the content material which is presented in a second language (Brinton et al., 1989).

The intent of this instructional method is to eliminate the "artificial separation between language instruction and subject matter classes which exists in most educational settings" (Brinton et al., 1989, p. 2). According to research (Benesch, 1988; Smoke, 1988; Brinton & Snow, 1988; Guyer & Peterson, 1988; Brinton et al., 1989; Kasper, 1997), this instructional method involves students in an academic learning environment in such a way that prepares them for university academic courses. The ultimate goal is to help second language students to be able to develop academic and language skills that will transfer to other academic courses (Brinton et al., 1989).

The Adjunct Model

There are several types of content-based instructional models. However, researchers such as Snow and Brinton (1988a) have identified one model, in particular, as an "ideal" choice for an EAP setting, where ESL students are matriculated into the mainstream academic community: the adjunct model. This model "introduces students to second language academic discourse and develops transferable academic skills" (Brinton et al., 1989, p. 19). Additionally, equal attention is given to mastery of both language and content. That is, ESL students should at least attain a strong enough grasp on the material in order to pass both classes. Achieving such mastery involves linking or pairing language courses with content courses (Andrade & Makaafi, 2001). The students are enrolled concurrently in a content class (e.g., sociology, psychology) and an ESL class. The content class provides the students with the content, and the language class provides the students with the language skills support needed for the students to be successful in the content class (Andrade & Makaafi, 2001). The language skills are developed through the content of the content course (Iancu, 1997).

There are several features specific to the adjunct model which makes it a beneficial environment for matriculated ESL students. According to Brinton et al. (1989), adjunct models are appropriate for secondary schools, colleges and universities, where the language proficiency of the students is intermediate to advanced. The higher language proficiency levels are necessary because of the high degree of "linguistic and conceptual complexity" that is present in the subject matter (p. 20). The proficiency level of matriculated ESL students must be high enough to be able to manage, with assistance, the readings and lectures that are presented within the content course (Snow & Brinton, 1988a). Another feature of this model involves integrating both non-native English

speakers together with native English speakers for content instruction. This can easily be managed as matriculated ESL students are already taking content classes. Further, students participating in this instructional format develop transferable academic skills as they are introduced to "general academic discourse" (Brinton et al., 1989, p. 18). Other additional features of the adjunct model that make it suitable for an EAP setting are the availability of content classes in a college or university setting and the opportunity of earning academic credit for both the content course and the ESL course (Snow & Brinton, 1988a).

Adjunct Model Features

There are several features that define the adjunct model, setting it apart from other content-based instructional models. The following discussion will provide a description of these features as well an outline of what role they play in the adjunct model.

Instructor roles.

One of the defining features of the adjunct model is that there are usually two instructors involved: one in each course. This is because the setup typically involves both a content and ESL course. The role of each instructor is an important feature of this model (Guyer & Peterson, 1988). The two instructors assume two different roles, one as content instructor and one as language instructor. The role of the content instructor is to provide instruction in the content area (Andrade & Makaafi, 2001). In the same manner, the role of the adjunct ESL instructor is to provide the language instruction for English language development (Snow & Brinton, 1988a).

Although the ESL instructor and content instructor are responsible for teaching their respective disciplines, Kasper (1994) recommends that the two teachers frequently attend each other's classes. This benefits the content area teacher, as attendance in ESL

classes exposes the content teacher to a variety of instructional techniques. It also raises awareness to the specific problems of ESL students as well as effective solutions on handling these problems.

Similarly, the attendance of ESL instructors in content classes benefits the ESL instructor as well. Attending the content course is helpful in determining problems ESL students have in these classes. ESL instructors are also able to teach specific academic language and study skills such as note-taking and understanding lectures, using examples from his/her own notes from the content area class (Kasper, 1994).

There are specific attributes that each instructor should possess. Content area instructors "should have a solid teaching reputation and be eager or at least willing to participate" (Andrade & Makaafi, 2001, p. 35). Also, it is advantageous for the content area instructor to have experience with and interest in nonnative English speakers.

ESL instructors should be flexible as "what happens in the content course determines, to a large extent, what is taught in the ESL adjunct course" (Andrade & Makaafi, 2001, p. 36). ESL instructors are responsible for designing exercises that relate to academic skill building based on the content material. ESL instructors are also responsible for "providing feedback on both the linguistic aspects of the students' work and (to a lesser degree) the quality of the content" (Snow & Brinton, 1988a, p. 43).

Because language and content teaching in an adjunct situation are interwoven, just how involved the ESL teacher should be in addressing content in the class is not always clear. Snow and Brinton (1988a) state that part of the role of the ESL teacher is to spend some time "learning the material of the content course" (p. 43). However, it is not necessary for ESL instructors to have an extensive knowledge of the content area (Andrade

& Makaafi, 2001). ESL instructors are "in no way meant to supersede the content course teaching staff" (Snow & Brinton, 1988a, p. 43). Gee (1997) addressed this issue by stressing to the students that they are the content experts and referred any content problems to the content area instructor.

The roles and attributes of the instructors are summarized in Table 4 below.

Table 4

Roles and Attributes of Instructors in the Adjunct Model

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Study	Instructor	Role/Attribute
Andrade & Makaafi, 2001	Content	Instructor teaches content
		Instructor should have a solid teaching reputation
		Instructor should show eagerness and willingness to participate
		Instructor should have experience and an interest in non-native English speakers
Andrade & Makaafi, 2001	ESL	Instructor should be flexible
		Instructor should provide feedback on student coursework
		Instructor should learn content material
Snow & Brinton, 1988a	ESL	Instructor teaches academic English
		Instructor should provide feedback on student coursework
		Instructor should learn content material

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Coordination.

Coordination between staff is crucial if the adjunct model is to be effective in its purpose (Snow & Brinton, 1988a). Although the two instructors have two distinct roles,

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they must work together in collaboration to ensure coordination between the curricula of the two courses (Kasper, 2000). First, faculty need training in effective implementation of adjunct courses (Kasper, 1994). This entails discussing and planning how course material will be interrelated as well as discussing pedagogical techniques that are appropriate for content-based instruction (Babbitt & Mlynarczyk, 2000). Coordination is critical in terms of reinforcing the goals and objectives of the program (Brinton & Snow, 1988a). The goals and objectives of the program must be continually stressed otherwise content area instructors and ESL instructors may potentially promote their own agendas and consequently find themselves at cross purposes. The effectiveness of the adjunct model, whose goal is to prepare ESL students for the language and academic demands of university academic courses, would consequently decrease.

Types of Skills Taught in an Adjunct Model

The skills that are taught vary according to the purpose of the adjunct model (Andrade & Makaafi, 2001). Adjunct courses can focus on academic study skills, the development of language skills or the development of both language skills and content mastery. The specific language skills taught vary according to the requirements of the content course. Determining what to teach depends on the needs of the students. For example, some students may need academic skills that support learning from classroom lectures and others may need to learn academic skills that focus on academic reading and writing (Andrade & Makaafi, 2001).

For whatever skills are taught, the language instruction is provided through the medium of the content course (Snow & Brinton, 1988a). As such, the syllabus for the language course is "mapped onto the content curriculum and includes treatment of more

general academic language skills in addition to content-specific language needs" (Brinton et al., 1989, p. 20). Because of this, the materials used in the adjunct language course are distinctly different from traditional ESL courses. The materials that are used in the adjunct course are primarily based on the content texts and lectures which are adjusted to fit the language proficiency of the students. Much of the language skills presentation and practice is derived from these materials. At times, however, ESL texts are appropriate for use as references by both teachers and students for certain areas such as article usage or transitional expressions (Snow & Brinton, 1988a).

Theoretical foundations

There are several theories that lay the foundation for the adjunct model of language instruction. A common theme running through these theories is the stressed importance of creating opportunities that allow students to "interact with authentic, contextualized, linguistically challenging materials in a communicative and academic context" (Kasper, 2000, p. 4).

Comprehensible Input Hypothesis.

According to Kasper (2000), one of the main influences on the adjunct model is Krashen's Comprehensible Input Hypothesis. This hypothesis asserts that language structures are acquired most efficiently through comprehensible input that is a little beyond the proficiency level of the learner (Krashen, 1982, 1985). This forces the learner to rely on previous knowledge and context to find the meaning of the new language structure. Kasper (2000) also states that this idea relates to content-based instruction as these courses present comprehensible input that is meaningful, which facilitates the acquisition of both language and information.

Zone of Proximal Development.

According to Grabe and Stoller (1997), Vygotsky's Zone of Proximal Development (ZPD) is also an integral part of the theoretical support for content-based language instruction. The Zone of Proximal Development is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or more capable peers" (Vygotsky, 1978, p. 86). This theory is applicable through a concept called scaffolding (Saville-Troike, 2006). Scaffolding is the "verbal guidance which an expert provides to help a learner perform any specific task, or the verbal collaboration of peers to perform a task which would be too difficult for any one of them in individual performance" (p. 193).

The adjunct model, as a type of content-based language instruction, is a direct example of scaffolding. In any university content course, students need to be able to perform certain academic tasks in order to be successful in that class. Instruction in an adjunct course assists ESL students in helping them perform these tasks until they can do them independently without assistance. Upon entering the adjunct course, students begin receiving a high degree of assistance, and as they progress through the course, assistance is gradually reduced until the student can achieve independently. (See Kinginger, 2002 for the misrepresentation of the ZPD in educational research).

Cummins Two-Tiered Skill Model.

Cummins' Two-Tiered Skill Model also offers theoretical support for the adjunct model. Cummins asserts that becoming proficient in a second language involves two types

of skill acquisition. These types are represented by two tiers. The first tier represents the acquisition of basic interpersonal language skills. Interpersonal language skills involve basic conversation ability as well as being able to articulate needs. The second tier represents cognitive academic language proficiency, which is acquiring the ability to understand complex, decontextualized linguistic structures. It also represents the ability to analyze, explore and deconstruct the concepts that are often found in academic texts. These skills take longer to acquire than the interpersonal language skills (Cummins, 1981).

Cummins (1984) further develops this concept in his presentation of the types and ranges of proficiency along two continua: a horizontal continuum indicating the range of context-embedded and context-reduced tasks, and a vertical continuum demonstrating the range of cognitively demanding and cognitively undemanding activities. The context-embedded to context-reduced continuum presents "a range of contextual support available for expressing or receiving meaning" (p. 138). In other words, it gauges how embedded the input is in some sort of context. On the context-embedded side of the continuum, meaning is actively negotiated and "language is supported by a wide range of meaningful paralinguistic and situational cues" (p. 138). An example of this is the conversational use of language. The context-reduced side of the continuum indicates that successful communication "depends heavily on knowledge of the language itself" (p. 138). Context-reduced communication might be used to satisfy the demands of academic tasks, such as reading textbooks (Cummins, 1984).

The vertical continuum relays the range of cognitively demanding to cognitively undemanding tasks. The lower end of the continuum represents tasks "in which communicative tools have not become automatized and thus require active cognitive

involvement" (p. 139). The upper part of the continuum represents "communicative tasks and activities in which the linguistic tools have become largely automatized (mastered) and thus require little active cognitive involvement for appropriate performance" (p. 139).

How does this relate to content-based language instruction? Cummins' explanations drive home the point that there are distinctions in types of language proficiency. Kasper (2000) states that this distinction is "critical to the needs of the college ESL student, who must become not only functionally, but also academically literate, and who must be able to use English not just as a means to converse and communicate, but also as a vehicle for learning, articulating and analyzing information from a variety of academic disciplines" (p. 5). According to Cummins, learners cannot acquire cognitive academic language skills in the same manner they acquire basic interpersonal language skills. Learners acquire cognitive academic language skills through "task-based, experiential learning typified by students' interactions with contexts, tasks, and texts that present them with complex interdisciplinary content," which is a key component of content-based college ESL instruction (Kasper, 2000, p. 5).

Cognitive Learning Theory.

