*Chapter* **1**

# A History of English for Academic Purposes

This history of English for academic purposes (EAP), like all overviews, is subjective. Choices of which citations to include and leave out depend on the aims and predispositions of the overview's author. Yet, while acknowledging my subjectivity, in this chapter I try to present the history of EAP from the perspective of specialists who have shaped the field over the last 30 years and to honor their contributions. Further on, I highlight concerns raised about EAP from outside the field (see chap. 3). This is not to say that EAP has developed without criticism from within. On the contrary, theoretical and pedagogical differences, many of which I discuss in this chapter, are prevalent in the EAP literature as they are in all academic fields. Indeed, discussion of these conflicts has contributed to shifts in EAP's research and teaching methods over the years.

Although such contestation and debate appear frequently in the EAP literature, its politics remain largely hidden. Power issues have been ignored in the name of pragmatism, that is, fulfilling target expectations without questioning the inequities they might perpetuate or engender (Benesch, 1993). These questions, though, are not the focus of the present chapter. Instead, I save them for the next chapter in order to first present a chronology of the intellectual history of EAP, a discussion of its theoretical influences from the 1960s to the present. One way my subjectivity manifests itself in this presentation is that I devote more space to the recent years of EAP, that is, to needs analysis, study skills, linked courses and genre analysis, and less space to the early years of register analysis and rhetorical analysis. This choice was guided by my teaching and research experience, based on more recent developments in EAP's history than on earlier ones.

Some of those I cite in this overview, such as Tony Dudley-Evans, Ann Johns, and John Swales, have both participated in and chronicled EAP's history, offering a longitudinal view as well as eyewitness accounts of EAP curriculum

development in particular settings. Others I cite contributed to the field during a single period, yet their work has led to refinements in EAP theory and practice.

## THEORETICAL INFLUENCES

The theoretical influences that have shaped EAP throughout its 30-year history include: linguistics; applied linguistics; sociolinguistics; communicative language teaching; writing across the curriculum; learning theory; and genre studies. The emphasis, however, has been less on research and theory than on curriculum and instruction, leading some EAP specialists to raise concerns about unquestioned assumptions driving the development of classroom materials and activities. McDonough (1986), for example, is troubled that "insufficient attention is paid to the research sources from which pedagogical decisions—about materials, methodology and so on—either are drawn or might profitably be so" (p. 17). She calls for "classroom-initiated research" informed by theory to arrive at an "integrated view of research" that erases distinctions between practitioners and researchers of EAP. (p. 23) As I show in the later stages of this chronology, that type of research is currently being carried out, especially in linked courses.

Yet, there has been a positive dimension to EAP's historical favoring of application and teaching materials over research and theory. Due to its preoccupation with syllabus design, materials development, and pedagogy, EAP has become increasingly responsive to the complexities of institutions, teaching, and learning in local contexts. That is, although the early years of EAP focused mainly on teaching the lexical items and types of texts students might encounter in their work or academic courses, in recent years, social context, with its unpredictability and multiple meanings, has become a central concern. It is now recognized that knowledge is socially constructed and that linguistic analyses of texts, the basis of early EAP instruction, are an insufficient foundation of instruction. The following retrospective reveals how EAP arrived at its current acknowledgment of the centrality of context as it moved through various stages of its history: register analysis; rhetorical analysis; study skills and needs analysis; and genre analysis. These stages are presented chronologically, but it should be noted that they are overlapping and not mutually exclusive; although some EAP specialists are conducting the type of integrated classroom-based research McDonough (1986) has called for, others continue to carry out more traditional text and discourse analysis.

## HISTORICAL TRENDS

### Register Analysis

The early history of EAP spans the mid-1960s to the early 1970s, beginning with the emergence of English for science and technology (EST). EST, at that

time, was intended to provide an alternative to English language teaching as humanities, preparing students to read literary texts. The goal was to move away from "language teaching as a handmaiden of literary studies" toward "the notion that the teaching of language can with advantage be deliberately matched to the specific needs and purposes of the learner" (Strevens, 1977, p. 89). Strevens (1971b) argued that by teaching only literature and not other kinds of texts, secondary school English teachers, in the United Kingdom and other countries, were neglecting to prepare "scientifically inclined" students for further studies. He claimed that many teachers trained in literature were predisposed to viewing science as "cold" and literature as "warm": "Literature is held to be the only morally and aesthetically worthwhile subject. Scientists are stated to be philistines…and any activity that smacks of measurement or quantification is low-valued" (p. 8). Reacting against what he saw as the literary bias of English language teaching, Strevens recommended offering courses geared to the eventual uses students would make of the language in their future studies and jobs. He believed that at the beginning levels, these courses might include scientific vocabulary exercises and scenarios set in scientific situations, such as labs. At more advanced levels, EST might include replicating and discussing experiments and teaching scientific texts.

The postwar boom in funding for science and technology by the United States and the United Kingdom included subsidies for English language teaching (ELT) and teacher training (in chap. 2, I explore the economic roots of EAP and their political implications). The response of ELT specialists was to shift instruction away from the traditional focus on grammar and literature toward greater attention to features of scientific English. Attempting to capture and characterize the uniqueness of scientific English, EST research during this period consisted primarily of frequency studies of lexical items and grammatical features in scientific texts. Huddlestone (1971), for example, carried out a 4-year linguistic study of 135,000 words of scientific English, looking for patterns in single sentences and clauses (cited in Macmillan, 1971a). This register analysis and similar ones were the basis of EST instruction for students who had usually acquired a degree of proficiency in reading English.

EST textbooks based on register analysis were published during this period, one example being Ewer and Latorre's *A Course in Basic Scientific English* (1969). The authors based the material on a study of 3,000,000 words of "modern scientific English ranging from popular writings to learned articles and graded according to both frequency and complexity" (Macmillan, 1971b, p. 23). Each unit of the text includes a reading passage written by the authors, comprehension questions, vocabulary exercises, structural exercises, and a discussion and criticism section. Also included are a dictionary of scientific terms and an index of grammatical structures found in the reading passages (Macmillan, 1971b).

