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ABSTRACT

Proceedings of the February 1993 conference on college instruction and services to promote retention and success of high-risk (limited-ability, limited-English-proficient (LEP), and learning-disabled) college students include prefatory remarks, a keynote address, panel presentations, and summaries of discipline-based workshops. The keynote address, by JoAnn Crandall, looks at the situation of students at the City University of New York (CUNY) in the context of the national situation, identifies the challenges facing CUNY in meeting the needs of a diverse student population, discusses the resources that this population can provide, suggests faculty strategies for accommodating a diverse population, and offers additional ideas for institutional involvement and support. Four panel presentations also offer ideas in the areas of: remedial and developmental instruction; learning of reading, writing, and speaking skills; and large classes. A refugee student's personal narrative is also presented. The discipline-based workshops summarized are those for health occupations, social sciences/education, humanities/arts, engineering/technology, business/mathematics; and science. Appended materials include the conference program, a list of faculty participants, and the description of an intermediate/advanced English-as-a-Second-Language (ESL) lesson in critical thinking and self-expression about current events. (MSE)

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ESL Students in the CUNY Classroom: *Faculty Strategies for Success*

Conference Proceedings



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Friday, February 5, 1993
8:45 A.M. - 4:00 P.M.

Borough of Manhattan Community College
199 Chambers Street
New York, NY 10007

Sponsored by The City College of New York
and Kingsborough Community College

This Conference has been made possible by a grant from the
National Center for Academic Achievement and Transfer

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ESL Students in the CUNY Classroom: Faculty Strategies for Success was organized by Kingsborough Community College and The City College of New York to build on and extend previous grant-supported activities intended to facilitate the transfer and retention of English as a Second Language students. Students who are non-native speakers of English are an increasingly large presence in City University's classrooms and this trend is projected to continue well into the next century. Teachers of academic subjects are becoming aware that changes in the student population may require new perspectives and strategies to meet the needs of students.

This Conference endeavored to support and encourage teachers to examine and share their pedagogical philosophies and techniques. Within this forum, CUNY faculty identified problems, discussed needs, and shared strategies to maximize the learning of the ESL students in their classrooms and promote prospects for successful student transfer from community to senior colleges. An outcome of the Conference is this compilation of teaching strategies discussed at the Conference. These Proceedings are available to faculty throughout the university and beyond.

Kingsborough Community College and The City College of New York gratefully acknowledge the support of the National Center for Academic Achievement and Transfer which made this Conference possible.

ESL Students in the CUNY Classroom:
Faculty Strategies for Success

Conference Proceedings

Special thanks
to the Coordinators of the Conference
who worked very diligently
and without whom
this Conference would not have
been possible.

Dr. Phyllis Zadra
Office of the Provost, The City College of New York

Professor Nancy Duke S. Lay
E.S.L. Department, The City College of New York

Professor Barbara Petrello
Department of English, Kingsborough Community College

Professor Robert Viscount
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PREFACE

Dear Colleagues:

As we get ready to go to press with our Proceedings for the Conference, ESL Students in the CUNY Classroom: Faculty Strategies for Success, it becomes clear that some background about the partnership that brought this project about is important to set the stage for the material that is enclosed. We hope that you take the time to read the articles and workshop synopses and find them helpful to you in planning your lessons in the coming years.

Background:

In 1991, The City College of New York, a senior college, and Kingsborough Community College received a grant from the National Center for Academic Achievement and Transfer for a Winter Intensive Study and Transfer Project (WIST). The primary objective of the program was to facilitate the transfer of ESL students at Kingsborough Community to four-year colleges. The Program was found to be highly successful in improving the English language skills of the community college students as evidenced by a significant improvement in the Skills Assessment Test scores. Also, the students' interest, confidence and motivation about transferring to a senior college were heightened.

In Spring 1992, The City College and Kingsborough Community College were invited to submit another proposal, under the auspices of the Partnership Grant, to build upon the relationship we had developed in our first project. Aware of the many obstacles that affect the retention and transfer of ESL students within CUNY, we chose to direct our attention to the concerns of CUNY faculty regarding ESL students in their classrooms and the special challenges they present. The conference was designed specifically for CUNY teaching faculty from selected academic disciplines as a forum to discuss issues of pedagogy and teaching strategies for English as a Second Language. It was supported by a second Partnership Grant.

The funding for the Conference provided us with an opportunity to bring an outstanding keynote speaker to the Conference and to experiment with ways for community and senior college faculty to collaborate on issues of mutual concern. With the Conference taking shape in our minds, we were inspired to contact faculty from five CUNY community and five senior colleges to outline ways in which we might discuss issues which affect them on a daily basis. The Conference day was designed to encourage interchange among the invited participants, and was particularly evident in our afternoon workshops which were moderated by pairs of CUNY community and senior faculty.

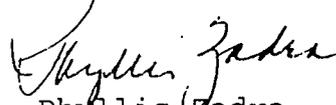
Approximately 90 faculty from humanities, social science, science, business, mathematics, education, health, engineering, technology, and nursing attended the one-day Conference held at Borough of Manhattan Community College on February 3, 1993. The enthusiasm of that day was electrifying. Misconceptions about the faculty from four-year colleges and community college gradually dissipated as we all became involved with the most important issue at hand, making our classrooms more responsive to the needs of ESL students and, in fact, to all students. This was a unique opportunity for CUNY's community colleges' faculty to share teaching experiences with senior colleges' faculty. The group found similarities and differences, as well as excellent suggestions for teaching ESL students in the various academic settings. The Conference also generated many questions. Should ESL students be treated differently? Should courses be taught in the first language? How can the ESL instructor work closely with faculty from different disciplines? Are we (CUNY faculty and administrators) sensitive enough to the diverse population that comes into our classrooms--culturally as well as linguistically? Are we too focused upon the problems presented by our students that we fail to bring out the richness of our student population? How can we make better use of our student diversity so our classes are more interesting and our students more respectful of their own cultures? These and many other issues arose during the course of the one-day conference.

We know that there are more questions waiting to be asked and few established campus venues for CUNY professionals to contemplate and discuss possible answers and remedies. The Conference, ESL Students in the CUNY Classroom: Faculty Strategies for Success, was a step in the important process of reconfiguring teaching environments to be more responsive to ESL students. The next step is for faculty on each campus to continue the "communication" process and encourage their colleagues to devise exciting, engaging and interactive approaches to their disciplines that will reach all of the students at CUNY.

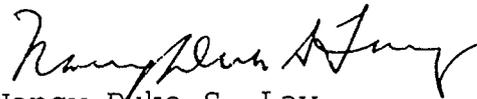
The *Proceedings* of the Conference include opening remarks by Vice Chancellor Elsa Nunez-Wormack, the Keynote Address by Professor JoAnn Crandall, University of Maryland, Baltimore, the remarks of each of our panelists and summaries of effective teaching strategies offered by the participants during the afternoon workshops. There was unusually high enthusiasm for the day considering it was a working conference and many worked until the end (beyond 4 P.M.). I am sure as you read through these articles that you will absorb some of the insights and some of the humor, and that you will choose to adopt some strategies that have been proven by your colleagues. In addition, I hope that some of

the good feeling and optimism so prevalent on February 3, 1993 can also be absorbed.

Sincerely,



Phyllis Zadra
Acting Associate Provost
City College of New York



Nancy Duke S. Lay
Professor, ESL Department
City College of New York

REMARKS

Presented by: Dean Elsa Nunez-Wormack
Office of Academic Affairs
The City University of New York

It is a pleasure to be here today and join you at this Conference, I am happy to lend my support as you share your ideas and endeavors to strengthen the goals of the English as a Second Language Council.

All of us in New York know that the strength of this city lies in the varied composite of people from every part of the world, bringing to us the history of their culture and the richness of their language, adding to the "great mosaic" as our Mayor calls it. The ESL programs at CUNY mirror this reality.

According to the best estimates currently available, about 18% of CUNY undergraduate students have taken at least one ESL course: 26% at community colleges and 15% at senior institutions. As a group, ESL students are more likely to be enrolled full-time 74% as compared to 58% for non-ESL students. Of ESL students, 54% were in associate programs and twice as likely to participate in SEEK and College Discovery.

Let's look at the typical ESL student. This student is more likely to be female (57%) and between 27-28 years of age. The highest percentage are of Hispanic heritage (41%) followed by Asians (28%). Most students in ESL courses were born outside the United States mainland, and most closely identify with nations in the Caribbean, the Orient, or in Central or South America. About 28% are of Chinese or other Asian origin, another 8% are Puerto Rican, 15% Central or South American and 13% are from Haiti. While by definition, ESL students who have taken one or more ESL courses, speak a language other than English, it is worthy to note that a high percentage continues to be more comfortable with their native language than they are with English. When the Fall 1992 entering freshmen were asked, 49.5% said they spoke a language other than English at home and of these 33% stated they were more comfortable in this other language. The CUNY ESL programs recognize that learning a language is a life-long process and it does not occur in isolation. The mission of the University is to provide a culturally enriched environment which is also conducive to providing a quality public education.

In closing, I would like to thank the faculty of the ESL Council. The Office of Academic Affairs expresses its

appreciation for the leadership they have provided to the students of the City University of New York.

**SHORT BIOGRAPHY OF KEYNOTE SPEAKER:
DR. JOANN CRANDALL
UNIVERSITY OF BALTIMORE**

Dr. JoAnn Crandall received her Ph.D in Sociolinguistics and Applied Linguistics from Georgetown University and is presently an Associate Professor in ESL/Bilingual Education at the University of Maryland, Baltimore County.