Another influence that is significant for understanding the theoretical foundations of content-based instruction is cognitive learning theory (Brinton et al., 1989). From this learning theory proposed by Anderson (1983, 1985), the basic progression of learning is delineated in three stages. First, learning begins with a rough mental representation of a certain task, which is referred to as the cognitive stage. This representation becomes clearer

and stronger in the second associative stage; however, the learner still relies on outside help. Finally, as the task representation becomes more refined, the learner is able to perform the task independently and automatically. It is only by progressing through these stages that the learner will be able to become autonomous in a particular learning environment. This theory is related to content-based instruction as this type of instruction often makes use of scaffolding (Kasper, 2000).

The Effectiveness of the Adjunct Model

Several studies into the effectiveness of the adjunct model of language instruction in transitioning ESL students into the university academic environment have revealed several positive results (Kasper, 1997). Benesch (1988), Guyer and Peterson (1988) and Snow and Brinton (1988a, 1988b) have all found evidence that adjunct courses are effective in that they ease the transition into content area classes by teaching language skills that are necessary to pass their academic content courses, putting their academic achievements on par with native speakers. On a test comparing listening, note-taking, reading and writing skills of ESL students who attended the adjunct with ESL students who did not attend, Snow and Brinton (1988b) found that ESL students who participated in an adjunct model program at University of California Lost Angeles (UCLA) performed as well as ESL students who did not attend, despite the fact that the ESL students began the semester with lower English proficiency scores. Studies carried out by Andrade and Makaafi (2001) indicated that students who participated in the adjunct course achieve overall course grades comparable to their native English speaking peers. Snow and Brinton (1988b) interviewed former students who had attended an adjunct model program at UCLA and found that upon attending an adjunct program, students felt they had improved their

study skills, become more self-confident, and felt as if their ability to read and write had improved.

Results of Kasper's (1994) study, which compared the reading performance of ESL students who did not attend the adjunct course with ESL student who did attend the course, revealed that adjunct instruction also improved language skills in addition to improving academic performance in content courses. Kasper cited the higher reading performances of the ESL students who attended the adjunct as well as students' overall higher grades in the content as evidence. At Macalester College in St. Paul, Minnesota, Guyer and Peterson (1988) compared the performance on unit tests over a semester of native English speaking American students, non-native English speaking students not required to attend the adjunct course because of their high English proficiency level, and non-native English speakers who were required to attend the adjunct course. The comparison revealed that "the non-native speaker group with benefit of the study skills (adjunct) class was able to pass the non-native speaker group with superior language proficiency and in some semesters to approach the average score for native speakers" (p. 104). The adjunct course also reduced the dropout and failure rate of students attending the content course. Adamson (1990) found that ESL students participating in an adjunct pre-course, a "theme-based ESL course that contains a module in which the students join a regular course for several weeks" designed for those whose English skills were not high enough for a full semester adjunct course, were able to participate in a content course that was above their language abilities, performing such academic tasks as writing research, participating in classroom discussion and taking exams (p. 78).

Transfer of learning

Part of the effectiveness of the adjunct model of language instruction is realized in the occurrence of transfer of learning, which is when learning that occurs in a particular course is applied to another course. A study by James (2006) into whether learning transfer occurs between content-based instructional (CBI) courses and academic courses provided some indication that it does occur. Although the particular context of this study was not an adjunct ESL course, the results are relevant as adjunct courses are a type of CBI.

In this study, information about what learning transfer had occurred was gathered through interviews, journal entries, classroom observations and materials used in the course. The results revealed that learning transfer did occur in such areas as listening comprehension skills, reading comprehension skills, speaking skills writing skills, and study skills. In each case, interviewees gave specific examples of how they used specific skill learned in the CBI course in another course. Examples of these skills include summarizing lectures, using transition words such as *however* to help identify when there was a change in an idea, using clear communication skills, and organizing and developing ideas (James, 2006).

It is important to note, however, that the skills reported to have transferred only did so under certain conditions. First, learning transfer occurred when an activity in one course required application of something that was learned in the CBI course. Second, transfer of learning occurred when a student was faced with a challenging situation, and applying something learned in the CBI course was helpful in meeting that challenge. Third, learning transfer occurred when a student had a personal weakness, such as lecture comprehension, that required application of skills learned in the CBI course to alleviate the problem. Transfer of learning also occurred because the CBI course was the only source of support

available. Another condition which facilitated learning transfer was when similarities in "content, type of activity, type of reading text, or type of writing text" occurred between the CBI course and the academic course (James, 2006, p. 798). Also, evidence of learning transfer was present "because instruction in the CBI course was chronologically close to an opportunity to apply what was learned (James, 2006, p. 798). In other words, a skill that was being developed in the CBI course was being used at about the same time in the academic course. Last, learning transfer occurred when the level of difficulty of the CBI course was higher than in the other academic course. For example, if listening comprehension activities were more challenging in the CBI course than the other course, then this would be a condition that facilitated learning transfer (James, 2006).

Several of these conditions either are present in the adjunct model or can easily be facilitated by the adjunct model. Linking a content course and an ESL course requires coordination of the assignments of both courses. This facilitates two of the conditions cited by James (2006) that are needed for transfer of learning to occur: the first condition being the application of skills learned in one class to a required task in another course and the second being the chronological closeness of the learning of a certain skill in one course and the required application of that skill in another course.

The adjunct model also has the potential to facilitate learning transfer because of similarities in content, activity type, reading material, and writing assignments. One of the objectives of the adjunct course is to match the purposes of the content course with the purposes of the ESL course. In doing so, the assignments and materials for the adjunct course are based on the assignments and materials of the content course.

Although it is easy to see that because the adjunct model of language instruction meets many of the conditions for transfer of learning to occur, James (2006) cautions that this does not necessarily mean that transfer will occur in other classes beyond the linked content course. However, findings in Kasper's (1997) study do indicate evidence of learning transfer that extends beyond the time period in which students take content-based instruction courses.

Kasper (1997) compared the subsequent academic performance of ESL students who had been enrolled in content-based courses (the experimental group) with ESL students who had not been enrolled in content based courses (the control group) in the same semesters. The results of this study indicated three important findings. First, in reading and writing assessment tests given to both the experimental and the control groups in semesters following the experimental group's enrollment in content-based courses, the experimental group scored higher than the control group (Kasper, 1997). Second, in comparison to pass rates in a subsequent academic course, the pass rate of the experimental group was significantly higher. Additionally, the experimental group received higher grades in subsequent academic courses than the control group. Last, the graduation rate of the experimental group was significantly higher than that of the control group (Kasper, 1997).

In summary, James' (2006) study provides evidence that learning transfer from ESL classes does occur in content-based instruction courses. Kasper's (1997) study indicated that not only does learning transfer occur, but the transfer extends beyond a single semester to classes taken in subsequent semesters. Combined, these studies provide

some support for the adjunct model's potential success in transitioning ESL students into the academic environment of colleges and universities.

Benefits of the Adjunct Model

Because of the selective effectiveness of the adjunct model as reported in the above mentioned studies, several benefits follow its implementation. These benefits fall into four categories: pedagogical, linguistic, psychological and collegial (Pally, 2000). This section will discuss the benefits of each category.

   Pedagogical Benefits.

The adjunct model of language instruction offers several pedagogical benefits. The first of these is the opportunity for students to learn both language and content (Pally, 2000). In the adjunct model, the two are given equal importance (Brinton et al., 1989), and research indicates that gains are made in both areas (Kasper, 1994). Students learn academic language through the medium of the content course. In turn, as student learn academic language skills, their ability to master concepts in the content course increases.

Another pedagogical benefit is the utilization of scaffolding (Pally, 2000). An ESL class linked to a geography class at Macalester College provides a salient example of scaffolding (Guyer & Peterson, 1988). During the introductory phase, in which students were adjusting to the content course, the ESL instructor provided a high level of support by giving students study guides, reading questions, lecture outlines that are closely related to the text as well as the actual transcripts of lectures. As the students progressed in the course they had to prepare their own notes, study questions and outlines. In the last part of the course, students began to analyze, synthesize and evaluate information on their own by completing outside readings and doing research at the library to relate information and

concepts learned in the geography course to current events discussed in magazines and newspapers (Guyer & Peterson, 1988).

Integration of the four language skills is also another pedagogical benefit. Because of the nature of the adjunct model, it provides an environment for facilitating the integration of reading, writing, listening and speaking skills (Snow & Brinton, 1988a). The assignments based on the content course provide opportunities to listen, read, discuss and write about certain topics. For example, a writing assignment in an adjunct course might require the students to listen, read and discuss the issues related to the assignment before writing about it, instead of just writing about a topic as might be expected in a traditional writing class (Shih, 1986).

Linguistic Benefits.

There are also linguistic advantages that come from participating in the adjunct model. The design of the model is such that it provides students with meaningful input conveyed through everyday communicative language as well as academic language (Pally, 2000). This is done through exposure to vocabulary, forms, registers and pragmatic functions. Words and forms are recycled, which eases the processes of memory and acquisition (Pally, 2000). Another advantage frequently overlooked is that, within this model, students are given the opportunity for social interaction with the native English speakers within their class (Andrade & Makaafi, 2001).

Psychological Benefits.

The adjunct model allows for several psychological benefits (Pally, 2000). These benefits include increased interest and motivation. Because the students are typically more interested in what they study in content classes, they are more likely to recall, synthesize

and elaborate on information that they learned. Students also become more motivated as they realize that the adjunct course is helping them build the academic and language skills they will need to be successful upon entrance into mainstream content courses (Iancu, 1997).

Another psychological benefit is reduced anxiety (Andrade & Makaafi, 2001). In a study conducted by Kasper (1994), student feedback indicated that linking the ESL adjunct course with the content course reduced student anxiety, as they became less overwhelmed by the academic content.

Collegial Benefits.

Implementation of the adjunct model can also offer collegial benefits. As collaboration occurs between content area instructors and ESL adjunct instructors, a reciprocal relationship of support can develop. Content instructors become more supportive of the ESL program as a result of gaining a better understanding of the needs of ESL students. In return, ESL instructors provide support to content area instructors (Andrade & Makaafi, 2001). The building and strengthening of relationships that occurs fosters "mutual understanding, appreciation, and respect for the activity of preparing nonnative English speakers for U.S. college courses" (Iancu, 1997, p. 150).

The relationship between adjunct instructors and content instructors also results in the content instructors becoming more aware and understanding of the needs of ESL students (Andrade & Makaafi, 2001). The increased awareness and understanding allows the content teachers to attend more effectively to the needs of the ESL students. This relieves the frustrations that content area teachers sometimes experience, making teaching ESL students more satisfying and enjoyable (Kasper, 1994).

Other Content-Based Instructional Models

There are other types of content-based instructional models besides the adjunct model. Brinton et al. (1989) discuss alternatives to the adjunct model, which they refer to as theme-based and sheltered language instruction. However, the purposes of these models are different than the adjunct model and do not appear to fully meet the needs of matriculated university ESL students. The following is a more detailed characterization of these models along with a discussion regarding why they are not the best option for transitioning matriculated ESL students in a university setting.

Theme-Based Language Instruction.

Because the theme-based language course is a type of content-based language instruction, the content material is the basis for teaching language skills (Brinton et al., 1989). Theme-based courses are primarily ESL courses whose intent is to "help students develop L2 competence within specific topic areas" (p. 19). In this approach, the language instructor teaches both the language and the content of the course. The materials used are either developed by the teacher or come from commercial ESL textbooks.

Theme-based courses are centered around certain topics or themes, "with the topics forming the backbone of the course curriculum" (p. 14). Brinton et al. (1989) describe a 10-week course "organized around several unrelated topics, such as heart disease, noise pollution, solar energy, and television news coverage" as an example of this type of approach (p. 15). Another example of this approach given by Brinton et al. (1989) is a course which structures the curriculum for the whole course around one major topic, such as marketing, and then dividing this topic into several subtopics, such as product development, advertising strategies, consumer behavior, etc.