Swales (1988) cites Herbert's (1965) EST text, *The Structure of Technical English*, as perhaps the first English for specific purposes (ESP) textbook, one based on "a serious and detached investigation into the characteristics and the language found in science and engineering written texts" (p. 17). Each section of

that textbook begins with a 500-word passage written by Herbert to illustrate certain aspects of technical style rather than to convey content. The accompanying exercises serve to highlight and review lexical items and grammatical points in the passage.

EST texts of this period were admired for their "coverage of…semi-technical language" (Dudley-Evans & St. John, 1998, p. 21). However, they were also found to be pedagogically and theoretically unsound: "The passages were dense and lacked authenticity, the accompanying diagrams were not very supportive, and worst of all, the exercises were repetitive…" (p. 22). Doubts about the application of register analysis to teaching English for science and technology led EAP research away from linguistic form toward communicative purpose and role, through the use of rhetorical analysis (Robinson, 1980). Yet, Robinson (1980) acknowledges a place for register analysis in local settings: "ESP courses should be designed locally for specific target audiences with any register analysis confined to the particular set of textbooks for their special subject that a particular class employs" (p. 19). As Dudley-Evans and St. John (1998) point out, although register analysis is no longer the focal point of EAP research and teaching, the use of computers has led to a resurgent interest in quantifying grammatical features of ESP texts.

## Rhetorical Analysis

The second stage of EAP, during the 1970s, was more rhetorical in focus. Rather than simply enumerating and describing linguistic features of scientific English, researchers investigated the relationship between grammatical choices and rhetorical purpose. The Washington State ESP group is usually cited as an example of discourse analysis during this period, especially its identification of levels of abstraction and rhetorical functions in scientific texts. Whereas register analysis dwelled on the grammar of sentences, this group attended to paragraphs. Hoping to help engineering students "manipulate scientific and technical information" (p. 128), Lackstrom, Selinker, and Trimble (1973), members of the Washington State group, studied two areas of grammar that their students struggled with: articles and tense choice. In particular, they focused on how presuppositions, "information shared by the technical writer and reader," affect surface-level syntactic choices of articles and tenses within paragraphs. They were not as much interested in "physical paragraphs," groups of sentences demarcated by indentation, as they were in "conceptual" ones, "organizationally- or rhetorically- related concepts which develop a given generalization in such a way as to form a coherent and complete unit of discourse" (p. 130).

To explain how concepts within a paragraph (defined in this way) interrelated, they offer a *rhetorical-grammatical process chart* for EST of four discourse levels with different rhetorical purposes but related hierarchically to each other. In the chart, the four rhetorical levels, A-D, are: purpose of the total discourse; function of the units that develop the purposes of Level A; rhetorical devices employed to develop the functions of Level B; and relational rhetorical

principles that provide cohesion with the units of Level C. Level A includes presenting information, presenting a proposal, and detailing an experiment. Level B includes reporting past research, discussing theory, and stating the problem. Level C includes definition, classification, and explanation. Level D includes natural principles, such as time and space order, and logical principles, such as analogy and exemplificiation. In addition, for each level the authors include grammatical choices, articles, and tenses.

The *rhetorical-grammatical process* chart describes EST paragraph development as a set of hierarchical relationships constraining and guiding rhetorical choices. Building on this type of rhetorical analysis, Selinker, Todd-Trimble, and Trimble (1978), discuss a second method of paragraph development, *rhetorical function-shift development.* Whereas in the first type of paragraph development, generalizations and supporting statements are clearly stated, in the second type "clearly stated core ideas are seldom found" (p. 314). In addition, shifts in these paragraphs from one rhetorical function to another are not signaled, making comprehension difficult for students, according to Selinker, Todd-Trimble, and Trimble (1978). To improve the comprehension of EST texts, they taught students to anticipate shifts by carrying out rhetorical analysis, sensitizing them to changes in communicative purpose occurring in paragraphs.

Drobnic (1978) offers an example of rhetorical analysis applied to teaching materials in his discussion of a course for Taiwanese nuclear engineers. To introduce the relationship between physical and conceptual paragraphs, he first gave students a three-paragraph text on atomic fuel published by the U.S. government. The text defines atomic fuel and discusses the ingredients used to produce it. After reading the text, students completed fill-in-the-blank questions about each physical paragraph and then constructed a flowchart of all the information in the text.[1] According to Drobnic, the flowchart allowed students to grasp "the conceptual unity of the stretch of text" and to become "adept at recognizing conceptual paragraphs" (p. 11) in subsequent lessons.

Other classroom materials based on rhetorical analysis include the *English in Focus* series, edited by Patrick Allen and Henry Widdowson between 1974 and 1980, nine textbooks, each dealing with a different subject area, including medical science, agriculture, and social science. In their introduction to the teacher's edition of *English in the physical sciences,* Allen and Widdowson (1974), explain that their goal is "not to teach more grammar, but to show students how to use the grammar they already know" (p. xi). That is, the authors assume that students "have a considerable dormant competence in English" as well as "knowledge of basic science" (p. xi). The aim of the textbook, therefore, is not to teach science per se but, rather, "to develop in the reader an understanding of how this subject-matter is expressed through English" (pp. xi–xii). To carry out this goal, the authors offer eight units, seven of which open

[1]This is one of the more dramatic examples of attention to rhetoric but not to content. Drobnic (1978) makes no mention of discussing the ethics of producing atomic fuel with the students.

with a short simple reading passage, followed by exercises referring back to rhetorical features in the passage. The units also include guided paragraph writing and a longer reading passage intended to "approximate the kind of language that the student will find in his scientific textbooks" (p. xii).