In 1977-1992 she was the Vice President and Director of International and Corporate Education Division, Center for Applied Linguistics.

Some of the selected projects she has directed include:
National Clearinghouse on Literary Education for Limited English Proficient Adults and Out-of-School Youth;

The Language of Mathematics: The English Barrier.

Dr. Crandall has done extensive work here and abroad and her publications are numerous. Specifically, she has done a lot of work linking language and content-based instruction for language minority students.

Speech delivered to the Conference on ESL Students in the CUNY Classroom:
Faculty Strategies for Success, February 5, 1993

DIVERSITY AS CHALLENGE AND RESOURCE

JoAnn Crandall
University of Maryland Baltimore County

I am pleased to have been invited to meet with you today and to participate in such important discussions. I am also honored to have been asked by The City University of New York (CUNY), an institution which is nationally recognized for its commitment to providing access to language minority students and for the quality of its efforts in helping these students to achieve success in their college program. In getting ready for this talk, I reviewed a number of documents and reports about the CUNY system, its ESL programs, its testing procedures, and the various academic initiatives and other support programs which it has instituted in an attempt to better serve language minority--and all--students and to increase both academic achievement and continuing participation or retention in college (Benesch, 1991; Cochran, 1992; CUNY ESL Council, 1991; Instructional Resource Center, 1989; Otheguy, 1990). Given CUNY's reputation for innovation and excellence in both English as a second language (ESL) and more broadly, for programs which support an open access policy and help students who otherwise might be denied a college education to achieve academic success, I was not surprised to learn of the number and the quality of the initiatives, but I did wonder what I might be able to contribute to the discussion. Perhaps I can serve best by identifying some disparate efforts, attempted at only one or two of the colleges and often for only brief periods of time, and organizing them into a larger, more coherent picture, suggesting some ways in which these efforts might be expanded, adapted, researched, or validated, and hopefully, shared with other institutions across the country who are experiencing similar increases in the numbers of language minority students.

What I plan to do this morning, then, is to 1) place CUNY's situation within the broader context of the country as a whole; 2) try to define the nature of the challenges facing the CUNY system in meeting the needs of such a diverse population, commenting briefly on what it means to learn a language for participation in academic instruction through that language; 3) reframe that discussion somewhat in terms of the resource that this diverse population represents; 4) review some of the program initiatives which I have read about in literature about CUNY and suggest some strategies which faculty might use to better accommodate a linguistically and culturally diverse population; and 5) suggest some additional areas for CUNY involvement and support.

CUNY AS A MICROCOSM

In a real sense, CUNY is both a microcosm of New York City and of the United States as a whole, reflecting the increasing diversity of our population. In both New York and the United States, between 1980 and 1990, the Hispanic or Latino population increased by more than 50% and the Asian-American population more than doubled (Bureau of the Census, 1991; Waggoner, 1992). New York City has the largest Chinese and Indian communities in the country and the second largest Korean community after Los Angeles (Asian American Higher Education

Council, 1990, cited in Cochran, 1992). As world political conditions change, so does our immigrant and refugee population and New York reflects that change as well, with increasing numbers of Russian, Eastern and Central European, Caribbean, Central and South American, and Hong Kong arrivals (Cochran, 1992; Lin, 1991; Raphael, 1989). Since most of these individuals come to the United States seeking freedom and a better life, one can expect that they and their children will enter not only elementary and secondary classrooms, but tertiary level programs as well.

In short, as the CUNY Language Forum states, New York City--and by extension, CUNY--can expect to be educating increasing numbers of students who speak languages other than English at home. Currently, an estimated one-third of all CUNY students come from homes in which a language other than English is spoken, consistent with the general New York City statistics. They speak some 50 different languages, the most common (as throughout the United States) being Spanish and Chinese (mostly Cantonese), though there are large numbers who speak Haitian Creole, Korean, Vietnamese, Russian, Italian, and other languages as well. Add to this the number of individuals who speak another variety of English--West or East Indian, Filipino, Sri Lankan--and the community becomes even more diverse and the challenge for CUNY even greater.

THE CHALLENGE FOR CUNY

In the last 15 years, the number of students speaking a language other than English at home has increased dramatically--from an estimated 5,000 in 1976, to 7,500 in 1981; to more than 12,000 in 1989, and the number is still growing--with all colleges in the system affected, though the percentage of students at any one college varies greatly, from a reported 1% to 80% (Raphael, 1989). It might surprise you to know that this growth in language minority populations is typical of colleges and universities across the country. In fact, a recent survey conducted by The Center for the Study of Community Colleges in Los Angeles, California, which has been tracking community college curriculum trends since 1975, found that ESL is the fastest growing area of study in US community colleges (Ignash, 1992). Eight community colleges had more than 70 sections of ESL, with the largest, El Paso Community College, reporting 429 sections! Currently, at CUNY, an estimated 15-20% of all students require at least one semester of ESL upon entry (Raphael, 1989), but a much larger number require support and assistance from a variety of sources--from faculty, counselors, peers--to realize their full potential as students.

Not only are numbers increasing, but the diversity of these students is increasing as well. The students in these colleges, as in CUNY, vary greatly in terms of cultural background, prior education, degree of English language proficiency, and the like. Cochran and her colleagues (1992) did an excellent job of profiling the student population at CUNY into six major groups: 1) native speakers, 2) close to native speakers, 3) foreign-educated adults with some knowledge of English, 4) foreign-educated adults with no knowledge of English, 5) non-native speakers with limited schooling, and 6) non-native nonliterate speakers. All of these students will need some kind of assistance in acquiring the academic, study, and thinking skills required of college level courses. Some of that assistance can come from study skills sessions, orientation and academic counseling, or special developmental reading, writing, or ESL classes, but the majority will need to be provided through the regular academic program. In fact, all students will need to continue developing what has been termed in the

psycholinguistic literature as "academic English": that is, the abstract, formal, cognitively complex, decontextualized language in which relatively complex concepts are presented, analyzed, discussed, and tested (Cummins, 1981). While some of that language will be familiar to native English-speaking students, even they will continue to acquire and develop their academic English throughout their college life, and hopefully, after that as well. Think, for example, of the amount of time spent, especially in introductory courses, on teaching the specialized language of your own academic discipline and of the length of time it took to master it. Those for whom English is an additional language (a second, third, or more), will need even more time and specialized attention to developing academic English and to learning the culturally-influenced repertoires of written and spoken English expected in American colleges and universities.

In essence, then, all faculty must view themselves as both language and content teachers, especially in institutions with such linguistically, culturally, and academically diverse students. ESL faculty must incorporate tasks, texts, and even tests from other academic areas into their instruction, in order to help prepare students for the academic language demands of their other courses; faculty in other disciplines must consider the language demands of their courses and help all students to acquire this language, as they are also learning the concepts. (See Crandall & Tucker, 1990; Crandall & others, 1987 for further discussion.) It is not only unrealistic to expect ESL students to defer any real academic learning until they have become fully proficient in English, it is also probably impossible, since much of that proficiency in English can only develop when students are engaged in meaningful use of English in real academic contexts.

Let's take each of the six groups Cochran and her colleagues identified separately and briefly discuss their needs. First, the native speakers. These range from monolingual English speakers to bilingual or bidialectal speakers, both of whom, if I read the CUNY literature accurately, are likely to need academic support, with special attention to reading, writing, and study skills--especially to the particular academic discourse expected in college. While students develop some of this proficiency and these skills in developmental programs, it would be inappropriate to believe that this kind of intervention alone is sufficient. We can begin the process in specialized sections focusing on academic reading or writing or study skills, but students will only be able to build upon these and expand them by being placed in academic contexts in which these skills are used, and in doing so, they will encounter new language, concepts, and skills which will need to be developed in the specific discipline. For example, it is possible in a reading course to help students understand the basic organization of academic or scientific texts, but the development of specific arguments and the linguistic and textual clues to that development need to be learned within the context of the discipline. Those of you in the sciences will be familiar with the current emphasis on ferreting out and addressing students' misconceptions and misunderstandings. Much of what is done in those efforts is similar to what I am referring to here. Misconceptions and misunderstandings often have linguistic, as well as conceptual, bases which need to be identified and discussed.

The second group, close to native speakers, are similar to the previous group, though all are somewhat bilingual or bi-dialectal. Most were born in the United States or arrived at an early age and have attended our public schools.

They may be quite fluent in oral English, but that may lead to exaggerated expectations of their written English proficiency and to their reading as well.

The third and fourth groups of students are foreign-educated adults who differ primarily in their exposure to and mastery of English. Those with some knowledge of English are likely to have acquired it in foreign language classes in their own countries. Depending on the number of years of study, the relative importance of English within their schools, the possibilities of listening to or using English outside of school, and the like, their proficiency is likely to vary a great deal. They differ from limited English speaking native-born students primarily in their relative proficiency in reading and their more limited facility with oral English. They may have special difficulty in following lectures or discussions which are typically spoken in rather rapid English and will need special courses on developing listening and speaking skills. These students may also have difficulty in the kinds of academic writing required of them.