Sheltered Content Instruction.

Sheltered courses, as described by Brinton et al. (1989), are courses in which second language learners are separated, or "sheltered," from their native speaking peers for the purpose of assisting students in learning the content material, which is the primary focus of the class. Any language learning that occurs is "incidental." The courses are taught in the second language by a native speaker who is a content area specialist (i.e., academic content course instructor). In an attempt to ensure the understanding of second language learners, modifications are often made to the course. For example, "texts are carefully selected for their organization and clarity, the instructor might gear lectures more closely to the written text and make certain linguistic adjustments to allow for students' listening, comprehension difficulties, and the overall course requirements might be altered to include greater emphasis on receptive skills and less on speaking and writing" (Brinton et al., 1989, p. 16).

The Adjunct Model versus Theme-based and Sheltered Models.

In comparing the features of all three models, it appears that the adjunct model is the best option to help matriculated ESL students make the transition into academic content courses for a number of reasons. First, adjunct courses offer a setting that is closer to an actual academic course than sheltered and theme-based courses (Brinton et al., 1989; Adamson, 1990). In order to conceptualize this point, Brinton et al. (1989) describe the models using a continuum in which the left side represents a language course and the right side represents a mainstream content course. Theme-based courses are placed on the left

side of the continuum, which shows their similarity to a typical language class. Sheltered courses are placed in the middle of the continuum, halfway between the language class side and the mainstream content course side. Adjunct courses are placed on the right side, showing that they are closer to a mainstream content course than a language course.

The reason for the placement of the adjunct course close to the content course side of the continuum is that it possesses more similarities to academic content courses than sheltered and theme-based courses. One similarity is that in adjunct courses, ESL students are introduced to authentic academic discourse through class lectures and texts and become accustomed to normal academic tasks, such as note-taking (Adamson, 1990). Another reason is that the adjunct model provides opportunity for ESL students to interact with native English speakers through their attendance of the content course linked with the adjunct course. This is a feature that is missing in sheltered courses and theme-based courses.

Another reason why adjunct model courses appear to be the best option to help transition matriculated ESL students is that the focus of these courses is on both language and content mastery in addition to developing transferable academic skills (Brinton et al., 1989). This is different from theme-based courses which focus on language competency within a specific topic area, and sheltered courses which focus more on content mastery. As matriculated ESL students are involved in both EAP courses and content area courses, a focus on both as a bridge between the two settings would be more beneficial to them in their transition into university environments.

Criticisms of the Adjunct Model of Language Instruction

Marginalization of ESL Adjunct Instructors.

Although the literature states that adjunct models can cultivate good relationships between content area instructors and ESL instructors (Andrade & Makaafi, 2001; Iancu, 1997: Gee, 1997), it can also foster the marginalization of ESL teachers (Goldstein, Campbell & Cummings, 1997). This is a major criticism of the adjunct model and is an area in which potential problems can surface. Although ESL teachers involved in adjunct model courses experience marginalization, it is not an issue that is specific to this particular situation. It is experienced by most ESL teachers in all settings (Auerbach, 1991). Auerbach (1991) states, "marginalization is a fact of life for ESL educators" (p. 1). Auerbach (1991) goes on to say that "college ESL instructors are often hired as adjunct faculty on a semester by semester basis to teach non-credit preparatory courses in academic skills centers. Elementary ESL teachers teach in pull-out programs, traveling from school to school and setting up shop in closets, corridors, and basements. Adult educators teaching survival ESL have to work two or three jobs in order to survive; jobs with benefits, living wages, and any measure of security are few and far between" (p. 1).

ESL teachers of adjunct courses are expected to "attend the lecture class with which their ESL course is paired, adapt their curriculum to that of the content class, and ensure that the material is comprehensible to the ESL students" (Benesch, 1992, p. 1). What results is that ESL teachers teaching adjunct ESL courses sometimes feel as if they are giving up their authority over their own "content," doing little more than tutoring students in order for them to pass their content courses (Goldstein et al., 1997).

Auerbach (1991) offers an explanation for the rationalization of the marginalization of ESL teachers in that ESL is seen as a skill and not a discipline. The job of ESL teachers is viewed as that of "preparing students to do something other than learn English, and it is

that other something that counts" (Auerbach, 1991, p. 1). Consequently, the job of the ESL teacher is viewed as "training" rather than "educating."

ESL Viewed as a Service Course.

A second criticism leveled at the adjunct model is that the adjunct course is sometimes seen as a service course. Benesch (1992) states that "paired arrangements can easily turn the ESL course into a tutoring service which sustains large classes, one-way lectures, incomprehensible textbooks, and coverage of massive amounts of material" (p. 8). Viewed in this light, adjunct ESL courses are often seen as less important than content courses (Goldstein et al., 1997). Consequently, ESL adjunct courses are expected to "adapt to the demands of the content course" while the content course "retains its traditional format and curriculum" (Benesch, 1992, p. 1). Instead, Benesch (1992) suggests that ESL teachers should be "fighting for smaller classes, a more interactive teaching approach and better readings" rather than acting as the support in this arrangement (p. 8).

Potential Problems

Although there are many benefits to the adjunct model, implementation does not come without its own set of problems. These problems can cause potential breakdowns in the success of adjunct courses (Snow & Brinton, 1988a). The following section outlines some of the relevant issues regarding this topic.

Coordination.

One of the most crucial areas in which breakdown can occur is in the coordination between content teachers and ESL teachers (Snow & Brinton, 1988a). As stated above, a large part of the success of the adjunct model lies in effective coordination (Gee, 1997). Problems with coordination can surface largely because of "staff turnover and inefficient

meetings" (Snow & Brinton, 1988a, p. 47). Related to coordination is the potential

breakdown in assignment planning (Snow & Brinton, 1988a). Assignment planning in an

adjunct course situation is a collaborative activity and must be done by both the content

and language instructors.

Communication of the Underlying Philosophy.

Another problem can surface when "the underlying philosophy of the program is

either not shared by all instructors or is not communicated uniformly to the

students" (Snow & Brinton, 1988a, p. 47). For example, in an adjunct model implemented

at UCLA, a professor, in an effort to "create a nonthreatening learning environment," had a

tendency to downplay academic tasks by "minimizing the students' academic

responsibilities" (Snow & Brinton, 1988a, p. 47). This misled ESL students about the

demands of future academic courses (Snow & Brinton, 1988a).

Balancing Language and Content.

The balance between language and content is a tough challenge to overcome

(Guyer & Peterson, 1988). Problems can surface when students place higher importance on

the content of the class than the language aspect and consequently may be more prone to

using the adjunct ESL class to review the content rather than building language skills

(Guyer & Peterson, 1988). This has the potential to decrease the authenticity of the adjunct

course "as a non-specialist's simplifications of the lectures often distort course

content" (Guyer & Peterson, 1988, p. 98).

Attrition.

Brinton (1997) notes that in the adjunct model problems with attrition are

compounded. This is because a student failing in one class is also at risk of failing in the

linked course as well. "Thus, once the failure factor sets in, it is multiplied over the number of courses involved, and students do not have the usual recourse of redoubling their efforts in their other courses" (Brinton, 1997, p. 344).

Student Interests and Expectations.

Other potential problems are highlighted by Goldstein et al. (1997) in their description of an adjunct writing class paired with a content course. The first problem occurred when students were not interested in the content course or found it irrelevant. Goldstein et al. (1997) found that in their experience, when an adjunct writing course is paired with a content course that has little value to the students, it causes considerable resistance to the adjunct writing course. Another issue surfaced when students had certain expectations about what a writing class should look like based on experiences from previous writing classes. Additionally, students lost trust in the adjunct course when they felt like they were not getting the type of writing instruction they thought they needed. Lastly, students perceived a disconnect between the expectations of writing instructors and content instructors, which resulted in frustration from what they thought was conflicting evaluative feedback (Goldstein et al., 1997).

Examples of Adjunct Models

While some adjunct model programs have already been mentioned above, there are several examples published in the literature that have been implemented at different U.S. colleges and universities. As the needs of ESL students vary in a particular university academic setting, each model has been uniquely adapted to address them. The four programs described in this next section are the Freshman Summer Program at UCLA, the Master of Business Administration (MBA) adjunct course at the University of Florida, the

English Language Institute adjunct program at George Fox University and the adjunct program at Macalester College.

Freshman Summer Program at UCLA.

The Freshman Summer Program (FSP) is a program offered to newly admitted students who are considered "high risk." In other words, these students are not fully prepared in reading, writing and study skills that are necessary to face the academic challenges that university courses afford (Snow & Brinton, 1988a). These students have low verbal SAT and ACT scores, usually come from low income backgrounds and are members of an ethnic or linguistic minority. The reading skills of the ESL students were ranked lower than 99% of those entering as college freshman. The overall goal of the program is to "bridge the gap between high school and college" (Snow & Brinton, 1988a, p. 37). This is achieved by equipping students to be successful in such areas as independent thinking, writing and study skills. Additionally, the program meets social and recreational needs, encourages the building of positive self-images, and ensures emotional stability.

The program consists of six entry-level content courses which are paired with ESL/ English composition courses. Each week, students attend 12-14 hours of language classes and 8 hours of the content area courses. The academic focus of the ESL section adjunct classes is to improve reading, writing and study skills among its participants which is done through assignments based almost exclusively on material taken from the content course (Snow & Brinton, 1988a).

The overall outcome of this program has been determined to effectively transition students into the university academic environment. The program's effectiveness in this regard has been verified through a follow-up study carried out by Snow and Brinton

(1988a). In this study, students were surveyed at the end of each session. The results indicated that over 80% felt that their writing skills improved as a result of attending the adjunct writing course offered by the FSP. Additional success was documented through open-ended comments given by attendees of the FSP which attributed their success in content courses and increased development in language skills to the adjunct language course. Further, these students reported improvements in self-confidence which was also attributed to their attendance of the FSP.

University of Florida.

The adjunct model was implemented in the University of Florida MBA program as the enrollment of international students in the program increased (McGarry, 1998). As these students were matriculated into MBA courses, it became apparent that they could not cope with the expectations of many of the faculty, who expected them to perform at the same level as native speakers. While there were no problems with the students' knowledge of MBA concepts, there were, however, problems with the language aspect of academic tasks they needed to be able to perform, such as giving oral presentations and writing reports and case studies. In order to improve the language skills of international graduate students enrolled in this program, the adjunct course Professional Writing for Business Administration (PWBA) was developed as the result of collaboration between the College of Business and the Scholarly Writing Program (SWP), a part of the linguistics program.

The content of the course came from first-year MBA curriculum which included such concepts as accounting, finance, operations, organizational behavior, and marketing.

The design of the course emphasizes a variety of skills, including analyzing written and oral information; composing, revising and redrafting reports; and presenting findings to peers. The course is taught by doctoral candidates in linguistics. Students receive three hours of graduate credit which can be applied towards their MBA degree (McGarry, 1998). The outcome of this program was not reported.

George Fox University in Newberg, Oregon.

The adjunct model at George Fox University, a part of the English Language Institute, consists of undergraduate students from a variety of language backgrounds (Iancu, 1997). The program was implemented for two reasons. The first reason was to offer a different context for learning English in attempt to improve the morale of the students. The second reason was to try to help in integration and transitioning processes that occur upon entrance into university life and also in increasing motivation levels among the students (Iancu, 1997).

This particular model consists of two content courses, a geography course and a history course (Iancu, 1997). One is offered in the fall and the other is offered in the spring. The content courses are paired with reading, writing and grammar, listening and note-taking classes. The program also includes a speech class. However, this class is not based on the content course, but rather on general topics. The adjunct listening and note-taking and reading classes are taught by two different ESL instructors, while the writing and speech courses are taught by a third instructor. The listening and note-taking instructors attend the lectures and are responsible for communicating information from the content class to the other instructors. Another component to the adjunct class is the inclusion of a

content tutor who meets with the students for three hours per week to discuss key issues that are covered in the lectures and readings (Iancu, 1997).