However, assumptions on which the *English in Focus* series was based have been questioned. Robinson (1980), for example, challenges Widdowson's hypotheses that the deep cognitive structures of the sciences exist independently of their realizations in various languages and that students draw on their prior acquisition of those deep structures when learning the surface forms of scientific English. According to Robinson (1980), this formulation assumes that knowledge is separate from language and that with input from EST teachers, students can call on a storehouse of nonlinguistic scientific knowledge when learning the surface forms in the target language, a dubious and untested hypothesis, also questioned by Swales (1988). Knowledge is socially constructed, not universal or nonlinguistic, according to Swales. It is "influenced by national, social, cultural, technical, educational, and religious expectations and inspirations" (p. 72). Nor can the prior teaching of scientific knowledge in L1 be assumed, Swales points out, further calling the rationale of the *English in Focus* series into question.

Starfield's (1990) discovery that the Allen and Widdowson textbooks were not applicable to her teaching situation at the University of the Witswatersrand, South Africa supports Swales' (1998) critique of the series. Finding that her non-native speaking students had not been taught science in L1 in high school, she was forced to reject what she calls the *Widdowsonian translation approach:* "based on 'translating' into English the knowledge the students is already presumed to have in the L1" (p. 87). Her university students had been taught science in L2 by high school teachers who were themselves non-native speakers of English and who were found to be proficient neither in English nor in science. Therefore, "few assumptions can be made about students' scientific knowledge or their language proficiency" (p. 87). In place of the *translation approach*, Starfield organized team-teaching, where language and subject specialists planned and cotaught courses, thereby "embed[ding] language in the reality of students' mainstream course content" and "reducing cognitive demands on them" (p. 88). Other examples of team-teaching and linked courses, aiming to contextualize language teaching, are discussed later in this chapter.

## Study Skills and Needs Analysis

Increased attention to how students acquire English in academic settings shifted emphasis from linguistic and rhetorical forms to study skills and strategies. In fact, the interest in study skills was so great that by the late 1980s, Jordan (1989) declares: "Study skills is seen as the key component of EAP" (p. 151). Coinciding with this development was the appearance of needs analyses describing the types of tasks, skills, and behaviors required of learners in present and future target situations. Munby's (1978) taxonomy of skills and functions and Richterich and Chancerel's (1977) systems approach, sponsored by the

Council of Europe, are needs-analysis prototypes from that period. Jordan (1997) classifies Munby's approach as "target situation analysis," concentrating on precourse assessment of the skills required in future courses. The Council of Europe's systems approach, according to Jordan (1997), is "present situation analysis," an ongoing assessment of a large number of variables, including the learner, teacher, institution, curriculum, assessment, and the interaction among them. Jordan believes that subsequent needs analyses have been "refinements to the starting positions of present situation and future/target situation" (p. 25).

***Target Situation Analyses.*** During the early to mid-1980s, EAP researchers in U.S. universities conducted target situation analyses to discover the skills and assignments ESL students were likely to encounter in future academic classes across the curriculum (Horowitz, 1986b; Johns, 1981; Ostler, 1980). These studies were, in part, a reaction against the growing interest in process approaches in L1 and L2 composition research and teaching. EAP specialists were concerned that the focus on students' writing processes detracted from what they saw as the business at hand: preparing students for courses across the curriculum. They rejected the premise of process advocates, such as Zamel (1976, 1982), who argued that if students were guided through the same types of activities carried out by professional writers—invention, drafting, revising and editing—they could apply these practices to any assignment they met. Horowitz (1986a) was especially critical of the emphasis on conferencing and revision, pointing out that some types of academic writing, such as essay examinations, do not call for multiple drafts. Instead, they are timed writings designed to test knowledge: product, not process. Horowitz (1986a), therefore, believed that process writing was inadequate, perhaps harmful, preparation for the demands of academic courses.

To discover those demands and provide "realistic advice about appropriate discourse structures for specific tasks" in EAP (p. 447), Horowitz (1986b) surveyed writing-assignment handouts and essay-examination questions from 36 faculty (out of 750 contacted) at a midwestern university. According to Horowitz, the most important finding of his survey was that the writing tasks were highly controlled by faculty who offered detailed instructions about content and organization. His data analysis includes a taxonomy of writing tasks, including summaries of/reactions to a reading; annotated bibliographies; syntheses of multiple sources; and research projects. It also includes a set of skills required for carrying out those tasks: selecting relevant data from sources; reorganizing data in response to a question; encoding data into academic English. In his pedagogical recommendations, Horowitz proposes exercises to "simulate university writing tasks in a practical way" (p. 455) and to offer students ways to work on "information-processing problems" (p. 460).

Having concluded from his survey that "[g]enerally speaking, the academic writer's task is not to create personal meaning, but to find, organize, and present data according to fairly explicit instructions," Horowitz (1986b) recommends an emphasis in EAP on "recognition and reorganization of data" rather than "invention and personal discovery," tenets of process writing. (p. 455) Perhaps revealing a lack of conviction about the generalizability of his finding, Horowitz

tentatively proposes EAP curricula based on his small sample at a single university. Yet, he also calls on EAP teachers to conduct their own target situation analyses. That is, he simultaneously recommends restructuring of ESL teaching based on an admittedly limited survey and suggests further research in local contexts to bring EAP instruction in line with the cognitive and linguistic demands of college courses in those institutions.

A similar tension appears in Johns' (1981) report of a survey of 140 faculty at San Diego State University. The author makes recommendations based on her small sample and calls for further research at her own institution and at others to "teach more of the skills that the students will actually need" (p. 56). In her study, Johns asked respondents to rank English skills in order of importance for a particular class they taught. Finding that reading and listening were ranked highest among faculty teaching lower- and upper-division classes, Johns (1981) recommends "systematic teaching of listening and note-taking" (p. 56) in EAP classes and a de-emphasis on speaking and writing, except in the service of lecture and textbook comprehension: "Writing, for example, could involve the paraphrase or summary of reading materials or the organization and rewriting of lecture notes" (p. 56). Curiously, the finding that the majority of faculty, except those in engineering, ranked general English above specific-purposes English is dismissed as a matter of ignorance: "There could be a number of reasons for the General English preferences, the most compelling of which is that most faculty do not understand the nature and breadth of ESP. They tend to think of it as an aspect of the discipline that has to do with vocabulary alone" (p. 54).