Those with no knowledge of English but some prior education are generally part of one of two groups. The first are the older, foreign-educated adults, who came as refugees and immigrants with no prior education in English, who will be trying to acquire both oral and written English while they are also trying to become acculturated to CUNY. The second are the younger immigrants or refugees who may have had some ESL in New York City high schools, (and therefore, strictly speaking, have some knowledge of English) but because of interrupted education and differences between the education they received in their home countries and that expected of them here, they are also trying to catch up in their subject matter courses while they were also trying to acquire English: a daunting task, if there ever was one! They will need both ESL and additional work to strengthen their mastery of academic content, preferably in linked or paired courses or in courses in which academic instructors specially adapt or "shelter" their instruction so that these students can grow cognitively and linguistically at the same time.

Non-native students with little or no prior schooling--categories five and six--represent even more of a challenge for our colleges, since they need intensive attention to both academic concepts and language and this will take time. While they may have a multitude of experiences on which to draw in their education, they are not likely to have developed many of the expected academic or language skills, even in their first language, and if they participated in some education in the United States, it was probably not sufficient to prepare them for college work. Depending on their age and the amount of time they have functioned outside of schools using English, they may have developed a "fossilized" form of English with a number of structural errors which can be very difficult to remove, especially in older learners. These students will need a great deal of time in ESL, some of which should be directed toward the mastery of basic knowledge in core courses, perhaps through bridge or sheltered programs. Those who are non-literate will of course take even longer. It is difficult for those of us who are literate to understand how long it can take for a breakthrough to initial literacy, which is made even more difficult if one is trying to do this in a language which is unfamiliar at the same time. Ideally, these students would get initial literacy in their own languages while focusing on oral English and then make the transfer to English language literacy and academic content instruction, but the number and diversity of languages may make that difficult. (I applaud, however, the presence of some bilingual programs on

CUNY campuses.) For both of these last two groups, time and intensity of instruction are major requirements.

MEETING THE CHALLENGE: ACADEMIC LANGUAGE, LITERACY, AND CONCEPTUAL DEVELOPMENT

This diversity may seem overwhelming, but there are some principles that can serve as guidelines in our attempts to accommodate and effectively serve these students. To begin with, it is important to remember that language acquisition and learning are developmental and students will continue to develop their language skills, so long as there is both motivation and appropriate educational experiences in which to do so. The same is true of literacy: we are all someplace on a continuum of literacy and we become increasingly more literate as we are challenged to understand new ideas and texts. In fact, rarely does one see the singular term "literacy" used (except perhaps in its negative form of "illiteracy" and then usually in some kind of story to scare us about the extent of that phenomenon in the United States). More common is a reference to "literacies"--to "scientific," "computer," "workplace," or even "family" literacies--an attempt to capture the varying nature of the kinds of skills and practices required in different situations (Crandall, 1992; Crandall & Imel, 1991).

To some degree, language and literacy skills are transferrable from one situation to another, as they are from one language to another, but at the same time, new skills need to be developed within the context in which they will be applied. This is a message which we are hearing increasingly from linguists, ethnographers of communication, literacy experts, and even the educators and employers who formed the Secretary (of Labor's) Commission on Achieving National Skills. It is also a message that each of us hears from our students when they report little prior difficulty in reading or writing, but a great deal of it when confronted by our texts, tests, or writing assignments. As students enter new academic areas, they acquire new academic language and literacy skills, and most of them, native speaker or not, need help in doing so.

Both native and non-native speakers (unless they have substantial amounts of education in another country) may be much more fluent in oral English than they are either fluent or accurate in written English. According to a number of studies of public school students who speak a language other than English at home, students usually need only one or two years to acquire the ability to speak English rather fluently, both with their peers and their teachers, especially in relatively informal contexts. Their seeming fluency, in fact, is part of the problem they face, since routinely teachers and schools exit them from ESL with the expectation that they will be able to participate equally with English-speaking students in regular academic classrooms. However, it takes five to seven years to acquire the more complex forms of English such as those required in reading history texts, writing up lab experiments, solving mathematical word problems, or making formal oral presentations, even for those students from relatively advantaged homes (Cummins, 1981; Collier, 1987, 1989). Even students who have had bilingual or ESL classes in our schools may not have had sufficient attention to their linguistic or academic development, either in their ESL program or their regular classes, to be successful in secondary school or to prepare them adequately for college. They will need linguistic, academic, and perhaps, emotional support when they enroll. If they have been educated in another country and have developed that threshold of academic language proficiency, even though it is in another language, the time required may be

somewhat shortened, since much of the academic proficiency from the first language will transfer to English, as they are learning the language. For them, however, oral communication is likely to be a problem, since they may have had little opportunity to really hear or speak English.

Both native and non-native speakers may need help in acquiring written English, as the numbers of developmental composition classes attest. For non-native speakers of English, however, the task may be more difficult and the required time may be longer, since there does seem to be considerable interference from first language discourse styles. Studies of academic writing in English by students who speak Spanish, Chinese, Arabic, Russian, and other languages have found consistent differences in the ways in which discourse is organized in those languages and in English (Kaplan, 1966; Connor & Kaplan, 1987; Grabe & Kaplan, 1989). Those of you who have become impatient with seeming digressions from the main idea by Spanish or other Romance language speakers or the seeming spiral development of an argument by Chinese or Japanese speakers--when what you were looking for was the simple linear introduction, body, and conclusion familiar to our culture--may now know that there is an explanation for it. But for the students, the explanation may not be enough: it takes a long time to develop new discourse styles in writing.

Cultural influences are also likely to affect students' oral discourse as well. We may expect students to ask questions or to challenge us, but that may not be culturally appropriate for some students. We may also feel that some students ask too many questions at the "wrong" times, and in seemingly disrespectful ways. We want to be challenged, but not too challenged! No wonder it's difficult for our students. There's so much to learn.

CULTURAL AND LINGUISTIC DIVERSITY AS A RESOURCE

But, before we go into more detail on the diversity of programs needed by these students and the various strategies which faculty can employ to accommodate this multilingual and multicultural student population, let's take a step back and reconsider this diversity, not as a challenge, but as a resource. CUNY, like New York City, is fortunate to have a population which is representative of much of the world. In an era of North American Free Trade Agreements, the Common Market and European Community, and the growing inter-relationships of the Pacific Rim countries, business, industry, and economies are becoming inextricably linked. While English has achieved an unprecedented status, becoming something of a "second language of the world," we cannot, or should not, expect that to continue indefinitely. At some point (and the trend is evident even now), business, political, and other leaders will become impatient with what is perceived as the rampant monolingualism of Americans or in Paul Simon's words, the prevalence of the "tongue-tied American". We should be encouraging competence in another language for English-speaking Americans if we are to achieve what Dick Tucker has termed "a language competent American society," and we should definitely be nurturing native language and cultural fluency among our diverse students and making it possible for them to acquire the English language and academic education so that they can function bilingually in business, professional, technical, and other contexts (Tucker, 1986). A bilingual, bicultural workforce is an asset. I can still remember Sylvia Porter's advice to high school students many years ago when she was asked what students might do to ensure that they would have a (good) job. Her response: become bilingual. With economies as fragile as ours and with the world becoming smaller and more

interdependent, that advice strikes me as equally appropriate today. Moreover, there is substantial evidence that bilinguals are more cognitively flexible and that diversity can yield innovation, both of which are good for our institutions and our country. (See Tucker, 1989 for a discussion of the cognitive consequences of bilingualism.)

Moreover, the presence of students from a variety of linguistic, cultural, and educational backgrounds enriches all of our classes and represents a resource which we should tap in all our courses, especially in our literature and social science courses, developing curricula which are reflective of that diversity. The presence of these students can help to expand the horizons of the more parochial students and may even help English-speaking students to discover part of their own ethnic heritage. The students who speak another language may find that the shared heritage enables them to interact with English-speaking students and to improve their own proficiency in the language.

I do not want to belabor this point, but I do feel it is important to stress the value that this diversity represents to CUNY and to the nation as a whole, before moving into a more detailed examination of the kinds of programs and strategies which can be used to meet these diverse student needs.

MEETING THE LINGUISTIC AND ACADEMIC NEEDS OF A DIVERSE STUDENT POPULATION

Let me begin by reviewing some of the initiatives which have been tried and may be currently in place at CUNY colleges. Forgive me if not all colleges are mentioned, but time prohibits that. I believe, however, that it is important to mention some of these, since if CUNY is like other multi-campus institutions, most of you know very little of what is being tried at other institutions, or maybe outside of your own department on campus! For this portion of the talk I am particularly indebted to two documents: The City University of New York English as a Second Language Programs (Instructional Resource Center, Office of Academic Affairs, CUNY, 1989) and Into the Academic Mainstream: Guidelines for Teaching Language Minority Students (Cochran, ed., 1992, in conjunction with The CUNY Language Forum and The CUNY ESL Council). If you have not read these documents, I commend them to your attention. I would also recommend that you look at other key resources on integrating language minority students into English-medium classrooms, especially the collection of articles edited by Benesch 1988, since most of these directly refer to the innovative programs at CUNY. In addition, you may want to look at Brinton, Snow, & Wesche, 1989; Crandall, 1987, 1993; Crandall & Tucker, 1990; Mohan, 1979, 1986; Short, 1991. While some of these deal primarily with K-12 contexts, the suggestions for programs and strategies are usually appropriate for college classes as well. In addition, there have been a number of studies focusing on problems encountered by secondary and college students in particular disciplines, especially mathematics and science, which identify strategies to use in helping students deal with these problems. (See Cuevas, 1984; Spanos & others, 1988; Fathman, Quinn, & Kessler, 1992.)