Although no statistical outcomes were reported in the description of this model recounted by Iancu (1997), several benefits were discussed. Iancu (1997) states that implementation of the adjunct model increased the motivation of ESL students; helped ESL students "feel more a part of college life" and develop relationships with native English speakers; "ease the transition between ESL status and regular student status" by giving them a preview of what they will face as regular college students (p. 150). Additionally, it "enhanced mutual understanding, appreciation and respect" between content and ESL instructors (p. 150).

Macalester College.

The adjunct program at Macalester College enrolls students from many different countries intending to pursue many different majors (Guyer & Peterson, 1988). For many students, enrollment in the adjunct course is their first encounter with an academic course taught in English. The students place into this adjunct course when they have either completed advanced ESL courses, (e.g., Advanced Composition and Critical Reading), or receive scores on the college's ESL placement test that indicate they no longer require ESL courses at the college but still need help with language skills (Guyer & Peterson, 1988).

The adjunct course at Macalester College is an ESL language and study skills course linked with a content course, Human Geography (Guyer & Peterson, 1988). In this particular model, the ESL teacher attends the content course lectures. Following the lecture, the ESL teacher meets with the ESL students for work in listening comprehension,

vocabulary development, critical reading, note-taking, library work, writing practice, and class discussion (Guyer & Peterson, 1988).

Guyer and Peterson (1988) reported positive outcomes resulting from the implementation of the adjunct program at Macalester College. First, academic content course professors indicated that it dramatically improved the retention rate of ESL students in content courses. Second, in a test comparing the performance of native English speakers, non-native English speakers who had no "language handicap" and did not attend the adjunct course, and non-native English speakers who did attend the adjunct course indicated that the non-native English speakers who attended the adjunct course were able to pass the non-native speaker group "with superior language proficiency and in some semesters to approach the average score for native speakers" (p. 104).

Gap

The literature review above on the adjunct model of language instruction brings out two key observations. First, this particular content-based instructional model appears to be one of the best methods available to transition matriculated ESL students into academic environments of colleges and universities. Second, although there are already several examples of adjunct models in place at different colleges and universities, no one example is the same; each example has been adapted to a particular university as well as to the needs of the students. In turn two conclusions follow forming the research gap of this thesis. First, if the adjunct model of language instruction is a better way to help matriculated ESL students transition into the university academic environment, then it should be implemented within the EAP program at IUPUI. Second, doing so requires

research and analysis of both the needs of ESL students at IUPUI as well as the context in which it will be implemented.

Goal

In light of this, the goal of this thesis is to propose an adjunct EAP course for IUPUI by taking into account guidelines found in the literature as well as the specific needs of ESL students at IUPUI.

Chapter 3: Designing and Implementing an Adjunct Program

Because the adjunct model involves extensive collaboration with other academic disciplines, it is subject to an array of problems and concerns that do not normally exist in other language instructional models. As such, the adjunct model requires extensive planning in order for it to successfully accomplish its purpose (Babbitt & Mlynarczyk, 2000). From the literature on adjunct models (Snow & Brinton, 1988a; Guyer & Peterson, 1988; Iancu, 1997; Babbitt & Mlynarcyk, 2000; Andrade & Makaafi, 2001), there are several important factors that should be considered in the design and planning process. Because of this, the purpose of the following section is to address these considerations in an attempt to ease the process of implementation with respect to any given university context.

Determining Purpose

According to Babbitt and Mlynarczyk (2000), the first step in planning a content-based ESL program is to define the overall purpose of the program. In designing a program

or course, there is an assumption that "there is a gap to be bridged between a current state and a desired one, or progress to be made toward a desired goal, or a change to be made" (Graves, 2000, p. 101). In an adjunct model, the overall desired purpose is to effectively transition matriculated students into university academic courses, which is mainly accomplished through the students' learning of academic English skills necessary to be successful in academic courses (Babbitt & Mlynarczyk, 2000). However, it is evident from the previous discussion of the different adjunct models implemented in different colleges and universities that each adjunct program has been tailored to fit the specific academic needs of a particular group of people in a particular context. Andrade and Makaafi (2001) echo this noting that "adjunct courses can take on many configurations, depending on the needs of the students and the objectives of the ESL program" (Andrade & Makaafi, 2001, p. 37). Determining these needs and how they will be met, and defining the context in which these needs are present is crucial in establishing the purpose and parameters of the adjunct course.

Conducting a Needs Analysis

In order to determine the purpose of the adjunct program a needs analysis or assessment needs to be conducted. This is of primary importance in the initial stages of program design (Babbitt & Mlynarczyk, 2000). Needs assessment, as defined by Graves (2000), is "a systematic and ongoing process of gathering information about students' needs and preferences, interpreting the information, and then making course decisions based on the interpretation in order to meet the needs" (p. 98). The rationale behind this is "that by identifying elements of students' target English situations and using them as the

basis of EAP/ESP instruction, teachers will be able to provide students with the specific

language they need to succeed in their courses and future careers" (Benesch, 1996, p. 723).

Broadly speaking, the literature on the needs analysis for ESL students suggests

that there are certain academic needs that are common to all ESL students in order for them

to be successful in their academic endeavors (Babbitt & Mlynarczyk, 2000). These needs

include improving English language skills, test-taking skills, understanding lectures, and

taking notes (Babbitt & Mlynarczyk, 2000). However, simply knowing these needs is not

enough to tailor any course in such a way that it meets the specific needs of EAP students

in a given context. Needs vary according to each specific situation (Dudley-Evans & St.

John, 1998). Because of this, the analysis should take into account such integral factors as

the backgrounds and goals of the students; the nature of course assignments; "collecting

and classifying assignments; observing students in naturalistic settings, such as lecture

classes, and noting the linguistic and behavior demands; or combining these techniques to

obtain a description of assignments, discourse, and classroom behavior" (Benesch, 1996, p.

723). Obtaining this information is crucial in order to get a more accurate picture of the

particular needs that ESL students face within a specific context. This process leads to a

more focused course (Dudley-Evans & St. John, 1998).

Dudley-Evans and St. John (1998) note that in conducting a needs analysis, it is

important to understand what is meant by "needs" as there are a number of different terms

used to describe different needs that exist. There are objective and perceived needs, which

are needs that originate from facts. There are subjective and felt needs which come from

"insiders and correspond to cognitive and affective factors" (Dudley-Evans & St. John,

1998, p. 123). There are product-oriented needs, which are determined from knowing what

the learner needs to know. There are process-oriented needs which are determined from the learning situation. Together, all of the needs should be identified in order to determine the scope of the projected course.

These needs can be studied by four different approaches (Dudley-Evans & St. John, 1998). The first is the target situation analysis, which is an attempt to discover what the learner needs to be able to do in a particular situation by examining the objective and perceived needs. The learner situation analysis which is comprised of discovering the felt or subjective needs is the second approach. Third is the present situation analysis, which is a study of what the students can and cannot do. Additionally, a study of the environment in which the course is to take place is also useful (West, 1997; Dudley-Evans & St. John, 1998).

In an EAP situation, the needs analysis should ideally be the first step in course design. In most cases, a needs analysis can be carried out far in advance of the onset of the course, especially if the course is repeated and has a large number of students (Dudley-Evans & St. John, 1998). Another possibility is to carry out a needs analysis during the course in response to the changing perceptions of both the students and instructors (West, 1994).

Securing Administrative Support

As adjunct programs require extended interdisciplinary interaction, it is necessary to enlist support from faculty and administrators outside the ESL program (Andrade & Makaafi, 2001). Babbitt and Mlyarczyk (2001) advise doing this early on in the planning process. Garnering strong support from administrators may result in other departments being more willing to assist in the adjunct program.

One way to secure the support of administrators, as suggested by Andrade and Makaafi (2001), is to implement a pilot adjunct course. In their experience, the implementation of a pilot adjunct course was so successful that administrators took notice and encouraged other departments to participate in the project, leading to a more permanent adjunct course program.

Babbitt and Mlynarczyk (2000) state that once support is secured, effective communication with administrators is crucial to the longevity of adjunct programs. Effective communication includes familiarizing administrators with "day to day operations by inviting them to visit classes, come along on field trips, or speak at faculty development workshops" (Babbitt & Mlynarczyk, 2000, p. 29). Additionally, they note that it is helpful to continue communication by sending written reports of the activities of the program.

Roles

Adjunct Coordinator.

The role of the adjunct coordinator is very important because of the high amount of coordination involved in implementing the adjunct program (Babbitt & Mlynarczyk, 2001). The coordinator is responsible for maintaining strong communication between all parties involved in the program. Other responsibilities may include implementing curricular philosophy, budgeting, hiring instructors, selecting textbooks, scheduling both class times and rooms, and overseeing evaluation of students, instructors and the program (Brinton, 1997).

Instructors.

An adjunct program can only go so far if it is not effectively implemented in the classroom. For this reason, selecting the right content area instructors to carry out the

implementation of the program is crucial, as the success of the adjunct program is contingent on the "commitment and expertise of participating faculty" (Babbitt & Mlynarczyk, 2001, p. 31). As an adjunct situation involves both a content course and an ESL course, faculty selection involves choosing instructors from both disciplines.

In the selection of each instructor, there are several characteristics that should be considered. More broadly, Babbitt and Mlynarczyk (2001) note that is important for both ESL and content instructors to genuinely enjoy working with others. This is important because of the high collaboration factor involved in the adjunct situation.

Selecting the content course instructor involves consideration of a number of factors. First, Andrade and Makaafi (2001) suggest choosing an instructor who has a solid teaching reputation, is willing to participate in the program, has experience or interest in ESL students and has had prior experience in second language learning. Additionally, Babbitt and Mlynarczyk (2000) suggest selecting an instructor who is sensitive to the needs of ESL students. Departmental chairs may be helpful in recommending content area instructors that fit all or some of these qualifications (Babbitt & Mlynarczyk, 2000). Although finding content instructors with some or all of these qualities is ideal, on a pragmatic level, Andrade and Makaafi (2001) note that the final decision on instructor choice may simply come down to a matter of choosing "between an ideal time and an ideal content instructor, especially if there are a limited number of sections available" (p. 35).

Choosing adjunct instructors also comes with a list of qualifications that should be considered. Flexibility is an advantageous attribute for the adjunct instructor to possess as what goes on in the content class usually sets the agenda for the adjunct class (Andrade & Makaafi, 2001). This is more prevalent in adjunct situations where the ESL instructor is not

able to plan a syllabus before the onset of the course. Because of this, the adjunct ESL instructor must be flexible enough to be able to make last minute changes in lesson plans (Andrade & Makaafi, 2001). Additionally, the adjunct ESL teacher should also be "an experienced language teacher who can identify students' needs and devise learning tasks and materials accordingly" (Andrade & Makaafi, 2001, p. 36).

Content Tutor.

It may also be beneficial to the adjunct program to consider selecting content tutors to assist ESL students with the material covered in the content course (Iancu, 1997). The purpose behind this is to eliminate the tendency of ESL students to depend on the adjunct instructor to help them understand the content material. The tutor should meet with the students a few hours a week to discuss the content material. This frees up the adjunct instructor to focus directly on helping the students develop language skills (Iancu, 1997).

Determining the Roles of the Content Area Instructor and ESL Instructor

In the process of implementing the adjunct course, the roles of each instructor, content and adjunct alike, must be determined (Andrade & Makaafi, 2001). In some adjunct situations, the content instructor is not asked to conduct their class any differently than what is normal (Andrade & Makaafi, 2001). However, it is not uncommon for content area instructors to want to learn about different ways to teach ESL students. In these cases, where there is an expressed interest on the part of the content area instructor, ESL instructors can share different methods for teaching ESL students, such as ways of making content more comprehensible and techniques for cultivating language acquisition (Andrade & Makaafi, 2001; Gee, 1989). Content area instructors may also be required to help in the coordination of instructional materials and assignments (Andrade & Makaafi, 2001).