Although Horowitz and Johns seem to recognize the limitations of their research, they are nonetheless prepared to generalize their finding to other EAP settings. Materials writers also subscribed to the idea that skills taught in an EAP class would transfer to students' future academic classes. Textbooks based on this assumption proliferated during the 1980s and 1990s, some of which dealt with English for general academic purposes (EGAP) while others, classified as English for specific academic purposes (ESAP), focused on a single field, such as economics, engineering, and business.

Despite the appearance of numerous skills-based EGAP and ESAP textbooks, doubts about the generalizability of study skills from one context to another began to emerge, leading to an increase in more contextualized EAP research and instruction as the following sections show.

***Present Situation Analyses.*** Needs analysis based solely on surveys and questionnaires were supplanted in the late 1980s with present situation analysis taking a greater number of variables into account, following the Council of Europe's comprehensive, ongoing needs analyses (Johns, 1990a; Prior, 1991, 1995; Ramani, Chacko, Singh, & Glendinning, 1988). This research aims to reveal not only the types of texts assigned but also reactions of students to assignments and the processes they go through in fulfilling them as well as faculty reactions to student participation and writing. Teaching as an interactive social practice is recognized in this research, which includes in-depth interviews and observation of faculty and students and, in some cases, ongoing revision of EAP instruction based on feedback and evaluation.

One example of present situation analysis is the ethnographic approach to EAP syllabus design of Ramani et al. (1988) at the Indian Institute of Science in Bangalore. Dissatisfied with register and discourse analysis as tools to guide English language instruction, these colleagues from the Foreign Language Section conducted ethnographic research over 1 month in four departments. Their data collection consisted of seven steps:

1. specify the learners;
2. analyze their needs;
3. specify enabling objections;
4. select or evolve materials;
5. identify appropriate teaching/learning activities;
6. evaluate;
7. revise.

Step 2 is further broken down into more detailed data collection taking students' and teachers' views into account:

1. observe students in their natural academic environment ("what the normal day of a student in a particular department is like" (p. 84);
2. ask the students about their communication practices, needs, and problems;
3. ask the subject specialists;
4. ask the language specialists.

Ramani et al. (1988) found their colleagues in other departments receptive to interviews and clear about a range of issues from the larger goals of their field and department to the communicative practices required by their courses.

During unstructured interviews, the teacher/researchers learned about distinctions between professional genres they had been previously unaware of and about the recent stress on critical reading and discussion of journal articles in management courses. These and other findings led to changes in English language courses, including an increase in problem-solving activities carried out in pair and group work. The researchers do not claim that their findings are applicable to other settings. Rather, they recommend ethnographic approaches as a way to collaborate with other faculty "to articulate and understand the complexity and specificity of the communication" (Ramani et al., 1988, p. 88) in the institutions in which they teach.

Prior's (1991, 1995) research is also ethnographic. Influenced by "situated" L1 composition research, his three studies of a graduate seminar in second-language education aimed for "a fuller examination of the literate processes involved in academic work" than is offered through analysis of assignment guidelines or student texts alone (Prior, 1995, p. 49). The data included observations of seminar meetings, interviews with students and the professor about assignments and course goals, and "text-based interviews" (Prior, 1991, p. 273), with the professor sharing his reactions to particular student papers. Prior chronicles the history of selected assignments, from preliminary in-class explanations by the professor to clarification, negotiation and enactment of the guidelines by the students in dialogue with the professor. He describes making

and carrying out writing assignments in the graduate seminar as a complicated and interactive "indeterminate" process characterized by "order, convention, and continuity," on the one hand, and "chance, anomaly, and rupture," on the other (Prior, 1991, p. 304). For example, to his surprise, Prior discovered that students relied more on their prior experience in school, on the assigned readings, and on their perceptions of the professors' interests and biases in carrying out assignments than on the professor's initial guidelines. He also notes that some of the international students in the seminar were able to prevail on the professor to reduce the number of reading assignments and drop one of the writing assignments, revealing a degree of flexibility that would not have appeared if the data had only included the original syllabus and assignment guidelines.

Prior's (1995) view is that surveys and questionnaires offer EAP useful information about the linguistic and rhetorical structure of academic texts, but that they are limited due to their neglect of "situated processes and resources students use in producing writing and professors use in responding to it" (p. 77). He cautions readers not to transform his findings into "abstract, anonymous structures occurring anytime, anywhere" (p. 55) but rather to conceptualize academic writing tasks as speech genres "unfold[ing] in concrete situations at specific times with particular participants" (p. 77). These studies will complicate the job of teachers, materials writers, test makers and researchers, according to Prior, but the benefit is that they will honor the complexity and dialogic nature of academic teaching and learning.

Like Prior, Johns (1988a, 1990a), in a retreat from her earlier research (Johns, 1981), questions the generalizability of precourse needs analysis from the context in which it was carried out to others. Reviewing L1 studies on writing-across-the-curriculum, she notes that university courses are idiosyncratic, even those within the same department. Individual professors' idiosyncracies, she concludes, make it difficult for needs analysis to predict the demands students will face in academic courses. Therefore, according to Johns, target situation analysis is an inadequate tool for EAP curriculum development. In its place, she recommends ethnographic needs analysis in linked EAP/content courses, thereby combining research and teaching. That is, as far as Johns is concerned, EAP research is best carried out by students and teachers in a collaborative, cross-curricular effort. Her description of linked courses at San Diego State University demonstrates how student research informed EAP teaching (Johns, 1990a).