I will try to organize my discussion into the following categories: 1) strategies which seek to increase the linkages between language development--reading, writing, or oral communication--with academic content; 2) grouping strategies which increase interaction among students of a variety of English language proficiencies; 3) writing initiatives which can be implemented at the college level or in individual classrooms; 4) the use of graphic organizers to

assist students in identifying and organizing the major ideas of a text or lecture; and 5) a number of other helpful strategies or guidelines.

1. Strategies which link language development with academic content development

There are three basic ways in which language and content can be integrated: faculty from ESL can integrate material from one discipline or several disciplines by building the language curriculum around the academic content, using texts (either authentic or adapted), tasks, and language from that content in what is often referred to as content-based ESL; faculty in specific disciplines can adapt their instruction, using the techniques which experienced ESL and other language faculty use to enable students of different levels of language proficiency to make ideas comprehensible and to enable students to learn academic concepts while they are also developing their English language skills in what is often referred to as sheltered instruction; or some combination of the two in the form of paired classes, team teaching, or an integrated curriculum is used (Crandall, 1993). Examples of all three can be found in the CUNY system.

For example, City College has developed Readings for ESL Students which uses college-level reading materials drawn from history and other areas, organizing these around themes of relevance to language minority students, such as international migration, urbanization, family history, or American expansion. City College also has developed conversation groups pairing ESL students with faculty from various disciplines; in one program, students meet one hour a week in small groups throughout the semester. Hostos, in its Access Project, has developed a block program of courses for intermediate students interested in health careers which includes special sections of courses in health, science, math, oral language and written language.

Special sheltered sections of academic courses, which accommodate language minority students, have also been tried by some of the CUNY colleges, though there is limited mention of these in the literature I reviewed. For example, Hostos has developed new content courses or modified existing courses to accommodate advanced ESL students.

Paired courses, which have been tried successfully in a number of contexts, ranging from a UCLA summer preparatory program linking ESL with psychology, to a pairing of genetics and ESL at St. Michael's College, and a human geography course with ESL at Macalester. Sometimes the ESL courses focus on specific academic skills, such as reading or writing, as is the case at Philadelphia Community College, where a history or psychology course is linked with ESL reading or writing. Paired courses have also been implemented at CUNY. For example, Hunter has paired a social science course that studies "historically oppressed minorities" or "conquered peoples" (Cochran, 1991:12) with an ESL writing class and LaGuardia has paired an intermediate ESL course with a business skills course in keyboarding, proofreading, and formatting. LaGuardia has also paired an advanced ESL course with an interdisciplinary course with modules in art, music, philosophy, and theater. Baruch College, likewise, pairs journalism and ESL, taking advantage of the obvious link of writing between the two. At the College of Staten Island, students who have failed all the skills assessment tests take reading, writing, and one content course for a semester, with instructors meeting weekly to coordinate the curriculum.

However, if the literature I reviewed is accurate, there is relatively limited use of any of these models. I believe their use should be expanded. Where there are substantial numbers of language minority students, there is little reason not to increase the number of content-based ESL classes, sheltered content classes, or paired courses. These might even form a sequence of courses for ESL students, with less proficient English speakers enrolled in ESL courses which introduce progressively more content, probably drawn from core courses which most freshmen or sophomores are likely to take. They would move then to sheltered content classes, where special cohorts of intermediate or advanced ESL students would meet in one section of a course taught by a faculty member who is willing and able to accommodate students whose language proficiency is still improving or to paired courses, linking special sections of a history or psychology or other core course with ESL reading, writing, or integrated skills. A sheltered course does not need to be "watered down," a frequent concern of content faculty. What it does mean is that core concepts are focused upon, more attention is paid to making certain students understand the language and concepts, and more time is provided for students to read, discuss, and write about their responses. As one high school biology teacher who finally agreed to teach a sheltered section informed me with some surprise in his voice: "You know, many of these kids are gifted and talented!" Until someone had gone to the trouble to ensure that the students were receiving comprehensible input, all of these students had been dismissed as "deficient." That seems especially surprising coming from a science teacher, when the largest percentage of graduate degrees in scientific and technical areas are being awarded to non-native speakers of English. Those who study freshman French or Spanish are not considered disadvantaged or deficient, and we even give them three credits or more for their meager efforts and results. Our ESL students perform at a much higher level of proficiency and receive little or no credit. I am pleased to see that most CUNY colleges offer at least a token of credit for ESL, though far fewer credits than would be given in an equal amount of time spent in another language class.

2. Grouping strategies

There are a number of ways in which the use of small groups--especially those organized around cooperative learning principles--can assist language minority students, while benefitting other students as well. But it is essential that each member of the group be assigned a role, such as that of Facilitator, Recorder, Reporter, and the like, and that these roles maximize students' abilities and enable them to learn from others who have different strengths. There are a number of cooperative activities that are beneficial to all students, but also appropriate for language minority students (Holt, Chips, & Wallace, 1992; Jacobs & Mattson, 1987; Kagan, 1986; Slavin, 1983). Let me discuss two of these. The first, what is termed "think-pair-share," is a simple activity in which students are given some time to think about a topic, perhaps taking notes about what they have read, what they already know about a subject, the questions that they have, predictions about what is going to happen, and the like. After having time to think, students share their ideas with another, and then finally, with the whole group. This approach provides the language minority student with time to think and respond in a second language (in which processing time is likely to take longer) and more important, it also offers rehearsal time, time to try out not only the idea, but an appropriate way of communicating it in English with a peer, before being asked to respond in class. Those of you who have been called on to respond in a foreign language--when you knew the answer

but just did not have time to find the appropriate words to use--will understand what the quiet, thinking time and the sheltered, sharing time might mean. In fact, time is a precious commodity to students functioning academically in a new language. We need to provide it whenever possible; i.e., before asking students to answer questions in class or when assigning in-class writing assignments or tests.

A second activity, what is referred to as "jigsaw"--has different members of a group responsible for researching, mastering, or writing about, different aspects of a related topic. For example, in a four-act play, each of the four members of the group might be responsible for summarizing one act, working in conjunction with students from other groups who are responsible for that same act. After all those dealing with act one are satisfied that they have an adequate summary, they return to their groups and provide that summary for the others, who in turn summarize acts two, three, and four. Students developing their language proficiency are provided with a real need to communicate, to make themselves understood; in turn, they receive support and help from their peers, who may restate a fractured sentence or provide a missing word or otherwise help the language minority student to better communicate his or her message. The advantages of this approach are obvious for language minority students, but they are also beneficial for all students. It has been said that "No one learns as much as the teacher." With jigsaw, as in most cooperative activities, every student becomes a teacher. ESL students have multiple opportunities to get the information and acquire the language required to communicate and time to explore ways of communicating that information, with support from their peers. I would encourage this approach even in testing situations. I currently encourage my graduate students to work in small groups, not only on reports and projects, but also on out-of-class exams. Since I found that I learned most as a graduate student from discussion groups with other students, I have applied that to all my classes and the quality of their output far exceeds what I might have expected from singular efforts. They also seem to retain what they have learned much more, perhaps because they have had to clarify their thoughts for others and have also benefitted from their peers' feedback. Moreover, peer response mirrors real life: how many of you would consider sending out a paper for publication or preparing a talk for a conference without asking others to comment or help you refine your thinking?

Peer tutoring and buddies can also provide support for language minority students. Not only may peers be better able to adapt their language a i instruction to accommodate language minority students, but they are also likely to learn a great deal from the tutoring process. Those who have recently been in ESL classes may find that their language proficiency continues to grow more if they are also helping others to improve theirs. Hunter College engages students who have recently exited from the ESL classes as peer reviewers in writing courses, helping students to revise and edit their essays. Additional initiatives of this type, pairing ESL and English-proficient students or students of different levels of ESL, would be useful, especially in academic tutoring and writing programs.

3. The importance of writing

That brings me to the importance of including writing in classes with language minority students. There is often a tendency to "excuse" these students from writing assignments which require more than short sentences; while that

tendency may be well-intentioned, it is misguided. For students to be able to grow both linguistically and academically, there must be some output. They must take their current understandings and articulate them, either orally or in writing. Since much academic work proceeds through writing, and since reading and writing are processes which complement each other--We learn to read not only by reading, but also by writing and we learn to write, not only by writing, but also by reading--we need to ensure that language minority students are provided with multiple occasions for writing, with multiple purposes and texts. This might take the form of group reports, produced in a jigsaw fashion, described above. It might involve the keeping of journals or learning logs, which can be responded to by other students or by the faculty member on an occasional basis. They might even evolve into dialogue journals, an ongoing written conversation between faculty and student or two students or some combination of the two (Peyton & Staton, 1991). And they might result in the publication of student writings, such as ESL Voices, which is a magazine of ESL student writings published at the Borough of Manhattan Community College that draws its entries from students at all levels of ESL proficiency, including the beginning levels.