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Another issue to consider in determining instructor roles is whether the adjunct instructor should continue attending the content area course once he/she is familiar with the teacher, text and the lectures. Andrade and Makaafi (2001) found that this is best determined by the adjunct instructors. However, they also note that when adjunct instructors continue attending the content course, even after becoming familiar with it, they feel that it helps them more effectively assist ESL students with specific needs. Another option for adjunct instructors who are already familiar with the content course would be to obtain weekly updates about the content course from the content instructor (Andrade & Makaafi, 2001).

Determining the Course Loads of Adjunct Instructors

Determining the course loads of the adjunct instructors is a necessary element in the implementation process. The importance of this stems from the differences in teaching an adjunct ESL course as opposed to teaching an independent ESL course, in terms of time allotted for preparation (Andrade & Makaafi, 2001). In the adjunct model, the adjunct instructor usually spends a greater amount of time in preparation for an adjunct course than for an independent ESL course (Iancu, 1997). This is because preparation is more complex, involving the adjunct instructor's attendance in the content course, meetings with content instructors and the development of instructional materials for the course (Andrade & Makaafi, 2001).

Selecting the Content Course(s)

One of the most important aspects in the design and implementation of the adjunct program is the selection of the content course. In this step, it is important to keep the needs of the students in mind (Babbitt & Mlynarczyk, 2001). From the existing literature on

adjunct models, there are several issues to take into consideration in choosing the best course to fit the needs of the students in the adjunct situation.

First, Andrade and Makaafi (2001) suggest choosing content courses that typically have high success rates for ESL students. Success rates can be gathered through historical information of past classes as well as input from content instructors (Andrade & Makaafi, 2001). Classes that typically generate high success rates are ones that meet the general education breadth requirements. General education classes are of value to ESL students who are pursuing degree studies as they count toward degree completion (Iancu, 1997). By taking these courses, students feel like they are making progress toward finishing their degree.

Course load can also have an effect on the overall content course success rate (Brinton, 1997). For example, in the Freshman Summer Program at UCLA, the course reading load for the American History course was quite substantial, consisting of six books comprised of a novel, several autobiographies and several academic textbooks. This significant amount of reading resulted in the ESL students feeling overwhelmed and they consequently abandoned their attempts to keep up (Brinton, 1997).

Another option to consider when choosing a content course is using one that is required in the major area of study (not a general education course). This is only a possibility if the majority of ESL students have the same major (Babbitt & Mlynarczyk, 2001), or if the adjunct class was created specifically for students of a particular major, such as the adjunct program at the University of Florida discussed in Chapter Two (McGarry, 1998).

Also important in the consideration of content course options is the "match between adjunct course objectives and content course requirements" (Andrade & Makaafi, 2001, p. 35). There are several steps involved in this consideration. First, the primary goal of the adjunct course should be taken into account. That is, is the objective of the course to teach language or content or to focus on both? If the primary goal of the adjunct course is to teach language skills, then it is necessary to determine whether the course will focus on only one particular skill or all skills. After this is decided, a content course whose course design fits with the primary goal of the adjunct should be selected.

By way of example, assuming the primary goal of the adjunct course is to focus on language skills, more particularly on reading skills, it would be desirable to select a content course which requires a substantial amount of reading, such as a history course (Andrade & Makaafi, 2001). Mismatching the purpose of the adjunct course and the content course requirements could result in resistance from ESL students in the participation in the adjunct course (Andrade & Makaafi, 2001). This is due largely in part to ESL students' view that activities which do not seem to be leading to the overall goal of passing the content class are extra and unimportant (Iancu, 1997).

The enrollment capacity of content courses is another important consideration in content course selection (Andrade & Makaafi, 2001). Content courses should only contain a small percentage of ESL students. Andrade and Makaafi (2001) suggest that ESL student enrollment should not exceed 25% of the class. Exceeding this percentage can "alter the class dynamic dramatically, thereby defeating one of the adjunct model's main objectives, specifically, to give ESL students an authentic content course experience" (Andrade & Makaafi, 2001, p. 35). Additionally, content area instructors sometimes view a large

percentage of ESL students as "an impediment to classroom interaction" (Iancu, 1997, p. 153). Conversely, content area instructors can also view a smaller number of ESL students positively, as "a source of enrichment through diversity" (Iancu, 1997, p. 153).

It may also be necessary to get permission from college administrators to lower the number of students allowed to enroll in the content classes (Babbitt & Mlynarczyk, 2001). This is because smaller class sizes are often viewed as an important factor in effectively teaching ESL students (Babbitt & Mlynarczyk, 2001). Small class sizes allow instructors to give more specific and timely feedback on assignments (Iancu, 1997).

Table 5 below summarizes the factors to consider in selecting an academic content course.

Table 5

Content Course Selection Process
_____

Factors to Consider
_____

Content courses that have a high ESL success rate, such as general education courses

Content courses that are required in a major area of study but are not general education courses

Work load of the content course

The match between content course requirements and adjunct course objectives

Enrollment capacity of the course
_____

Defining how the paired courses fit into the ESL program

Another stage in adjunct program planning and preparation is deciding how the adjunct ESL course would fit into the ESL program (Iancu, 1997). That is, what ESL class should be linked to the content course? Should it replace a current ESL class or

should it be taken in addition to other required classes. Should the adjunct ESL course focus on one skill or two or more? Should there be several adjunct classes connected to a content class or just one?

An example of defining how the paired courses fit into the ESL program is provided by Iancu (1997) in her description of George Fox University. At this university, the adjunct program began by replacing its reading, listening and note-taking courses with adjunct courses linked to a content course (history or sociology). Eventually, as the program developed, the independent writing and grammar ESL classes were linked to content courses as well. The speech course in the ESL program was the last course to be linked, although only a few of the assignments in this course were linked to assignments in the content course (Iancu, 1997).

In addition, how closely linked assignments are to the content course should also be considered. In some cases, all assignments in the adjunct class are directly related to assignments in the content course, while in other cases, not all of the assignments are. For example, the adjunct writing course at George Fox University linked most of its assignments to the content course; however, the instructors decided to add to the course requirements a research paper that was not included in the requirements for the history course (Iancu, 1997).

Establishing and English Proficiency Range

Iancu (1997) notes one of the main tasks involved in adjunct program implementation is establishing an English proficiency range for those participating in the adjunct course. In the adjunct program at George Fox University, they noted that the lower the English proficiency of the students, the more challenging the content course material

was for them. Consequently, the students tended to rely on the ESL instructor for help in understanding the course content. According to Iancu (1997), the students in the adjunct course should have a TOEFL score of at least 450, in order to "give them adequate instruction and support without compromising the integrity of the ESL faculty" (p. 157). Anything lower than this score could result in the ESL class becoming a tutoring service.

Connecting with Content Area Instructors

Program administrators should make the initial contacts with content area instructors (Andrade & Makaafi, 2001). In this step, it is helpful if the administrator explains the purpose of the adjunct model and discusses the role delineation of both the ESL adjunct instructor and the content area instructor. Stressing the benefits of the adjunct model in terms of what each party gains from the adjunct situation is also advisable. Additionally, it is also necessary to emphasize that the adjunct instructor's job is not to critique the content area instructor's methods, but to identify and help with the ESL student's language needs (Andrade & Makaafi, 2001).

Scheduling

Scheduling is a necessary step in program implementation. According to Babbitt and Mlynarczyk (2000), this should be planned one semester to one year ahead of the implementation of the program because of the complexity of this task. In the initial stages of this process, the director should first find out the expected number of students enrolled as well as the number of sections in each level that should be created. The director must then coordinate the linked classes in such a way that meets the scheduling needs of student and faculty as well as room requirements.

For sections that have already been put into operation, the director should also meet with the other department chairs involved in the adjunct model program in order to continue involving the same instructor teams. At times, however, changes in staffing may become inevitable as people leave the program for various reasons (Babbitt & Mlynarczyk, 2000). Occasionally, it may be necessary to drop a part of the program that is not working as planned. This may happen even if attempts have been made to correct the problem (Babbitt & Mlynarczyk, 2000).

It is important to be aware of the possibility of last-minute scheduling changes that sometimes occur because of "new-student placement." Fluctuation in enrollment can potentially complicate the linking of content courses and ESL courses (Andrade & Makaafi, 2001). Problems can surface when the content course is cancelled or the time slot for instructors is changed. Administrators may need to make last-minute changes in what content course they will link to the adjunct course. Andrade and Makaafi (2001) suggest creating an independent ESL course that is not linked to a content course in case it is too late to reserve seats for ESL students the alternative content course.

Content Course Seat Reservation

In reserving seats in the content area course for ESL students, there are several things to keep in mind. First, in enrolling in content courses, ESL students need to be kept in the same section (Andrade & Makaafi, 2001). Andrade and Makaafi (2001) found this helpful in their adjunct program, as in its earliest stages they noticed that the content classes were filling up before new ESL students could enroll. Reserving seats guaranteed that there would be enough slots available for ESL students, thus eliminating subsequent

problems that could arise from this issue (e.g., making requests to content area instructors to admit students despite the class being already filled to its capacity).

Classroom Location

The location of the classroom is also something to consider in setting up an adjunct program (Babbitt & Mlynarczyk, 2000). The location of the classroom can have an effect on how students view themselves in comparison to non-ESL students. Rooms isolated from the rest of the college or university can create a feeling of being separated or isolated. If part of the aim of the adjunct model is to integrate students into mainstream college life, then the location of the classrooms should reflect this. Anything otherwise may defeat this purpose (Babbitt & Mlynarczyk, 2001).

Offering Curriculum Development Workshops

According to Babbitt and Mlynarczyk (2000), offering curriculum development workshops for the faculty, tutors and counselors involved in the adjunct is a useful step in implementation of the program. Workshops such as these familiarize those involved with the rationale for linking content and ESL classes. It also acquaints them with effective pedagogical techniques. Participants are asked to do background reading on the "goals and pedagogical assumptions of the program" (Babbitt & Mlynarczyk, 2000, p. 32).

Evaluation

Babbitt and Mlynarczyk (2001) state that "evaluation of a content-based program is necessary to its survival" (p. 42). They also state that an adjunct program is more likely to succeed if "quantitative and qualitative evaluation measures are initiated and positive academic results can be documented" (p. 42). According to Brinton et al. (1989), evaluative information should be obtained from faculty, tutors, students, tutoring center

directors, counselors, department chairs and administrators and should be gathered both throughout the semester and at the end of the semester. Information that should be obtained should concentrate on the following areas: the achievement of students in both language and content; the attitudes of students toward the program; the language use of students; cost benefit; organization and coordination; the effectiveness of the instructors; the quality of the curriculum and materials used; and the roles of administrators and instructors.

Starting Out Small

Babbitt and Mlynarczyk (2001) suggest starting out small in the early stages of implementing an adjunct program. As problems are sure to surface, they will be more manageable if there are a fewer number of people involved. The program can then be expanded upon resolution of these problems (Babbitt & Mlynarczyk, 2001).

This is exemplified in the adjunct model at George Fox University. At this university, the program initially began by linking one ESL course to one content course. Problems surfaced in the first semester of linking courses, but were cleared up by addressing problem areas in subsequent semesters. Eventually, as problems were resolved, the adjunct program expanded to include all of the courses in the ESL program (Iancu, 1997).

As summarized in Table 6 (see next page), designing and implementing an adjunct program involves several different steps. Although the above guidelines are not specific to any one program, they provide the framework needed to start an adjunct program within a particular context.