Non-native students enrolled in the linked courses were asked to keep journals. Included in the journals were documentation of roles the students and their professor of Western Civilization were supposed to play in that course; the topics dealt with in the syllabus; the relationship of the topics to each other; and the various activities and conventions carried out in the content class. As the semester progressed, students reflected on their participation in that class, including their difficulties with reading and writing, offering the EAP teacher information and guidance about how to proceed and what to emphasize. Johns (1990a) concludes from her analysis of the students' journals, and the discussions and intervention they triggered, that the ideal setting for EAP is

linked courses where language instruction is contextualized: "If there is any way for direct contact with and discussion about content classes to take place, as it does in the program mentioned here, then more ideal teaching and learning circumstances can result" (p. 225).

Benson (1989) conducted an ethnographic study of a Saudi Arabian master's candidate in public administration at a U.S. university, examining the experience of an Arabic-speaking student navigating the complexities of academic study in English. In particular, Benson wanted to document the role listening played in his subject's learning, participation, and performance in one course. His data included taped lectures; lecture notes of his subject, some of his fellow students, and those of the professor; as well as interviews with his subject and the professor. Benson triangulates his data, showing what was said in class, what was written in lecture notes, and what his subject said retrospectively, after attending lectures. His analysis shows, among other things, that his subject recorded what he viewed to be main points but ignored other rhetorical moves, such as teacher/student interaction and teacher asides, which the professor believed offered equally important information. In addition, Benson (1989) notes that "in a highly verbal and participatory class, Hamad [his subject] never said a word. He was one of only two who remained silent throughout the 15 weeks" (p. 439). In drawing implications for EAP instruction from his study, Benson is critical of typical listening activities stressing comprehension as a one-way process of information absorption by students rather than as an interactive process involving both teaching and learning. He recommends EAP courses at U.S. universities that could engender the types of interactions he found in the lectures he studied where the students were expected not just to record facts but also to be aware of "attitudinal and affective factors that modify course content in various ways" (p. 441). That is, like Johns, he believes that students need to understand academic course work as more than information processing. Instead, each course presents cultural and intellectual challenges that may differ from ones students are accustomed to.

One way to contextualize EAP instruction is through linked courses, Johns' preferred mode of instruction, where students enroll concurrently in language and content courses, in which the materials and methods of both may be related. These courses require a certain amount of coordination not available in all institutions. Yet, they have been popular on campuses aiming to mainstream students into an academic curriculum. Due to the predominance of linked courses in U.S. undergraduate institutions, I present them here in a separate section rather than including them with the section on study skills, as is done in most overviews of EAP. In addition, the focus of the examples of linked courses, in the following section, is less on skills and more on collaboration across the curriculum.

## Linked Courses

Although ESL faculty have experimented with linked courses since the late 1970s, this approach to EAP gained wider acceptance during the mid-1980s and

continues into the present. With research evidence pointing to professors' varying expectations not only in different disciplines but "even different classes within a discipline" (Prior, 1991, p. 270), the need for well-contextualized EAP instruction based on continuous feedback from students and faculty was increasingly clear. Also, with little research evidence of transfer of skills from one context (the EAP classroom) to another (the content course), some EAP specialists have sought ways to join these contexts by forming partnerships with colleagues in other departments. They offer linked, adjunct, and team-taught courses, matching language instruction to the assignments, activities, and discourse of the content courses with which they are paired. The goal is to give students "immediate assistance with their difficulties as they arise," support not available when the "subject teacher or the language teacher [is] working in isolation" (Johns & Dudley-Evans, 1980, p. 8). According to Swales (1988), team-teaching represents "the ESP practitioner's growing concern with the total educational environment of the student" (p. 137).

One influence on paired courses in EAP is the language-across-the-curriculum (LAC) movement in the United Kingdom, exported to U.S. universities as writing-across-the-curriculum (WAC) in the 1980s. As early as 1966, members of the London Association of Teachers of English met to discuss the relationship between language and learning and to urge schools to work out a language policy for subjects across the curriculum. According to Britton (1982), one aim was to encourage children to use expressive talk and writing when learning new material, that is, "language in which we 'first-draft' our tentative or speculative ideas" (p. 181). Children's informal ways of speaking were seen as a way to explore new material and work toward understanding complex content. U.S. educators, such as Fulwiler and Young (1990), embraced the idea of expressive writing across the curriculum and conducted workshops at the University of Vermont and other universities to encourage the use of journals in all subjects areas, not just English.

Hirsch's (1988) tutoring program at Hostos Community College, the City University of New York's bilingual (Spanish/English) college, is a good example of the use of expressive talk and writing in EAP. Concerned that students who, despite having exited from the college's ESL program, have difficulty reading textbooks, understanding lectures, and passing tests in their academic classes, Hirsch developed small tutorled groups, of between three and eight students, linked to General Biology, Introduction to Business, and Early Childhood Education. The tutors, graduate and undergraduate students from public and private colleges, underwent 36 hours of preservice training as "facilitators of student learning" (p. 74) and ongoing training during the semesters they tutored. They were required to attend the content classes for which they were tutors and to meet periodically with the content teachers. Tutoring sessions offered opportunities for "expressive, exploratory talk and writing," including "students paraphrasing concepts, using learning logs, writing tutor- or pupil-generated assignments, reading from their papers, or holding frequent group discussions" (p. 73). Hirsch found that students who participated in the tutoring groups received a higher final mean grade than those in the

control group and twice as many As. In addition, the classroom attendance rate was higher among participants than nonparticipants. Hirsch (1988) attributes the program's effectiveness to the "importance of expressive language, and especially talk, as a contributor to ESL student learning" (p. 82).