The fact that Manhattan publishes submissions by even beginning ESL students is instructive for all of us. Students with developing language proficiency may still have important thoughts to convey. While there may be a natural tendency to focus on grammar, spelling, and punctuation--rather than the ideas being communicated--a more effective strategy is to focus on the quality of the ideas offered by the student and to model the appropriate forms of language in any written comments or responses. This is true for native speakers, for bidialectal speakers, and for language minority speakers alike. There is substantial evidence that all the correction in the world will not assist a student until he or she is developmentally ready to make that correction; moreover, language errors are often evidence that learning is taking place (Cf. when children who have been saying "came" or "went" begin shifting to "comed" and "goed," evidence of their beginning recognition of the way in which the past tense is usually formed in English. Over time, they will sort this out, returning to the use of "came" and "went," but also using "talked," "played" or other regular past tense verbs.) It seems a terrible waste of time, and to borrow a phrase, "of a mind," to focus on the smallest and least significant levels of writing while ignoring that which is most important: the thoughts or ideas being conveyed. If students are given adequate time to develop their ideas and are encouraged to provide feedback on each others' drafts, in a writing workshop or process-based writing approach, they will have an opportunity to refine their thinking and also to improve the overall quality of their writing. This is one reason why paired ESL writing and content courses can be so effective. The social science or science or business teacher can focus on the student's grasp of the concepts from these areas, leaving the ESL teacher to direct attention to both the over-all organization of ideas and the more minor details of mechanics or style. I notice, also, that most colleges have both ESL and English Department readers for the Writing Assessment Test, an important safeguard against over-emphasizing relatively low-level errors at the expense of the more important aspects of effective writing.

Writing can serve as a way of encouraging students to explore what they already know about a topic (i.e. in a freewriting activity at the beginning of class); to articulate questions or concerns that students have; to serve as the basis of small group discussion; or to summarize what has been learned from a reading assignment. And when students read each others' writings, they improve

their reading as well.

4. Using graphic organizers

Graphic organizers are schematics which illustrate the knowledge structure of a text; for example, a flow chart can be used to illustrate a sequence of events; a Venn diagram can be used as the basis for comparing and contrasting two theories or species; a timeline can be used to reflect different eras or events in one historical period. They may take the form of reading or learning logs, in which students can record what they understood about a text, the questions that they have, and what they learn subsequently through class discussion or further reading. They may even serve as the basis for paired or group jigsaw activities, with students having different portions of the information required to solve a problem and fill in the graphic.

Graphic organizers may be one of our most powerful tools for assisting all students in academic achievement, and they are especially helpful for language minority students, since they help break down dense text or lectures, pointing out that which is most important and the relationships among these items. For example, a chart which is partially filled in can be used to direct students to the most important ideas in a chapter; when students have completed the chart, they should not only have a clearer picture of the structure of the text and the relationships between ideas, but also have a study guide which can be referred to later. Graphic organizers can be used before reading or class lectures or discussions to provide a way of activating students' prior knowledge and encourage their predictions, based on clues provided in headings, pictures, and the like. They can be used during reading, lecture, or discussion, for example to assist in note-taking during a lecture, to record group ideas of possible causes and effects or advantages or disadvantages, or to identify major facts or themes in a text. And, afterwards, they can serve as the basis for a writing assignment.

Let me give one example where they are used at all three times. Students were given a chart to complete as they read a biographical portrait. They then were asked to complete another version of that chart with information on another comparable individual they obtained through their research. Finally, they were asked to write a brief biography, using the information in the chart. The chart provided direction for the initial reading, helped focus their research efforts, and served as a framework for writing.

5. Other strategies or guidelines

Essentially, if what we know about language acquisition and development is accurate, students learn language better when their attention is focused on interesting and relevant content and when that language is made comprehensible to them (Krashen, 1981). Faculty can make even complex material comprehensible by providing multiple opportunities for students to understand that material, previewing a lecture with an outline, making notes of important ideas on the board, providing opportunities for students to discuss and write about what they have learned, and the like. Using visuals and graphic organizers can also help, as can the use of demonstrations, experiments, and other experiential approaches to learning. Opportunities to receive differential input and to get clarification and feedback from others in paired, small group, or cooperative activities is also helpful, as are references to the students' own experiences

and backgrounds. And while these are helpful to language minority students, they are effective for most other students as well. In short, they represent good teaching. While a lecture may be an efficient way to transmit knowledge, there is little opportunity of seeing whether it has been received, let alone understood, in conventional classrooms. Classrooms in which students engage in group discussions or writing, where there is sufficient time for reflection, discussion, and integration of new knowledge with previous experience may result in less information being presented, but it could also result in much more being understood and remembered.

SOME FINAL SUGGESTIONS

In closing, let me make a few suggestions based on what knowledge I have been able to glean about CUNY from available reports and articles.

- 1) Some interesting program innovations are occurring at each campus, but there seems to be little attempt to share ideas or to learn from each other. This conference is an important step in that direction. Faculty should be encouraged to document their practices, to conduct research which both describes and evaluates these practices, and then to share the results with other campuses. Cross-campus comparisons might also be tried.
- 2) Greater attention needs to be paid to conscious integration of ESL and academic content instruction. Faculty should be encouraged to collaborate, developing more content-based ESL, sheltered instruction, or paired courses. Students in these programs should then be followed and the overall effects of the programs documented.
- 3) Moreover, just as the ESL program might be more integrated and less divided into classes focusing on reading or writing, the academic disciplinary courses might increase their focus on reading and writing, as well as the development of discussion and presentation skills.
- 4) ESL faculty need to be viewed as a resource to all other faculty, providing suggestions on ways in which faculty can better meet the needs of language minority students. ESL faculty need to work closely with faculty from all other Departments, helping to create bridge, sheltered, or paired courses. To do so, colleges with substantial numbers of ESL students will need to look closely at the number full-time and adjunct ESL faculty. To build coherent, integrated programs, faculty need to be able to devote adequate time to the substantial planning and monitoring that need to take place. It is unrealistic to expect adjunct faculty to engage in collaborative program design, to undertake long-term research projects, or otherwise to provide long hours of work additional to their teaching load. Moreover, the colleges should consider making ESL a separate Department (rather than a part of English or other Departments), reflective of its status as a separate and important discipline, especially in colleges in which substantial and increasing numbers of students are receiving their first college courses in ESL.
- 5) And, finally, language minority students need to be viewed as a resource whose value is reflected in courses across the curriculum. References to one's heritage or history or literature can lead to increased self-esteem, which, in turn, is likely to lead to increased academic achievement. It is also likely to benefit all students. As Cochran says,

"Multi-culturalism is an asset, not a liability, a fact to which most urban educators bear ready witness. Because of the presence of ESL students, classes are richer and more complex, albeit more demanding. . . . A challenge, to be sure, but most assuredly not a negative one." (1992:3)

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REFERENCES

- Anonymous. (1993). Bilingual education: Native tongues. New York times, January 4, B4.
- Brinton, D. M., Snow, M.A., and Wesche, M. B. (1989). Content-based second language instruction. New York: Harper and Row.
- Bureau of the Census. (1991). 1990 census. Washington, DC: Author.
- Cochran, E. P. (Ed.) (1992). Into the academic mainstream: Guidelines for teaching language minority students. New York: Instructional Resource Center, The City University of New York.
- Collier, V. P. (1987). Age and rate of acquisition of second language for academic purposes. TESOL quarterly. 21.4.617-641.
- Collier, V. P. (1989). How long? A synthesis of research on academic achievement in a second language. TESOL quarterly. 23.3.509-531.
- Connor, U. and Kaplan, R. B. (Eds.) (1987). Writing across languages. Reading, MA: Addison-Wesley.
- Crandall, J. A., (Ed.) (1987). ESL through content-area instruction: Mathematics, science, social studies. Englewood Cliffs, NJ: Prentice Hall Regents/Center for Applied Linguistics.
- Crandall, J. A. (1992). Language, literacy, and multilingualism. In J. E. Alatis (Ed.) Georgetown University Round Table on Languages and Linguistics 1991 (pp. 471-484). Washington, DC: Georgetown University Press.
- Crandall, J. A. (1993). Content-centered learning in the United States. In W. Grabe (ed.) Annual review of applied linguistics, Vol. 14. New York: Cambridge University Press. to appear.
- Crandall, J. A., Christian, D., Simich-Dudgeon, C., Willetts, K. (1987). Integrating language and content instruction for language minority students. Wheaton, MD: National Clearinghouse for Bilingual Education. [ERIC ED 291 247.]
- Crandall, J. A. and Imel, S. (1991). Issues in adult literacy. The ERIC review, 1.2.2-9.

- Crandall, J. A. and Tucker, G. R. (1990). Content-based language instruction in second and foreign languages. In S. Anivan (Ed.) Language teaching methodology for the nineties (pp. 83-95). Singapore: SEAMEO Regional Language Centre. [ERIC ED 312 895.]
- Cuevas, G. J. 1984. Mathematics learning in English as a second language. Journal for research in mathematics education. 15.2.134-144.
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In Schooling and language minority students: A theoretical framework (pp. 1-50). Los Angeles: Evaluation, Dissemination, and Assessment Center.
- CUNY ESL Council. (1991). Position paper on English as a second language at The City University of New York. New York: Author.
- Fathman, A. K., Quinn, M. E., and Kessler, C. (1992). Teaching science to English learners, grades 4-8. Washington, DC: National Clearinghouse for Bilingual Education.
- Grabe, W. and Kaplan, R. B. (1989). Writing in a second language: Contrastive rhetoric. In D. M. Johnson & D. H. Roen (Eds.) Richness in writing: Empowering ESL students (pp. 263-283). New York: Longman.
- Holt, D., Chips, B. and Wallace, D. (1992). Cooperative learning in the secondary school: Maximizing language acquisition, academic achievement, and social development. Washington, DC: National Clearinghouse for Bilingual Education.
- Ignash, J. (1992). Study shows ESL is fastest growing area of study in US community colleges. TESOL matters, December-January, 16-17.
- Instructional Resource Center, Office of Academic Affairs, The City University of New York. (1989). English as a second language programs at The City University of New York. New York: Author.
- Jacobs, E. and Mattson, B. (1987). Cooperative learning with limited-English-proficient students. ERIC Digest. Washington, DC: ERIC/CLL.
- Kagan, S. (1986). Cooperative learning and sociocultural factors in schooling. In California Department of Education (Ed.) Beyond language: Social and cultural factors in schooling language minority students (pp. 231-98). Los Angeles: California State University.
- Kaplan, R. B. (1966). Cultural thought patterns in inter-cultural education. Language learning. 16.1-20.
- Krashen, S. D. (1981). Second language acquisition and second language learning. Oxford: Pergamon Press.
- Lin, W. (1991). English as a 2nd language poll: 37% speak other languages at home. New York newsday, July 29, 22.