Table 6

_____

Steps
_____

Determine the purpose of the adjunct program

Conduct a needs analysis

Secure administrative support

Identify coordinator

Identify instructors

Select content tutor

Determine the roles of the content area instructor and ESL instructor

Determine adjunct instructor course loads

Select a content course

Define how the paired courses fit into the ESL program

Establish English proficiency range

Connect with content area instructors

Schedule courses

Reserve seats in content course

Consider classroom location

Offer curriculum development workshops

Conduct an evaluation
_____

Summary

   The literature reviewed above in Chapters One, Two, and Three highlight a number

of important points concerning the adjunct model of language instruction. First is that

matriculated ESL students have a wide array of academic and language needs which cause

them to feel unprepared for the challenges of academic content courses. Second, ESL

students in this position need a language instruction model that will build the language and

academic skills they need in order to make the full transition into the university academic environment. Third, the adjunct model of language instruction, which integrates language and content focusing on both content material and academic language skills, is offered as the best setup for matriculated ESL students in helping them make this transition. Fourth, there are a number of examples of adjunct models that have been implemented in the literature. Each one has contributed much by way of guidelines in implementing an adjunct model within a specific context.

Parallels can be drawn between the situation of matriculated ESL students characterized in the literature and those of matriculated ESL students at IUPUI. Because the literature points to the adjunct model as an effective option in transitioning matriculated ESL students by building academic and language skills while focusing on content mastery, implementing such a setup within the IUPUI context would be of benefit to both the EAP program and its students.

While the literature has reported the adjunct model's effectiveness in transitioning students, it also has revealed a number of problems that are associated with it. Although these are a cause for hesitation, a number of them can potentially be avoided or resolved through careful attention to these issues and their varied responses outlined in the literature. Further, no language instruction approach is without its problems and implementation of any model requires a great deal of adapting and fine-tuning in order to meet the needs of all involved.

The fourth chapter outlines a proposal for a pilot adjunct model to be implemented within the EAP program at IUPUI. This proposal takes into consideration all of the issues

and guidelines put forth by the literature and attempts to apply them in a manner that

creates a workable model for this campus.

Chapter 4: Guidelines for Implementing an Adjunct Model at IUPUI

IUPUI is an urban research and health sciences university located in downtown Indianapolis, Indiana (IUPUI Factbook, 2008). The university, as its name suggests, is a partnership between Indiana University and Purdue University and offers degree programs from both institutions. It is the home campus for Indiana University's programs in medicine, law, dentistry, nursing, health and rehabilitation science and social work. Of its achievements are its top fifteen ranking in the country for the number of first professional degrees it grants as well as its top seven ranking for the number of health-related degrees it confers. Also notable is the School of Engineering and Technology which has the seventh largest enrollment in the country and ranks second in the number of bachelor degrees it awards.

IUPUI is the third largest campus in the state of Indiana with 22 schools offering over 200 academic programs. It has a student body consisting of more than 29,000 undergraduate, graduate and professional students of which over a thousand are international students representing over 100 countries (IUPUI Factbook, 2008).

EAP Program

As IUPUI attracts over a thousand international students, it is necessary to offer academic English support in order to assist them in their academic pursuits. For this reason, the EAP program is in place at IUPUI (EAP Program Courses, 2008). This program is a part of the English department and offers academic language support to both undergraduate and graduate non-native English speaking students. The program offers courses focusing on a range of academic skills including reading, listening, speaking, composition and grammar skills and are as follows: ENG G009 Intermediate Aural/Oral Skills, ENG G010

ESL for Academic Purposes I, ENG G011 ESL for Academic Purposes II, ENG G012 Listening and Speaking for Academic Purposes, ENG G015 Pronunciation Skills, ENG W001 Fundamentals of English, and ENG W131 (ESL) Elementary Composition I. These courses fall into three different levels within the EAP program. Students who are in the first level have limited English proficiency and are restricted to enrollment in EAP courses, physical education, one mathematics course or one science course (see Appendix A). The courses that are listed under level I are ENG G009, ENG G010 and ENG G015. Level II is more advanced and allows students to take up to three EAP classes along with two content classes that have moderate reading and/or writing requirements. The courses at this level include ENG G011, ENG G012, ENG W001, and ENG G015. Level III is the highest level and consists of ENG W131 and ENG G015. At this level, EAP students are able to handle a full academic course load. These courses are taken concurrently with certain content courses recommended by the Academic Advising Guide for EAP students (see Appendix A). Table 7 (see next page) provides a summary of the courses and levels offered by the EAP program.

Additionally, the EAP program offers courses for graduate students (EAP Program Courses, 2008). These courses are ENG G013, which is an academic writing course focusing on research paper professional document writing, and ENG G020, which focuses on basic teaching strategies and oral language skills that are needed in order to present academic material. ESL students are placed into these courses from the results of the EAP Placement test which they are required to take upon entry into IUPUI (Professor Upton, personal communication, May 10, 2008). The EAP placement test measures proficiency in areas of grammar, reading and listening and writing. These are taken

Table 7

EAP Courses offered by IUPUI's EAP Program

Level	Course	Course Focus
I	ENG G009 Intermediate Aural/Oral Skills	Academic listening and speaking
I	ENG G010 ESL for Academic Purposes I	Academic reading, writing and grammar
II	ENG G011 ESL for Academic Purposes II	Academic reading and grammar
II	ENG G012 Listening and Speaking for Academic Purposes	Academic listening and speaking
II	ENG W001 Fundamentals of English	Academic writing
III	ENG W131 (ESL) Elementary Composition	Academic writing
I, II, III	ENG G015 Pronunciation Skills	Pronunciation
Graduate	ENG G013 Academic Writing for Graduate Students	Writing research papers and professional documents
Graduate	ENG G020 Communication Skills for Graduate Students and ITAs	Basic teaching strategies and oral language skills needed to present academic material

Note. Adapted from "English for Academic Purposes Program Courses," retrieved February 20, 2008, from Indiana University-Purdue University English for Academic Purposes website: http://english.iupui.edu/esl/esl.html

alongside academic content classes that count toward their major area of study. While taken concurrently, the courses are not linked as is the case with an adjunct model course structure. However, the intent is that students will use the academic English skills they learn in the EAP courses in their academic content courses.

The EAP program at IUPUI provides an excellent context for the implementation of an adjunct model. ESL students are matriculated which allows them to take both content courses and EAP courses simultaneously. Additionally, the EAP program is situated in a setting that offers a wide array of academic content courses which could potentially be used

to link with EAP courses. Similarly, the EAP program offers a number of courses that could potentially be linked with an academic content course. As the makeup of an adjunct model consists of both an academic content course and an ESL course, implementing such a model requires a setting in which involvement of the two can take place.

Another feature that the EAP program has which makes it conducive for adjunct model programs is that the proficiency level of its students is high enough to handle, with assistance, the content material of the academic content course. This is important as students with lower proficiency levels are usually unable to handle the "linguistic and conceptual complexity" of academic content courses (Brinton et al., 1989, p. 20). Further, the EAP program has a number of qualified staff who are able to successfully coordinate and teach in an adjunct program and the support of key administrators, both of which are necessary for adjunct model implementation. A more detailed discussion regarding administrative support and instructors will be addressed below.

Adjunct Implementation at IUPUI

Babbitt and Mlynarczyk (2001) suggest starting out small in the initial stages of an adjunct program. As such, what is being proposed is a pilot adjunct course, which involves only one academic content course and one EAP course. If it is determined to be successful, the program can be expanded upon to add more courses. However, in the initial stages, involving only one of each course makes it easier to deal with problems that may surface.

In designing a pilot adjunct program for the EAP program, careful attention was given to the guidelines summarized in Table 6 found in Chapter Three as these guidelines provided the framework for the proposed adjunct model. This section will provide a

discussion of the how these guidelines[4] were applied to construct an adjunct model tailored

specifically for this setting.

Needs Analysis

      The needs analysis for the IUPUI context was important in determining the purpose

of the adjunct course. As shown in Table 8 below, the needs were determined from three

sources: the literature, the EAP director and a general education content course (ENG

G104) instructor. The needs of the students from the learner situation, present situation and

target situation are all taken into account.

Table 8

Needs Analysis

_____

Source	Method	Analysis	Results
Literature	Survey	Learner situation	Academic skills ESL students feel they need for success in content courses are reading, listening and note-taking skills.
EAP Director	Interview	Present situation/ Target situation	ESL students perceive a disconnect between academic English skills learned in EAP classes and the tasks required of them in content courses.
ENG G104 Instructor	Interview	Target situation	Academic skills needed to for success in ENG G104 are reading and writing skills.

_____

    Learner Situation Analysis.

      The learner situation examines the subjective and felt needs which are "derived

from insiders and correspond to cognitive and affective factors" (Dudley-Evans & St. John,

1998, p. 123) The findings from the literature review found in Chapter One reveal that ESL

students have specific academic English skills they feel they need in order to be successful

_____

[4] The order in which these guidelines appear in Table 6 vary from the order in which they are addressed in this chapter

in their classes. The results of studies carried out by Smoke (1988) and Christison and Krahnke (1986) are specifically helpful in determining these needs.

Smoke (1988) indicated that although ESL classes helped them with English skills, they did not feel the classes helped them in preparing for college courses. ESL students felt weaknesses in such areas as reading and studying textbooks, writing research papers and taking notes. Christison and Krahnke's (1986) study resulted in a ranking of academic English skills that ESL students thought they needed in content courses, listing them from most important to least important as listening, reading, speaking and writing.

If the results of these studies can be representative of other colleges and universities across the U.S., then a reasonable conclusion that can be made is that ESL students at IUPUI also feel that the need to better develop their academic reading, listening and note-taking skills. While EAP skills-focused courses do address these academic skills, linking an EAP course to an academic course that the students have to take would definitely help them better learn how to apply these language skills to an academic context.

Present Situation Analysis/Target Situation Analysis.

According to the literature, ESL students need an array of academic language skills in areas such as reading, writing, listening and speaking in order to pass their content area courses. Many of the content area courses they will be required to take, such as ENG 104 Language Awareness, require proficiency in such skills as academic reading and writing. ESL students enrolled in the EAP program are lacking in all or some of these academic skills and are not completely ready to take a full academic course load until these skills are developed.

Although the courses offered by the EAP program do help ESL students build the academic English skills they need, IUPUI EAP program director Dr. Thomas A. Upton, thinks there needs to be a better bridge between what is taught in these classes and what students are required to do (personal communication, February 14, 2008). Professor Upton notes that students sometimes feel that there is a disconnect between what they are learning in EAP courses and the skills needed in content courses. What they need is a better option that will bridge this gap so they can better develop the academic skills in which they may be lacking in. His comments on student needs and program strengths and goals are described more fully below.

Defining how the paired courses fit into the ESL program

One of the guidelines stated in Chapter Three is defining how the paired courses fit into the ESL program. According to Professor Upton (personal communication, February 19, 2008), there are two options available in determining how the adjunct course fits into the EAP program at IUPUI. The first would be to create a new EAP course to link the content course with, and the second would be to use an existing EAP course. The first option presents two problems. First, it would entail designing new curriculum, and second, the creation of the new course would have to be approved, which is a lengthy process.

The problems created by the first option makes the second option, using an existing course, seem the more feasible option of the two choices. However, in using an existing course, it must be determined how this class should fit with current requirements. The main question is whether this course should be taken in place of current EAP requirements or should it be offered as an additional course within the EAP program. Professor Upton's conclusion was that the best possible option is to use an existing course.

Selecting the EAP Course

Having determined that the best possible option is to use an existing course, the next question is what specific EAP course is the best choice to link to a content course. As previously stated, there are several EAP courses offered by the EAP program: ENG G009/G010[5], ENG G011, ENG G012, ENG G015, ENG W001 & ENG W131, all of which are geared toward different proficiency levels. The answer to which one is most suitable to link with a content course lies in the consideration of all the levels, courses and needs of ESL students.

The needs of the EAP students say a lot about what EAP class would be the most helpful to them in linking it to a content course. Ostler (1980) and Johns (1981) revealed that ESL students place high importance on needs such as reading, listening and note-taking for success in academic classes. With this in mind, it is necessary to consider the existing EAP courses that focus on one or some of these skills. This limits the choices to ENG G009/G010, Level I courses, ENG G011, a Level II reading and grammar course, and ENG G012, also a Level II listening and speaking course.