Like Hirsch, Blakely (1995) was troubled that students who had successfully completed ESL courses offered at the University of Rhode Island struggled with their mainstream academic course work. He therefore developed a program allowing non-native students (NNS) to continue studying English while pursuing their undergraduate degrees; the language instruction would be directly connected to the content courses they took. In an interesting variation on Hirsch's tutoring model, Blakely recruited undergraduates who were enrolled as students in the class for which they would be tutors. That is, he paired "high-achieving native speakers with at-risk linguistic minority speakers" (p. 4) within the same course. Each semester, 15 native-speaking students, called *fellows*, participated in a 15-week training seminar for which they received three credits. The first part of the training, "Who," dealt with immigrants in the United States, the population comprising the NNS students at the University of Rhode Island. The second part, "What," covered second-language acquisition theory and practice. The third part, "How," dealt with what to do in meetings with NNS students. Blakely stresses the distinction between tutoring and the collaborative studying the program encouraged. The fellows were not peer tutors, a designation implying a power differential between giver and receiver. Rather, they saw themselves as "'privileged collaborators in learning,' the privilege being their native understanding of the language of instruction" (p. 5). Indeed, aside from the cognitive and linguistic benefits of study groups, there were social gains as well. Not only were averages for fellows and their NNS classmates significantly higher than those of nonparticipants, but those who participated in the groups reported a new appreciation for students with whom they had previously had no contact. That is, the program raised the profile of NNS students who had been marginalized and ignored on this campus and in the courses where they were performing very poorly. The social connections Blakely's program encouraged seem to have increased the retention of NNS students.

One more feature of the University of Rhode Island program is worth noting: interaction between the fellows and content faculty. Blakely reports that fellows were required to meet periodically with their professors to discuss the study sessions and let them know about any difficulties they and the NNS students might have been having. As a result of these meetings, content faculty made modifications, such as meeting with NNS students and fellows before exams, allowing extra time for writing assignments, simplifying language, and using more visuals during lectures. Although these changes are not a main goal of the English Language Fellows Program, they point to an area that is sometimes overlooked in EAP: The role of the content teacher in facilitating learning.

Instructional modifications by content faculty are highlighted in Haas, Smoke, and Hernandez (1991), whose account of their "collaborative model" of paired courses is a transcript of their retrospective conversation about the

developmental and ESL writing courses taught by Haas and Smoke at Hunter College, CUNY, paired with Hernandez's social sciences lecture course, "Conquered Peoples in America." In addition to meeting before the semester began to plan ways to coordinate instruction, the three met weekly to discuss assignments, students, and supplementary material. Hernandez highlights several modifications he made as a result of feedback from Haas and Smoke. For example, learning that his lectures were based on the incorrect assumption that the students had a background in geography and the origins of human beings, he decided to include maps and anthropological information in future lectures. In addition, he changed his view of writing—from a means of testing knowledge to a means of learning:

> During our collaboration, I began to ask students to write informally and I responded in writing, so they understood if their comments were effective or missed the point. At first, some students only turned in a sentence or two, thinking that was enough but when they realized that I preferred exploration to a quick answer, their next compositions changed radically. Students were much more expansive when they knew I was commenting on their ideas. (Haas, Smoke, & Hernandez, 1991, pp. 122–123)

Smoke and Haas also discuss ways they modified their teaching in response to Hernandez's course. For example, Haas abandoned planned lessons when students came into her class, fresh from a lecture, wanting to continue discussing the ideas. She found herself listening more than speaking, learning more than teaching on those occasions. Like Blakely, authors Haas, Smoke, and Hernandez (1991) note that the collaboration between teachers and among the students created a community resulting in higher grades for the participants than for nonparticipants in their program.

The previous two examples of linked courses bring up the issue of collaboration between language and content teachers as a central feature of linked courses. Barron (1992) offers a schema to categorize what he calls "cooperative relationships between ESP units and other departments" (p. 1) to take various levels of involvement into account. At the low end of the involvement continuum is the subject-specialist informant, who offers information to the ESP teacher about the "content and organisation of texts and on the processes of their subject" (p. 2). This information is used by the ESP teacher to inform materials development and lessons related to the subject; there is no formal link between ESL and content classes. At the high end of the continuum are team-taught courses where the faculty cooperate to the fullest extent, working out a joint syllabus, materials, methodology, and assessment. Barron describes his own experience as "collaborative teaching" (p. 4), a relationship he considers to involve a lower degree of cooperation than team teaching, in part because there are two separate classrooms rather than a shared one. At Papua New Guinea University of Technology, he taught language and

communication skills classes to first-year architecture students concurrently enrolled in a 7-hour studio class where they learned drawing and other architectural skills. Barron and the architecture teacher developed a series of joint projects intended to call on the language and architecture skills that were evaluated by both teachers.

To finish this history of EAP, I now turn to the most recent development, genre analysis. Although Dudley-Evans and St. John (1998) find this to be "an extremely useful tool of analysis" rather than "a new movement in the field" (p. 31), genre analysis has nonetheless captured the interest of various ESP/EAP researchers, cited next.

## Genre Analysis

Genre analysis reflects ESP/EAP's traditional attention to linguistic features of texts, their rhetorical purposes, and pedagogical application. Yet, genres are not simply texts to be analyzed for their grammatical and discoursal features. Rather, genre is "a social activity of a typical and recognizable kind in a community, which is realised in language" (Mauranen, 1993). That is, genres go beyond text to take social purposes into account, including ways members of discourse communities are guided by shared rhetorical purposes when they speak and write. They are "typified responses to events that recur over time and space" (Berkenkotter & Huckin, 1995, p. 151). For example, members of the English-language teaching community follow certain conventions when giving conference talks or writing articles, making these genres recognizable to their listeners and readers. Participating in these social acts solidifies one's membership in the community.

Bhatia (1993) contrasts genre analysis with register and rhetorical analysis, earlier types of EAP research discussed before, placing them all under the discourse-analysis rubric and then making distinctions. He categorizes register analysis and grammatical-rhetorical analysis as *discourse analysis as description*, which "typically concentrates on the linguistic aspects of text construction and interpretation" (p. 2) and therefore offers "insufficient explanation of sociocultural institutions and organizational constraints" (p. 10) shaping discourse. Genre analysis, categorized by Bhatia as *discourse analysis as explanation*, on the other hand, "goes beyond such a description to rationalize conventional aspects of genre construction and interpretation" (p. 2). It is concerned with answering the question: "Why are specific discourse-genres written and used by the specialist communities the way they are?" (p. 11). It aims to explain "why a particular type of conventional codification of meaning is considered appropriate to a particular institutionalized sociocultural setting" (p. 5).