- Mohan, B. A. (1979). Relating language teaching and content teaching. TESOL quarterly. 13.2.171-182.
- Mohan, B. A. (1986). Language and content. Reading, MA: Addison-Wesley.
- Otheguy, R. (1990). The condition of Latinos in The City University of New York. Report to the Vice Chancellor for Academic Affairs and to the Puerto Rican Council on Higher Education. New York: The City University of New York.
- Raphael, C. (1989). Introduction. In Instructional Resource Center, Office of Academic Affairs, The City University of New York (Ed.) The City University of New York: English as a second language programs (pp. 1-8). New York: Author.
- Short, D. (1991). How to integrate language and content instruction: A training manual. Washington, DC: Center for Applied Linguistics. [ERIC ED 305 824.]
- Slavin, R. (1983). Cooperative learning. New York: Longman.
- Spanos, G. A., Rhodes, N. C., Dale, T. C., and Crandall, J. A. (1988). Linguistic features of mathematical problem solving. In R. C. Cocking & J. P. Mestre. (Eds.) Linguistic and cultural influences on learning mathematics (pp. 221-240). Hillsdale, NJ: Erlbaum.
- Tucker, G. R. (1986). Developing a language-competent American society. In D. Tannen (Ed.) Georgetown University Round Table on Languages and Linguistics 1985 (pp. 263-274). Washington, DC: Georgetown University Press.
- Tucker, G. R. (1989). Cognitive consequences of bilingualism. In J. E. Alatis (Ed.) Georgetown University Round Table on Languages and Linguistics 1989. Washington, DC: Georgetown University Press.
- Waggoner, D. (1992). The increasing multiethnic and multilingual diversity of the U.S.: Findings from the 1990 Census. TESOL matters. 2.5.12-13.

PRESENTATIONS BY PANELISTS

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Pedagogical Strategies for ESL Students: The Perspective from Special Services

Introduction

From my vantage point as the Director of Special Services at Kingsborough Community College, an associate professor in the Department of Student Development and a licensed psychologist, I have the opportunity to view the diversity of our student population from many perspectives. While the individual tiles that make up the mosaic of our student body are unique, complex and multidimensional, it is also apparent that the 'mortar of academia' in which these tiles are laid often serves to obscure rather than highlight their uniqueness. It is this mortar that we as faculty can control and sculpt so that the full spectrum of each tile can be appreciated. Therefore, in the interest of mortar reduction, and hopefully clarity, I thought that rather than simply reiterate the rambling remarks I made as a panelist at the conference, I would restructure my comments in a format that might help the reader better process that information. I also hoped that by doing so I could illustrate a central theme of my presentation: namely, that we as faculty need to be aware of how our students, our audience, process information. Specifically, how they process the information we present as function of the manner in which we present it, and ultimately, how we can modify both our styles of presentation and our students' mode of information processing to achieve more effective and meaningful communication.

In the remarks that follow, I will briefly describe the students with whom I work, some of their more salient characteristics and the implication of these factors for devising pedagogical strategies. However, before addressing these issues I feel compelled to make a few comments, since they are the bedrock upon which my subsequent remarks are rooted. One, to borrow from Harry Stack Sullivan, we are all more human than otherwise. Two, to expand on Sullivan's truism, we are all complex, unique, multidimensional human beings. Three, all behavior is multi-determined. Four, education is a reciprocal process involving the complex interweaving of cognitive and affective components, therefore, as educators we must simultaneously be 'educatees'. Five, it is not enough to tell our students 'what'; we must also actively help them discover 'how'. Six, while we are all in the business of bringing about change in

others, I venture to say that the hardest change to actualize is change in ourselves.

Source of Observation

Special Services at Kingsborough is a grant-funded, college-sponsored program that provides an individualized integrated continuum of remedial, counseling and consultation support services to over 330 students with physical, learning and emotional disabilities. Therefore, the ESL students I see are both those who have been diagnosed as having a disability as well as those who have been referred by faculty because of relatively persistent academic difficulties. These students frequently demonstrate atypical patterns of learning, behavior and social interactions. While rarely viewed as grossly inappropriate, these behaviors are noted to be resistant to traditional interventions and services. As a result, they arouse concern, bewilderment and frustration in faculty. On the other hand, the students express feelings of confusion, hopelessness and inadequacy. Based upon numerous indepth interviews, formal and informal assessments and observations in classes of ESL students I have taught, I have come to empathize with the concerns raised by both students and faculty. From this perspective and based on the segment of the ESL population I have described, I have come to view the issues of ESL students not as those of language and literacy but rather as those of culture, values perceptions and feelings both those experienced by student and those induced in the faculty.

Student Characteristics

While a gross oversimplification the students I see may be categorized into one of three groups. Those with limited academic aptitude, those with learning disabilities and those who demonstrate psycho-social difficulties that impact upon their academic functioning. However, it must be recognized that these categories are artificial. They are not orthogonal and, in effect, they are interconnected continuums along which to conceptualize the nature of the student's difficulties.

The first continuum, students with limited academic aptitude, should not be equated with limited intellectual capacity. The majority of these students are intellectually competent yet they demonstrate difficulties functioning in an academic environment. Frequently, they had difficulty realizing their full potential in the school setting of their native country. A parallel to these students would be individuals with limited athletic aptitude. They may be in good physical condition but do not have an affinity for athletics. However, with time, patience and effort they can master a particular sport. These students also can achieve academic success, often in a two-year degree program, when there is an

appropriate match between the students' skills and propensities and the program requirements. While they can learn through traditional approaches they require careful academic guidance, structure and repetition. Often, these students will benefit from a reduced course load, being able to audit or repeat courses and curriculum that include hands-on experiences or internships.

The Second group of students I see are those who demonstrate a specific learning disability (LD). Diagnosis of a learning disability even among native speakers is a complex and subtle art. Diagnosis of a learning disability among ESL students adds another dimension to further complicate an already complex endeavor. By definition, students with a learning disability are of at least average intellectual potential. For an ESL/LD student to be functioning on a college level, one may assume they possess even above-average intellectual abilities. Therefore, it is not surprising that in addition to being bewildered by their academic difficulties these students experience a significant level of frustration, anxiety and stress. At many colleges and universities a native-speaking learning disabled student can obtain a waiver or course substitution to satisfy foreign language requirements. However, we do not waive the English requirements for an ESL student with a learning disability. As with other LD students, these students can benefit from modifications in instructional strategies, specialized remedial assistance, reasonable testing accommodations, skilled academic advisement, and personal and vocational counseling.

The third group of students I see are those whose academic difficulties are related primarily to emotional factors. While some students present symptoms consistent with traditional diagnoses of psychopathology, the majority present patterns reflective of reactions to the psycho-social stressors surrounding their migration to this country. Often these include conflicts in cultural values, unresolved issues related to the reasons for and conditions under which they migrated to the United States and changes in the family structure that have ensued as a result of their migration. While these students may benefit from individual and group counseling, academically they require a supportive learning environment, the opportunity to learn in groups with cultural peers and native speakers and a context in which to integrate present learning with past experiences.

Again, at the risk of gross oversimplification and generalization, I will briefly delineate the more salient characteristics presented by the ESL students with whom I have worked. It should be recognized that at the time I see the students they have had numerous experiences of failure, are often feeling confused and overwhelmed and are anxious for a quick solution to their academic problems. Within that

context the students I see often present varying degrees of cognitive and emotional rigidity, low tolerance for ambiguity and difficulty actively restructuring material. In essence, they often impress as passive learners. While diligent and highly motivated they have difficulty adopting an integrated perspective. As with many native speakers they seem unaware of the mores of the college culture, the implied rules and expectations. Frequently they are oblivious to the subtle nuances and cues an instructor is transmitting. This seems to be compounded by the fact that the values they bring to the college are often incompatible with the values of the college. These include concerns with regard to asking questions of authority figures, speaking up in class, challenging authorities and peers, understanding the rationale behind multiple choice questions, acknowledging confusion and lack of understanding, competing with classmates, etc. In addition to having numerous commitments and responsibilities outside of the college, they are also functioning in two very separate and distinct cultures - one at home and another at the college. As a result, not only do they express fear of failure but underlying and often unconscious ambivalence with regard to being successful. Therefore, these students require clearly articulated, concrete communications of what is expected of them as well as specific strategies for how they can achieve these expectations. It is not always the case that students do not know the material, quite often they do not understand the question nor how to access and express what they possess.

Pedagogical Strategies

The pedagogical strategies listed below are intended to increase students' active participation, enable them to become more cognizant of what is expected and how to meet those expectations and provide faculty with feedback on the effectiveness of their instructional approaches.