Proficiency level plays a key part in narrowing down the choices. The literature in Chapter Three cited Iancu (1997) as cautioning against enrolling students in the adjunct course that are not at a high enough proficiency level. In doing so, students might potentially rely on the adjunct as a tutor course to learn the content, not to learn language skills. Adding additional support to this, Professor Upton (personal communication, February 19, 2008) stated that students attending ENG G009/G010 are not at a high enough level that the adjunct would be of much benefit to the students in that course.

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[5] ENG G009 and ENG G010 are taken together as one course.

Another reason why ENG G009/G010 would not be a viable choice for linking is that the students enrolled in this level are "generally restricted to taking only ESL, physical education, and one mathematics or computer science course" (EAP Program Courses, 2008). This leaves out the possibility of them taking a content course in the humanities or social science category, courses which are ideal for teaching language classes through content material. Additionally, according Professor Upton (personal communication, February 19, 2008), ENG G009/G010 does not always have a high enough enrollment to make it a good participant in an adjunct program.

This leaves ENG G012 and ENG G011 as choices which focus on the skills ESL students feel they need the most in an academic setting. In considering these two courses, it is important to take into account what types of skills are most important for success in the content courses they will take at this level. Students taking these courses are advised to take freshman-level content courses. Most of these courses come from the humanities and social sciences category. In these courses, there is a heavy emphasis on reading. ENG G012, however, focuses on listening and speaking skills. Pairing ENG G012 with a social science course mismatches the purposes and requirements of the classes. This is something that Andrade and Makaafi (2001) advise against as such an arrangement could potentially cause the adjunct course to be ineffective. Because of this, ENG G012 does not seem to be the best fit.

If the emphasis on reading in freshman level content courses is a qualification for choosing the right EAP course, then the logical choice would be a course that focuses on reading skills. Both ENG G011 and ENG G010, address academic reading skills. As ENG G010 has already been eliminated, ENG G011, a Level II reading and grammar course,

seems like the best fit, both because of the proficiency level of the students in the course and the focus of the course.

In taking a closer look at ENG G011, there are other qualities that make it a good choice. According to the EAP website, students admitted into Level II "generally take two EAP classes, but sometimes one or three, plus two freshman-level content courses" (EAP Program Courses, 2008). This makes it possible for students to take an ESL course concurrently with a content course. Also, it would be easy to match the purposes of both ENG G011 and the content course, as many freshman-level content courses require reading.

The remaining EAP courses for undergraduate students, ENG W001, ENG W131 and ENG G015 are not suitable to link with the content course for a variety of reasons. ENG W001, although it enrolls the same level students as ENG G011, would not be an ideal choice to link with content courses in the social sciences as these courses have more of a reading focus rather than a writing focus. Linking these two courses would mismatch the purposes of both the courses. Additionally, at this level, according to Professor Upton (personal communication, February, 19 2008), it is important to link an EAP course with a course that has more of a reading focus rather than writing focus because most general education classes have a stronger emphasis on reading. Also of note, the literature review in Chapter One indicated that writing skills were not as highly ranked as other skills among students and faculty as those most needed for academic success in content courses.

ENG W131, an elementary composition course listed under Level III of the EAP program, is also not a viable choice. Although, according the EAP program website, students at this level can take a full academic load, which would make it a good candidate

for linking with a content course, it is not an ideal choice to link with a course in the humanities or social sciences because of the risk of mismatching the purposes of these courses.

ENG G015, the only other EAP course left, is a pronunciation course, which does not rank high on the academic skills that students need to be successful in content courses.

In summary, there are several characteristics that are necessary for an EAP course to possess in choosing which one best fits the academic needs of the students. Table 9 (see next page) is a list of criteria that were used in determining what EAP course to link to the content course.

Selecting the Content Course

General education courses are a requirement common to all IUPUI degree programs, which make them good choices to link with EAP courses. Every major area of study has a list of approved general education courses that fulfill these general education course requirements. These courses fall under larger umbrella categories, such as social sciences and humanities from which students are required to choose a certain number of classes.

Table 9

EAP Course Selection
_____

Criteria for IUPUI
_____

Determine what level EAP course to use

Select a course that teaches skills which match the skills required in the content course

Select a course that can be taken concurrently with a social science or humanities course
_____

Each school on the IUPUI campus (e.g., Liberal Arts, Science) has a different set of general elective categories. Although there is some variance in these categories across schools, there is also similarity. In particular, most majors appear to have social science and the humanities general elective requirements (see Appendixes B and C). These two categories have several courses listed that students can use as general education electives. As such, it appears that there are several courses that, up front, look like good candidates to link the EAP course with. It is at this point that other factors should be taken into consideration in order to narrow down the choices.

The order in which EAP students can take certain classes is one such factor. For instance, although it appears that ENG W131 Elementary Composition I or COMM R110 Fundamentals in Speech Communication would make good candidates for linking because they are required general education courses for all majors, these would not be viable choices as EAP students can only take them after they finish ENG G011, the EAP course selected for the adjunct. This means that the content course choice should be one that students can take concurrently with ENG G011.

Other courses that are common general education requirements in the humanities and social sciences across degree programs, such as SOC R100 Introduction to Sociology, usually require a heavy reading load. On the outset, it appears that choosing an academic course with substantial reading requirements might make it a good choice, especially if the course is linked to an EAP course that focuses on reading. However, as previously noted in Chapter Three, students have a tendency to become overwhelmed and give up when the amount of reading is too much for them to keep up with (Brinton, 1997). Additionally, courses with heavy reading requirements, such as SOC R100, are not recommended on the

EAP Academic Advising guide (see Appendix A). What is needed, then, is an academic course that has a moderate reading load.

The Academic Advising Guide for EAP Students (see Appendix A) identifies classes that require either limited or moderate amounts of reading and writing skills. These classes are listed in Table 10 (see next page). As the reading and writing requirement for these classes are appropriate for ESL students with limited or moderate reading and writing skills, one of these courses would be an ideal choice for the content course.

Still, the question of which content course to link with the adjunct remains unanswered as Table 10 (see next page) lists quite a few classes from which to draw. In examining the courses listed in these tables, it is apparent that some of the courses, such as BUS K201 (The Computer in Business) or NURS B104 (Power Up: Strategies for Academic Success), are specific to certain degree programs. These are not good choices as they are not on all approved general education lists across majors. Eliminating these choices still leaves several courses which do appear on approved general elective lists and could be used as the content course.

Table 10

Courses appropriate for ESL students w/ limited or moderate reading & writing skills

Limited reading and writing	Moderate reading and writing
CIT E101	ANTH A104
ENGR 195	AST A100
Herron studio art courses	AST A105
Most HPER activity courses	BIOL N212

Learning Communities	BUS K201
Mathematics	BUS X100
MIL G101	CHEM C100
MUS E241	CHEM C101
MUS Z100	CIT 106
MUS M174	CSCI N100
Music performance courses	ECON E101
MUS M110	ENG G104
MUS "Z" classes except for Music for Film	Foreign Language
	GEOG G107
	HPER H160
	HPER activity courses
	PSY B104
	TCEM

Note. From the Academic Advising Guide for EAP students. Adapted with permission.

The last factor to be considered is the specific academic departments these courses fall under. Both Chapter Two and Chapter Three mentioned the importance of coordination between the two instructors of an adjunct model. Chapter Two cited coordination as a common problem in an adjunct situation. Chapter Three emphasized the importance of coordination between the two instructors in order for the adjunct model to survive. Further, Chapter Three addressed the problem of marginalization among ESL instructors. If these are major problems associated with the adjunct model, then linking the adjunct EAP course with a course in the same department where there is a possibility of the same instructor teaching both courses might be the best route to take in order to minimize these problems.

Using this as a selection criterion, it is necessary to consider what department might have an instructor with the qualification to teach both the EAP course and a content course.

As one component of the adjunct model has already been determined to be ENG G011, a course offered by the English department, then this department seems to be a logical starting point for finding a department with an instructor who might be qualified to teach an EAP course and a content course concurrently. To further make the case for using a content course from the English department is the department's offering of several courses that count toward general elective requirements across the majority of degree programs.

At this point, the content course choice is narrowed down to general elective courses specifically in the English department. Although the English department offers several general elective courses, the Academic Advising Guide for ESL students lists only one that is suitable for ESL students with limited or moderate reading and writing ability: ENG G104 Language Awareness.

ENG G104, according to the university website, is "a non-technical introduction to the study of linguistics" that "takes an interdisciplinary approach to language behavior. Particular attention is paid to cultural, social, and psychological aspects of language use. Topics vary and may include language origin, child language acquisition, gender and language, dialects, and slang, among others" (IUPUI Course Descriptions, 2008). There are many advantages in selecting this course as the content course for this adjunct model program. First, it is a course offered by the English department, allowing for the possibility of both this course (as the content course) and the adjunct EAP course to be taught by the same instructor. This setup nearly eliminates the need to address guideline listed in Table

6: determining the course loads of adjunct instructors. As noted in Chapter Three, in an adjunct model, the adjunct instructor usually spends more time in preparation for an adjunct course than an independent ESL course. This is largely due to the adjunct instructor's attendance in the content course, coordination meetings with content instructors and development of materials. In having only one instructor for both the content course and adjunct course, the issues surrounding the course load of the adjunct instructor may not be as significant. Questions of how often the adjunct instructor should attend the content class would not be relevant and lessons could quickly and easily be tailored to match what was done in the content course, if the need arises.

Further, ENG G104 is listed as an approved general education elective for many of the degree programs at IUPUI (see Appendixes B and C). ENG G104 also appears on the Academic Advising Guide for ESL Students under courses most appropriate for ESL students with moderate reading and writing skills. Additionally, the purposes and requirements of ENG G104 match well with those of ENG G011. That is, one of the focuses of G011 is academic reading, which is a skill that is frequently needed in ENG G104.

One last benefit in using this course as the academic content course is the subject material: language. This course focuses on a wide variety of topics regarding language, such as "nature of language, the history of English, the history of writing, language variation, language and gender, written and other modes of language, language and the media, language acquisition, language and thought" (Dr. Duerksen, personal communication, March 5, 2008). These are topics which could be useful to second language learners in developing an awareness of the uses of language within a culture.

One overt problem that is evident in looking at all the lists of required general education requirements across majors is that while ENG G104 appears on the majority of lists, it does not appear on every list (see Appendixes B and C). Obtaining approval for this course in the degree programs that do not currently list it as an approved general education elective will need to be looked into by the EAP program in order to make this is an option for as many EAP students as possible.

Increasing the enrollment of ENG G104 is another issue administrators may need to address. According to the university website the maximum amount of students allowed to enroll in ENG G104 is set at 35 (English Courses, 2008). In the spring of 2008, only nine students enrolled in this class. As previously stated in chapter three, Andrade and Makaafi (2001) suggest not allowing enrollment of ESL students exceed 25%. If this suggestion is followed, and if enrollment of non-ESL students is consistently this low, then an emphasis must be placed on increasing the number of non-ESL students in order for the adjunct to have an acceptable amount of students. Further, when enrollment in ENG G104 is increased, administrators should address the issue of reserving seats for EAP students in the content course

Purpose

Another key component in adjunct model implementation listed in Table 6 is determining the purpose. Based on the outcome of the needs analysis as well as the EAP and content course selection, the overall purpose of this adjunct program is to establish a better connection between the academic skills taught to students in EAP courses and the academic tasks they are required to perform in content courses. More narrowly, the EAP adjunct component of the adjunct will focus on teaching academic reading skills.

Roles in the IUPUI Adjunct Program

From Table 6, identifying the roles of those involved in the adjunct program is an important part of the designing and planning process. In the proposed adjunct model for IUPUI, there are a couple of different roles involved in implementing an adjunct program at IUPUI. The first is the coordinator. This role should logically fall with the director of the EAP program. Another important role is the instructor role. The instructor should be one who is qualified to teach both ENG G104 and ENG G011. Other qualifications the instructor should possess include a solid teaching reputation and a willingness to participate in the program.