These questions interest both EAP specialists and L1 rhetoricians (sometimes called *new rhetoric researchers*) such as Bazerman and Myers. They have carried out situated studies on, for example, the research processes of scientists and social scientists (Bazerman, 1988) and how two biologists worked to get their research funded and published (Myers, 1990). However, although L1

rhetoricians share an interest with EAP researchers in genre, their concerns and approaches to genre analysis differ. Hyon (1996) characterizes those differences, as well as ways Australian genre research differs from the other two.

According to Hyon, EAP genre research has concentrated mainly on the "formal characteristics of genres while focusing less on the specialized functions of texts and their surrounding social contexts" (p. 695). So, although rationales for genre research in EAP such as Bhatia's, mention social context, the studies are more concerned with textual features, such as discourse moves, than with particular situations and communities. New rhetoric studies, such as those of Bazerman, Prior, and Myers, on the other hand, are concerned with the role genres play, their "social purposes" or "actions" (Hyon, 1996) in particular settings. The new rhetoricians carry out ethnographic research "rather than linguistic methods for analyzing texts, offering thick descriptions of academic and professional contexts surrounding genres and the actions texts perform within these situations" (Hyon, 1996, p. 696). Like EAP genre studies, Australian genre research is linguistic, focused on textual structures, yet the types of genres studied are not academic and professional; rather, they are school- and workplace-based, reflecting a different set of goals, as shown next.

Hyon (1996) attributes the differences in the three genre traditions to varying contexts and goals. EAP, influenced by linguistics and applied linguistics, is mainly interested in applying its research findings to helping NNS students "master the functions and linguistic conventions of texts" (p. 698). That is, the primary goal is to help students fulfill the requirements of academic and professional settings so that they can "succeed" (p. 700). (In chap. 3, I discuss this goal as an ideological stance; for now, I accept Hyon's terms). The Australians, who analyze primary and secondary school genres, are also interested in helping students "succeed" though they claim that the "powerful" genres they study and teach will "empower" (p. 701) previously underserved children, including immigrants. New rhetoric researchers, by contrast, are less sanguine about the applicability of their studies to teaching.

Bazerman (1998) characterizes the difference between his research and that of Swales (1990) as a contrast between two traditions: rhetoric and linguistics. The rhetorical tradition, from which Bazerman comes, uses literary techniques, in an "ad hoc descriptive tradition…noticing a variety of things that might be going on in the text but not through any particular linguistic method" (p. 106). Swales' training in linguistics, on the other hand, led him to focus on moves analysis and linguistic features, such as tense and modality. Although Bazerman values Swales' and other linguists' research for offering rigorous, precise analysis "with which you could try to tie things down" (p. 108), he also cautions against dealing with genre "in too codified a way" (p. 109). Yet, he finds Swales' (1990) "create a research space" (CARS) model, discussed next, to be useful in teaching graduate students in the social sciences, though less useful with literature students.

In his analyses of research article introductions, Swales (1990) aimed to discover how scientists establish the context and credibility for their own research, in light of previous studies, in the introductions they write to research

articles. Yet, Swales did not simply discuss his findings about the rhetorical moves in scientific research article introductions. He translated them into a model, the "create a research space" (CARS) model, that could be used to teach this part of the research article as a genre (Swales, 1990, p. 140). This model has been adopted in various teaching situations, with mixed results: Master's of Science students in a British university (Dudley-Evans, 1995); undergraduate science students in a U.S. university (Jacoby, Leech, & Holten, 1995); and undergraduate first-year general education students at a U.S. university (Johns, 1995).

Dudley-Evans (1995) applies a modification of the CARS model to teaching academic writing to international graduate students in 1-year master's of science and PhD programs at the University of Birmingham. Students are offered a common-core class in which they develop rhetorical awareness by answering a series of questions about the patterns of organization of a text and why those particular patterns are "favored by those in the discourse community" (Dudley-Evans, 1995, p. 296). The students then apply move analysis to sections of research articles and theses, including the introduction, method, and discussion sections. The first exercise carried out to develop awareness of moves is for students to reorder the scrambled sentences of a research article introduction and then to discuss the correct order. They are then introduced to the revised four-move CARS model (establish the field; summarize the previous research; prepare for present research; introduce present research) and encouraged to practice "the language used to express each of the four moves" (Dudley-Evans, 1995, p. 300). Finally students are asked to write a "simulation of either a full report or a full section of an article or thesis based on some data or information provided" (Dudley-Evans, 1995, p. 301). According to Dudley-Evans (1995), these activities contribute to students' ability to apply "general knowledge of genre conventions and other aspects of writing they have gained from the general classes to actual assignments or examination answers" (p. 304), although no follow-up studies of student performance in subject-specific classes are cited.

Jacoby, Leech, and Holten (1995) describe a developmental writing course for non-native undergraduate science majors at UCLA. The goals of the course are to introduce "formal aspects of scientific writing" (p. 353) as well as to promote writing proficiency among these inexperienced writers. The authors see their charge as an "uneasy partnership" between product ("textual conventions of the scientific research report") and process ("strategies for revising,…shaping texts,…and responding effectively to their own and others' writing"; Jacoby, Leech, & Holten, 1995, p. 353). The example they offer of this partnership is an instructional unit on teaching the discourse structure and lexical and grammatical features of the discussion section of a research report. When beginning this unit, students have already written a draft of the introduction to a study they have not read, although they have read previous studies on which this one is based. After receiving feedback on their draft, students are given a table or graph showing the results of the current study. They are then taken through a series of activities, including a handout matching lexical choices with discourse moves from "authentic" discussion sections, helping them write their own

sections. The teachers also involve the students in self-reflection exercises to assess their understanding of the discourse conventions and their writing processes. The authors claim success for their course: "Rather than ignore or reduce this [rhetorical, textual, linguistic, and cognitive] complexity, our approach has been to find systematic ways of engaging students in discovering the richness of scientific argument so that they can successfully produce their own first attempts at experimental report writing" (Jacoby et al., 1995, p. 367). How that success is measured, however, is not discussed.