Instructional/Assessment Strategies: Generally, efforts should be made to devise strategies that provide multisensory instruction and multimodal assessment. Therefore, as the instructor lectures, students should simultaneously be presented with visual input. This can include overheads, as well as color notes and flow charts written on the chalkboard. The use of diagrams, symbols, icons and mnemonic devices can also aid students to focus during lectures. Multimodal assessment refers to students being tested through a variety of methods and modalities. Students' performance can be influenced as much by the method through which they are tested as it is by their grasp of the material. Using more than one assessment format may provide a more accurate picture of the student's knowledge. These could include multiple choice, short answer, matching, true and false and essay questions as well as take home exams, reports, term papers, individual and group projects, oral presentations and

oral exams. Students should be informed of and instructed on how to prepare for these different methods of assessment.

Syllabus: A syllabus can serve as a guide, a road map, to a course. It can be as detailed and innovative as you choose. Consider when you are given directions to a particular locale, isn't it also helpful if you receive approximate distances, landmarks and time frames? Therefore, a syllabus can include specific objectives for each lecture; questions that will be answered during that lecture; key vocabulary or concepts that should be mastered prior to the lecture as well as specific reading assignments, dates and types of exams to be administered and grading criteria.

Cooperative learning groups: The instructor can establish groups of 3-5 students to work on tasks together. Such groups could include native speakers and ESL students. The focus of the group is to have students prepare an assignment cooperatively. This could include making up questions for exams, reviewing other students' questions, outlining a chapter, submitting a short paper on a specific topic, making an oral presentation, etc. The focus is to provide students with an opportunity to work cooperatively and learn from each other.

Note-taking Strategies: Many students have difficulty taking notes. It is difficult for them to determine what is and is not important. Instructors can collect students' notes. This will provide concrete feedback on the manner and extent to which students are processing the lecture material. Students can submit a collective copy of their lecture notes devised in their cooperative learning group. Instructors can distribute, after each of the first few lectures, a copy of 'model' notes for those lectures. Students can then check their notes against the model. A good note-taking technique is the Cornell system. Wherein the page is divided in two. On the right two-thirds of the page notes are written; on the remaining left third questions are devised. Another method has the instructor distribute outlines with general headings listed along with space for students to fill in the details during the lecture. Following this the instructor can write topic headings and flow charts on the board for students to follow as they take notes.

Questioning: Turning statements into questions helps students focus. Instructors can write questions on the board and inform students that they should attend to the lecture focusing on the information that will answer these questions. Students can be instructed to submit a question after each lecture. These can be given to a cooperative learning group whose assignment it is to submit the five best questions or most frequent questions to the instructor. Students (or a cooperative learning group) also can be asked to devise and submit two multiple choice questions based on the readings

and lectures. They can be graded on the quality of their questions. Students can then be informed that the questions they submitted will be used for a quiz and if they want to "ace" the exam they should talk to all their classmates. When reviewing a student devised quiz ask them to rate each question and discuss why it was or was not a good question.

Use exams as instructional opportunities: Rather than just returning or "going over" exams, use them to reinforce material. Inform students that some questions from the present exam will be on future exams. After students take an exam and before they submit it ask them to review each question and indicate by a + or - whether they thought they got the question correct. When reviewing the exam have students compare their actual performance with their predictions. If they predicted they got a question incorrect and they did, why? If they predicted that they got a question correct but it was incorrect, why? To answer a question correctly students have to feed back what was given to them. However, to explore how a student came to an incorrect answer helps us and them understand how they are processing the information and what changes in the process are necessary.

Use of tape recorders: For many students, just slowing down our rate of oral presentation during a lecture helps them to process the information better. Many ESL students and those with auditory processing problems can benefit from the use of tape recorders in class. While students often need instruction and practice on how to use taping effectively, they should be encouraged to use tape recorders with digital counters. Students should take whatever notes they can during lectures writing the counter numbers in the margin to highlight important areas. Then when listening to the tape they can fast forward to the sections they had designated as especially important. Students should be encouraged to listen to the tape immediately after the lecture and fill in the blanks in their notes. For some students the use of a second tape recorder to dictate their own notes about the lecture is helpful and a necessary first step.

Taped texts: For some ESL, learning disabled and visually impaired students, being able to listen to the text on tape as they read along can be very helpful. Grant proposals to have texts taped, or asking students to volunteer to tape a text, are possible ways of getting textbooks taped. In addition, college libraries can purchase a Kurzweil reading machine. These machines translate print into synthetic speech.

Video Vignettes: Devising video vignettes of specific lectures enables students to preview and review lecture material. Grant proposals to purchase equipment and produce

a video could be a department project. In this way faculty could also be involved in a cooperative learning experience.

Summary

The students to whom I have referred represent only a small segment of the ESL population, perhaps the tip of the iceberg or the squeaky wheel. However, the issues they present and the strategies they require seem to be applicable to a broad range of ESL and native speaking students. Many of our students feel alien in the college culture and uncomfortable in our classes. Many, particularly those in the open enrollment community colleges, may have undiagnosed learning disabilities or learning style differences which impede their learning through traditional methods. Many have off campus responsibilities and commitments which engender conflict with the demands of academia.

It would appear that it is necessary for us to explore the implications of these factors for developing effective instructional strategies. Does this then mean that we as instructors need also to be 'active learners'? Should we be asking ourselves questions? Who are our students? How do we learn how they learn? How can we best teach them? Should we be asking our students for feedback through journals, commentaries and evaluations on the effectiveness of our approaches? This information could include their assessments of how they learn best, as well as their suggestions on how we could improve our presentations. Such an ongoing monitoring strategy could be beneficial to both students and ourselves. In fact, it might be proven that how we structure our classes, organize the material and present the information, with regard to the characteristics of our students, are just as important parts in our role as instructors as is our expertise on our particular domain.

Panelist: Professor Joan G. Johnston, Ed.D, RN.
School of Nursing
City College of New York

Reading

It is essential that baccalaureate students develop vocabulary and reading skills that are appropriate both for the general educational context and for the particular context of the discipline. Although, in theory, students should complete the sophomore year having reached some level of proficiency in these areas, they frequently have not yet acquired all these necessary skills. Consequently, they are lacking in the basic competencies necessary for them to build additional expertise at the level of the discipline.

Remediation prior to the major must be undertaken with a clear understanding of the minimum level of beginning competence necessary for students learning in the discipline. Faculty in the disciplines must also recognize the need to support continuing development throughout the program in order to enhance student success.

Teaching Strategies:

- * Faculty should be encouraged to develop vocabulary lists and study guides. Visual aids such as overheads, slides and the blackboard should be used to enhance classroom instruction.
- * Faculty must create a classroom atmosphere in which students feel able to ask questions for clarification and amplification.
- * Faculty must pay attention to the development of reliable and valid testing mechanisms that are appropriate to the discipline.
- * Students should be encouraged to underline and look up unfamiliar words in readings. They should also be encouraged to read the newspaper and analyze the information contained in news articles.
- * Many students need to be explicitly taught how to "skim" texts and how to use a highlighter.
- * The use of computer-assisted instructional modules is an effective way to improve readiness as well as test-taking skills.

Writing

In order to be successful in school and later in their profession, students must achieve a minimum level of

competence in the writing of standard English. Additionally, it is important that students are able to distinguish between creative and formal styles. Good study habits are dependent on effective note-taking, and the writing of a formal research paper is an acquired art.

Teaching Strategies:

- * An explicit description of writing strategies such as the Cornell method of note-taking and studying is often helpful.
- * Reviewing students' notebooks, and developing study guides and pretests are useful mechanisms.
- * Students need direction on effective study and test-taking skills, as well as practice with standardized test-taking.
- * The use of computers for writing, especially in conjunction with grammar and spell-checking programs, can improve writing and vocabulary and can also lead to significant improvements in reading.
- * Students must be taught how to develop a formal research paper and utilize appropriate citation methods.

Speaking Skills

In order for students to become effective professionals, they need to develop confidence in their ability to communicate in a variety of situations. Faculty must recognize the importance of developing these skills.

Teaching Strategies:

- * In addition to developing a supportive classroom environment, faculty should encourage students to ask questions after class if they do not feel comfortable asking in front of their peers. The responses to these questions can then later be reviewed with the class as a whole in order to clarify areas of confusion.
- * Forming study groups either inside or outside the classroom is an effective way to encourage the development of speaking skills as well as providing an additional way for students to acquire information.
- * In-class presentations, seminars and other opportunities for peer presentations help students to develop confidence in their communication skills.

Listening skills

It is important for faculty to validate and enhance student listening skills, especially for students whose first language is not English.

Teaching Strategies:

- * By asking frequent questions you can encourage feedback. Allow students to tape-record lectures and share the tapes with others. This process allows them to develop their listening skills.

Panelist: Professor Roger Persell
Department of Biological Sciences
Hunter College

I heartily commend JoAnn Crandall's stimulating overview of the language issues facing students who are struggling to learn English while they simultaneously grapple with new and often difficult ideas in the academic disciplines. In fact, I have, without the benefit of Crandall's sound theoretical understanding, stumbled into many of the excellent and pragmatic recommendations that she described in her introductory address.

As coordinator of a traditional, large-lecture format introductory biology course, a major guiding principle for me has been that the discipline of biology can serve as mini-paradigm for ESL education in general. Typical for many students at the City University of New York, biology is itself an entirely new language, in effect a second language that is unfamiliar to the majority of students in the class. But, in contrast to introductory courses in a foreign language, where the first words are often for common objects such as "apples" or "doors", new words in biology signify abstract processes, for example "oxidative phosphorylation".