Although the guidelines suggest having a content tutor, there is not a great need for one in this adjunct model program as the proposed choice of instructor is the same for both the content course and the adjunct course. In this situation, the instructor would be able to determine whether or not the students understand the content, and if not make the necessary adjustments to address specific problems.

Securing Support

To date, support for an adjunct program has already been secured (Professor Upton, personal communication, February 14, 2008). Administrators from such areas as the School of Engineering and Technology and the Office of International Affairs have expressed interest in participating in this program. The support and interest in this program on the part of the School of Engineering and Technology is due to the relatively high percentage of EAP students that are enrolled in the school's degree programs. The Office of International

Affairs' support comes as part of its function involves assisting international students in their academic pursuits at IUPUI. Support from these two areas is particularly vital for the proposed adjunct model as they both would be involved in promoting enrollment in this adjunct model program.

Scheduling

Scheduling both ENG G104 and ENG G011 involves consideration of two factors. First of these is the expressed support of the School of Engineering and Technology. Second, most of the students enrolled in EAP courses are engineering students (Professor Upton, personal communication, February 14, 2008). Because of these two factors, working with the schedules of these students in the initial stages of the pilot adjunct program seems like the most logical thing to do. In scheduling the courses at IUPUI, it is important to make sure the classes do not conflict with other required classes. In the School of Engineering, many of the math classes are held on Monday, Wednesday and Friday. Additionally, the majority of learning community courses for these students also meet on these days (Professor Upton, personal communication, February, 19, 2008). So ideally, the days that are most likely to work are Tuesday and Thursday.

Students from other schools can also enroll in the adjunct program if their schedule allows for it. However, at this point, the proposed days for offering ENG G104 and ENG G011 do not take into account the schedules of other schools on the IUPUI campus. If the adjunct program continues to be a success and becomes a more permanent fixture in the EAP program, then the course schedules of other schools may also need to be considered.

Other guidelines related to scheduling listed in Table 6 that program administrators should address are content course seat reservation and classroom location. Reserving seats

in the content course should be done in order to guarantee enough slots for ESL students. Classroom location should be addressed if administrators see that the scheduled room for the adjunct course is isolated from the rest of the college or university.

Offering Curriculum Development Workshops

The guidelines in Table 6 also list offering curriculum development workshops as necessary in adjunct program implementation. Because of this, it may be advisable to follow this suggestion in order to ensure that those involved understand the rationale for linking content and ESL classes.

Evaluation

Evaluation of the proposed adjunct program should be an integral part of the program and should be carried out by administrators, instructors and students. Evaluative information should be gathered both during the run of the course as well as at the end. As the purpose and goal of the proposed adjunct model is to provide better instructional support in order to transition ESL students more effectively, an evaluation to this end should be conducted. Information gathered should include the achievements of ESL students in both language and content mastery; the attitudes of students toward the program; suggestions on what might improve the course; the materials and curriculum that was use; and the roles of administrators and instructors.

Conclusion

ESL students at U.S. colleges and universities face a number of academic challenges as they are matriculated into mainstream content courses. As more and more ESL students are matriculated into the university academic environment, they need academic English support in order to ease their transition into this context. Although the

EAP program at IUPUI is in place already to provide this support by offering EAP classes

concurrently with academic classes, this thesis addresses another model of language

instruction, the adjunct model, which proposes linking content courses and EAP courses.

As such, different components of the IUPUI context were examined in light of the

literature on course linking with the intent of proposing a similar model adapted

specifically for this context. Whether or not this proposal is carried out is left up to the

decisions of administrators involved in the interests of ESL students at IUPUI.

Appendix A

Academic Advising Guide for ESL Students*
Compiled with UC and Departmental Advisors
May 2007

TABLE 1: Courses appropriate for ESL students w/ *limited* reading & writing skills (G009/G010 students)

CIT E101	MIL G101
ENGR 195	MUS E241
	MUS Z100
Herron studio art courses	MUS M174
Most HPER activity courses	Music performance courses
Learning Communities (except SCI 120 & UCOL U110 for Exploratory students)	MUS M110 (if interested in technology and composition)
Mathematics (see placement test results)	MUS "Z" classes except for Music for Film
UCOL U110 **ESL** Exploratory Learning Community	

TABLE 2: Courses appropriate for ESL students w/ *moderate* reading & writing skills (G011 & W001 students)

All the courses listed in TABLE 1	CSCI N100
ANTH A104 (consider the instructor)	ECON E101
AST A100 (but not first semester)	ENG G104
AST A105 (but not first semester)	Foreign Language (intro course or placement results)
BIOL N212 (with Dr. Ulbright)	GEOG G107
BUS K201	HPER H160
BUS X100	HPER activity courses
CHEM C100	PSY B104 (support services available!)
CHEM C101 (w/ prior Chem experience)	TCEM 100 (not first semester)
CIT 106 (higher end of moderate skills)	
UCOL U110 **ESL** Exploratory Learning Community	

NOTE: Students who have successfully completed ENG W001 must take the *ESL section* of ENG W131

TABLE 3: Courses for ESL students to *AVOID* their *first semester* (Should be enrolled in or completed W131)

AST A100	COMM R110	INFO I101	SOC R100
AST A105	ENG "L" courses	Journalism	SPEA J101
BIOL K101	FIS 205	MUS M394	SPEA V170
BIOL N107	Folklore	NEWM N100	Social Work
BIOL N217	GEOG G110	OLS 252	TCEM 100
BIOL N261	GEOG G130	Philosophy	UCOL U110 **Non-ESL** Exploratory Learning Community (Can take **ESL section**)
BUS A100	GEOL G109	Political Science	
CHEM C105	GEOL G110	PSY B105	
CLAS C205	Herron "H" classes	Religious Studies	
COMM C180	History	SCI 120 (unless in W131)	

NOTE: Students who place *directly* into ENG W131 can consider the above courses their first semester if advised about expectations, particularly if they have experiences with or high motivation towards a specific discipline. However, completion of W131 first would always be best.

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*ESL Students are defined as non-native speakers of English who have been placed into ESL classes based on the ESL Placement Test. ESL classes include ENG G009/G010, ENG G011, ENG G012, and ENG W001. Students may also be placed into ESL sections of ENG W131. Students who take ENG W001 and/or who are placed into ESL W131 must take the ESL sections of ENG W131. (The Writing Program will require ESL students in their W131 sections to withdraw and reregister for an ESL section of W131.)

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Appendix B

General Education Electives across Major
(Schools beginning with letters A-H)

	IU Herron School of Art and Design	IU Kelly School of Business	IU School of Dentistry	IU School of Education	Purdue School of Engineering and Technology	IU School of Health and Rehabilitation	of InfomaticsIU School
Humanities							
African-American Studies	V		A112 A141 A142 A150	V	A150		A150

			A169 A249 A277 A278				
American Studies	V		A200 A201 A202 A298	V			A103
Art History	V	H200	H100	V	H100 H101 H103		H100 H102
Classical Studies	V		C101 C102 C205 C206	V			
Communication Studies	V	T130		V			
English	V	L200		V			
Film Studies	V	C200		V	C190 C290 C391		C190
Folklore	V			V			
Foreign Lang/ Cultures	V			V			F200
History	V	Any course		V	H105 H106 H108 H109 H113 H114 H220 H221		H105 H106 H108 H113 H217
Music	V		Z101 Z103 Z111 Z201 Z202	V	M174 M118 M119 M200		M174
Philosophy	V	Any course	P100 P103 P105 P135 P140 P145 P150 P201 P205	V	P110 P120 P162 P210		P110 P120

Religious Studies	V	Any course	Any course	V	R100 R111 R133 R173 R200 R212		R173 R180 R212
Women's Studies	V			V			W105
Social Sciences	V			V			
African-American Studies	V			V			A150
Anthropology	V	Any course		V	A103 A104		A104
Communication Studies	V			V			T130 C180
Economics	V			V	E201 E202		E101
English	**P**	**P**		V	**G104**	**P**	**G104** I115
Folklore	V			V			F101
Geography	V	Any course		V	G107 G110 G130 G135		
History	V			V			H117
Political Science	V	Any course		V			Y101 Y103 Y213 Y219
Psychology	V	Any course		V	B104 B211		B104
Public/Environmental Affairs	V			V	V170 V264 E162 E272 H120		
Sociology	V	Any course		V	R100 R121 R220 R234		R100 R121
Women's Studies	V			V			W105

Note. 'P' indicates possible general elective credit. 'V' indicates general elective credits vary by major.

From Academics and Libraries (2008). Only classes at the 200 level or below are listed. Retrieved February 20, 2008 from Indiana University Purdue University Academics and Libraries Website: http://www.iupui.edu/academic.

Appendix C

General Education Electives across Major
(Schools beginning with letters I-S)

	IU School of Journalism	IU School of Liberal Arts	IU School of Medicine	IU School of Nursing	IU School of Physical Education and Tourism Management	IU School of Public and Environmental Affairs	Purdue School of Science	IU School of Social Work
Humanities								
African-American Studies	A150	A150	U	A150 A202	V	A150	A150	Any Course
American Studies	A103	A103	U		V		A103	
Art History		H100 H101 H102	U	H100 H102 H103	V	H100 H101 H102	H100 H101 H102	
Classical Studies			U		V	C205	C205	
Communication Studies			U	T130	V		T130	Any Course
English	L202 L203 L204 L205 L206 L207 L207 L208 L210 L213	L105 L115	U	L105 L115 L200 L203 L204 L207 L213	**P**	L105	L105 L115	**P**
Film Studies		C190	U	F292	V	C190	C299	
Folklore		F101	U		V		F101	Any course
Foreign Lang/ Cultures			U		V	F200	F200	Any course

Subject								
History		H105 H106 H108 H113 H217	U		V	H105 H106 H108 H113 H217	H105 H106 H108 H113 H217	Any course
Music	M110 M174 M393 Z103 Z201	M174	U	M174 Z201	V		M174	Any course
Philosophy	P110 P120 P210 P220 P221	P110 P120	U	P281	V		P110 P120	
Religious Studies	R100 R133 R200 R211 R212 R223	R111 R120 R133 R173 R180 R212	U	R133 R173 R212 R283	V	R133 R212	R133 R173 R180 R212	Any course
Women's Studies		W105	U	W105	V		W105	Any course
Social Sciences			U		V			
African-American Studies		A150	U		V		A150	
Anthropology	A103 A104	A104	U	A104	V	A104	A104	
Communication Studies		T130 C150	U		V	C180	C180	
Economics		E101 E201 E202	U	E101 E201	V	E201 E202	E101 E201 E202	
English	L103 **G104** G205 G206	**G104**	**P**	**P**	**P**	**G104**	**G104**	**P**
Folklore	F101 F220	F101	U	F101	V	F101	F101	
Geography	G110 G130 G201	G110 G130	U		V	G110 G130	G110 G130	
History	B221 H105	H117	U	H105 H106	V	H117	H117	

	H106			H108 H109 H221			
Political Science	Y101 Y103 Y200 Y205 Y211 Y215 Y217 Y219	Y101 Y103 Y213 Y219	U	Y101 Y103 Y211 Y213	V	Y101 Y103 B104		Y101 Y103 Y213 Y219
Psychology	B104	B104			V	B104	B104	
Public/Environmental Affairs	J101	V170	U	H120 J101	V	J101	V170	
Sociology	R100 R121 R220 R234 R239 R251 R295	R100 R121	U	R121 R220 R234 R240	V	R100 R121	R100 R121	
Women's Studies		W105	U	W105	V	W105	W105	

Note. 'P' indicates possible general elective credit. 'V' indicates general elective credits vary by major. 'U' indicates that the general elective credit information is unavailable from the IUPUI website. From Academics and Libraries (2008). Only classes from the 200 level or below are listed. Retrieved February 20, 2008 from Indiana University Purdue University Academics and Libraries Website: http://www.iupui.edu/academic.

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