The students in Jacoby, Leech, and Holten's program are undergraduate science majors. Johns' (1995) students are first-semester general education students whose low scores on the writing entrance exam have placed them in an ESL adjunct program; they are considered "at-risk" (p. 281). Johns discusses the curriculum of an ESL writing class, a combination of study skills and genre teaching, linked to a general education geography class. The geography course was a large lecture class in which students listened, took notes, read textbook chapters, and were given examinations, mainly multiple-choice. She also mentions that the geography professor did not attempt to "initiate students into the discipline; nothing was provided that would increase their awareness of authentic genres" (p. 283). Despite, or perhaps because of, the geography professor's lack of attention to "authentic genres," the adjunct writing course curriculum revolved around a data-driven paper based on interviews, a library assignment, and a journal article abstract. In addition, the geography teacher assigned an out-of-class essay and an in-class examination response.

Johns (1995) describes two assignments from the writing course in detail: the data-driven paper and the abstract. She calls the first a "classroom genre" and the second an "authentic genre" (p. 282). A classroom genre (CG), according to Johns, is a type of assignment traditionally required of undergraduate students, such as essay exams, summaries, lecture notes, and research papers. Faculty assign classroom genres, Johns claims, out of habit, because they are "reminiscent of their own undergraduate experience rather than of the discipline they have chosen" (p. 282). Authentic genres (AG), on the other hand, are those "employed to communicate among experts in a discipline (e.g., "the bid, the proposal, the memo, the report, or the journal article"; Johns, 1995, p. 282). The responsibility of the adjunct class, according to Johns, is to teach both CGs (helping students fulfill current assignments), and AGs, so that students can "move beyond the requirements of the CGs to initiation into an academic or professional discourse community" (p. 283).

The AG assignment Johns discusses included reading a published research article on methods used in the conservation of Polynesian birds, suggested to the EAP professor by the geography professor, and writing an abstract based on this article. The series of activities related to this assignment began with studying the title and list of references at the end of the article, then writing an invented bibliographic entry using the style found in the list, and discussing different types of referencing. Johns next asked students to analyze the article's introduction using Swales' CARS model, followed by a discussion of the article's headings, maps, and citations. Finally, the students wrote an abstract

(the original one had been removed), based on the headings. According to Johns, the abstract assignment was "a very difficult one" for the students. She adds that "[m]ost did not get to the core of the article" (p. 288). Nor did the students have much success with the next part of the assignment—writing a formal letter to the Tonga Parliament, as if they were the authors of the research article, "discussing their findings and suggesting measures for conservation of wildlife" (p. 288). Johns admits that students "had difficulty" with this letter-writing assignment, "a formidable task" (p. 288).

Johns' (1995) students' difficulties with genre-based assignments raise questions about applying genre-research findings to teaching situations other than ones in which the research was carried out, a concern raised by Prior (1998). His case studies of graduate seminars in language education, geography, American studies, and sociology challenge the notion of genres as predictable and stable text types across and within disciplines. Rather, Prior's (1998) research reveals that "specific writing tasks are rarely routine, involving complexly situated and novel features" (p. 64). Due to the situated nature of writing tasks, Prior recommends further research into ways students and teachers coconstruct assignments under the specific conditions of a particular class. He also cautions teachers not to assume a congruence between "what students need for success in classes," "what they need for institutional progress," and "their needs in professional work after they graduate" (Prior, 1995, p. 76), pointing out that these may vary. Given the limited transfer between "well-structured lessons," for example those developed by EAP teachers, and "complex settings" students will encounter in their academic content classes, Prior proposes engaging students in "dynamic, situated, interaction" in such settings as linked classes and using tools such as dialogue journals, to facilitate "communicative flexibility" (p. 77). This formulation, he believes, may hold greater promise for EAP than attempts to apply genre- research findings from one context to another. This is not to say that genre analysis has no place in EAP, but, rather, that the situated nature of teaching and learning requires context-sensitive curricula based on classroom research, called for by McDonough (1986), cited earlier in this chapter. According to Prior (1995), "[i]f academic discourse and academic environments are complex, constructed and unfolding events and not closed systems susceptible to taxonomic and rule-oriented description, then we cannot simply specify and teach 'academic writing tasks'" (pp. 76–77), that is, a reified notion of genre.

## SUMMARY

The strength of EAP has been its sensitivity to context. Yet, this overview of its 30-year history shows that the definition of context has been revised continually. During the years of register and rhetorical analysis, vocabulary and grammatical choices were the context, the focus of research and teaching. Later, as attention shifted to communication and learning, skills and learning strategies became the areas of attention. More recently, with acknowledgment of the social

construction of knowledge and language as discourse, social practices have become central to EAP research and teaching. This does not mean that EAP no longer attends to texts or learning processes. In fact, Candlin (1999) believes that EAP has arrived at a reconciliation of "texts, processes, and practices" with its focus on the "interconnection of the three in particular discourse communities." That is, form, cognitive processes, and institutional practices are integrated in the current interest in "dynamic interdiscursivity." How that integration will manifest itself in research and teaching is an ongoing question. It remains to be seen whether McDonough's (1986) "classroom-initiated research" informed by theory will prevail.

Despite EAP's attention to context, however, one central assumption guiding EAP research and teaching has not been adequately addressed in its official history: That its purpose is to prepare students unquestioningly for institutional and faculty expectations (Benesch, 1993). This is one of the themes taken up in chapter 3, a study of the literature offering critiques of EAP from outside the field. First, however, in chapter 2, I discuss the unofficial history of ESP/EAP that is, their political and economic roots.