Biology, furthermore, is the only science taken by a majority of college students; for many it is their only science course. Because the discipline of biology is an ever-changing amalgamation of physics, chemistry, traditional natural philosophy, and esoteric verbal description, it is especially difficult for all students who are linguistically unsophisticated. As a result, with support from a National Science Foundation Curriculum Development Grant, I have been working at Hunter College to find ways to introduce the ideas of biology through the building of English language skills.

Because of difficulty students have with biology, irrespective of their background, we have not singled out ESL students directly for special teaching strategies. Instead, I have introduced into Hunter College's year-long Principles of Biology course casual, non-graded, informal writing projects as a way for all students to gain mastery over biological ideas. One direction I value very much, that Crandall did not mention, is the encouragement of students to use their own visual language. For example, simple relationships between process may be expressed as arrows. Several arrows indicate many steps between a first event and an end event. Cartoon diagrams of wavy lines in a glass are instantly recognized in biology as the important and universal "aqueous medium". Other relationships may be expressed graphically. We ask students not only to make graphs, but also to pick apart the meaning of existing graphs and textbook diagrams.

An important benefit of working with visual images is that they present a relatively direct way for ESL and non-ESL students to work together in a classroom situation. As Crandall pointed out, language acquisition occurs most quickly when one student works with a student who is a native speaker. By treating biology as a new language for everyone, there is often less need to call attention to the status of an ESL student. Confirming Crandall's point, we have found that when they work together, students who differ in language fluency, previous knowledge, and level of preparation, mutually benefit as they tackle unfamiliar ideas in the course. In Principles of Biology, we make a considerable effort to encourage strong students to work with those who have less developed language skills. Feedback is very positive from both groups. Not only do the students report that they develop a sense of a supportive academic community, but native English speakers learn to appreciate the strengths and unique perspectives of ESL students.

A second approach that smooths the distinctions between native speakers and ESL students in Principles of Biology is our increasing use of computers. Research on the use of computers for writing has already demonstrated that many students feel far less intimidated by writing on a computer --with its illusion of technological objectivity-- than by committing pencil to paper. Students can easily work together to construct an essay, a set of notes, a vocabulary list, or even a sketch without worrying about a teacher's negative judgment. True, this kind of work necessitates a computer lab, but fortunately at Hunter College, we have been able to rely on the support of the College as well as a second National Science Foundation grant for computer instrumentation in introductory biology. Computers are being used for many purposes in education. Based on our experience in biology, however, I want to urge educators to emphasize the value of computers for elementary, informal work with language acquisition, as well as for what they can do for more formal work.

Our approach is based on the idea that science is learned through language, not that the study of English and the study of biology are mutually exclusive. We are finding that through computer-assisted casual writing and the use of simple drawings and graphics, ESL and non-ESL students both are gaining new mastery of English and biology.

Panelist: Dr. John Chaffee
Humanities
La Guardia Community College

Summary by Professor Nancy Lay:

Professor John Chaffee taught his first class in critical thinking in 1979 and at that time, there was a female student from the Dominican Republic who indicated that her goal was to become the first female president in her country. He spoke of students from different linguistic and cultural backgrounds who have been in many of his classes and how these students have enriched his own experiences.

He spoke of the effectiveness of the critical thinking course at LaGuardia Community College and how reading, writing, and math are integrated into the course. He also spoke of the advantages of using critical thinking to develop language abilities. Finally, Professor Chaffee read the following essay written by a Korean woman who described the experiences that helped shape the way she views the world.

An Experience That Shaped My Life

- Vivian Lee

There was a time in Korea, a different place and under a different frame of mind, when I was much younger than today, when I used to walk to school day after day. I remember something happening before my eyes that would forever change the way I viewed the world and the people in it. My friend and confidant was blown away while we walked to school. It was a time of revolution and chaos in a country that seemed forgotten by time. The event was really insignificant to others because there had been so many deaths at the time, but for me it was devastating.

I was very young then and didn't know the things I know now, so I couldn't understand what had just happened. I was naive to the world and to see my friend lifeless on the floor amidst a pool of blood left me speechless for many days and sleepless for many nights. I had never seen any one die before and this was my friend, so it left a scar for life.

My perception of life up to then was one of fun and carefree ideals. All of that was shattered by a lost bullet in a miserable second of my existence. For many years after that I had recurrent nightmares of the event and realized through these innumerable dreams that life is a partial gift that can be taken away at anytime.

I felt as if a huge span of my life was out of time. I felt as if I was alive and dead at the same time. It was like being in the world and yet I felt as if I was subtracted from

reality. All I could see was a spacious room with nothing in it--just emptiness. I could find no answers. No one really cared. Everyone seemed so wrapped up in their own problems which surely were bigger than mine. No one could ever know how I felt because only I knew. Only I was aware. Only I was I.

Now, many years later, I can look back and see that my life has taken on new perspectives. I don't try to explain what happened anymore, nor do I try to find answers. They simply don't exist.

DISCIPLINE-BASED ASSIGNED WORKSHOPS

Workshop: Health

Facilitators: Professor Barbara Petrello
English Department
Kingsborough Community College

Professor Joan Johnston
School of Nursing
The City College of New York

Summary by Barbara Petrello:

The Health Professions workshop included participants from Allied Health Science, Dental Hygiene, English as a Second Language, Nursing and Special Services. Discussion was lively and focused on the need for change.

The first area of attention was the ESL students themselves. Here, participants noted the full range of changes that ESL students must make in adapting not only to a new language and culture in the general sense, but to the special demands of a new learning environment. It was pointed out that these changes go beyond the many academic and life-style changes that all students, including English dominant learners, are required to make as they pursue their education in a large urban university. For ESL students to be successful, these adaptations include not only the acquisition of college level English language reading, writing, speaking and listening comprehension proficiency, but also the development of such skills as the ability to cope with the organization and administrative structure of the university, with the organization of courses or programs of study, with unfamiliar teaching styles and with different cultural values and assumptions informing preparation and practice in their chosen major and/or career fields.

Several participants expressed the opinion that, while ESL students need to make many changes and adaptations in order to succeed at CUNY, there is also a need for us, as instructors, to modify our thinking and our instructional strategies in order to meet the needs of this large number of students from a variety of linguistic and cultural backgrounds. Almost all participants had contributions to make on this point and described a number of ways to modify teaching style or to develop strategies or enrichments designed to integrate students into the community of the classroom. For example, instructors who use the lecture method and who make scripts of lectures available to students who are still perfecting their ability to understand spoken academic or technical English have seen

student success rates rise as a result of this procedure. Another technique, that of writing key words from a lecture on the blackboard, was shown to be a significant factor in aiding ESL student comprehension of material.

In addition to specific teaching methods, several patterns of classroom organization were noted as contributing to better integration of ESL learners into the learning environment. Pairing students so that peer tutoring can take place and designing group learning activities to draw on student strengths, making them active learners and raising their levels of self confidence with regard to mastery of course content, were considered particularly useful.

Pairing courses was described as a very promising way of achieving English language skill proficiency while enhancing content knowledge. Paired courses, which are based on the collaborative efforts of an ESL instructor and a content-area instructor have shown excellent results in terms of students success rates.

Because the Health Professions curriculum covers the full range of academic levels, another very important contribution to the discussion was made by instructors of upper division and graduate students. They explained that there are ESL learners at all levels of the curriculum, and while these students do not have the same needs as students at the entry level or the lower division level of the various curricula, these learners also need help in making specific linguistic and/or cultural adjustments. The suggestion was made that additional provision be made for these learners in the form of cultural seminars, and by the efforts of ESL counselors and tutors.

The discussion ended on a positive note. All participants expressed satisfaction with the opportunity to share views with colleagues from other CUNY colleges. The type of communication fostered by this open discussion was seen as an ideal way to air pedagogical philosophies and to exchange ideas in order to maximize students learning in our courses.

Workshop: Social Science/Education

Facilitators: Professor Milga Morales-Nadel
Education, Brooklyn College

Professor Philip Stander
Behavioral Science,
Kingsborough Community College

Summary by Philip Stander:

A. The Learning Needs of ESL Students.

1. There was general agreement that the number of non-native speakers of English is increasing in our City University Classrooms.
2. As Dr. Crandall noted, the ESL population is remarkably diverse, ranging from native English speaking; close to English speaking, i.e., with some fluency in speaking English; foreign-born with some English, i.e., oral English; foreign-born with no English; non-native with limited schooling; and non-native without schooling.
3. The consensus was that those who are not native English speaking need more time and individual attention in order to teach the formal, complex, at times abstract, cognitively dense language of the social and behavioral sciences.
4. After some discussion, it was concluded that all of our students, ESL as well as native born, would benefit from the following identified strategies.

B. Educational Strategies

1. The large class size of the lecture hall is a setting in which our students have little opportunity to use their second language. It is recommended that CUNY be adequately funded to assure the scheduling of small classes.
2. Entering students should be scheduled for orientation seminars in order to provide the following:
 - a. Discussion of the nature of the various curricula and their requirements.
 - b. Opportunities to discuss their views of the teacher as "authority," and familiarization with the college's expectation of the classroom performance of students.

- c. Knowledge of the college support services available to them, such as counseling, advisement, tutoring and English skills workshops where they can receive individual assistance with psycholinguistic problems.
 - d. The opportunity to meet and get to know students of a wide range of cultural backgrounds in order to break down stereotypes and enable the student to make an adjustment to the new school setting.
 - e. The opportunity to better understand the nature of Western Culture, its similarities and differences in comparison to the student's native culture so that a better adjustment can be made.
3. A "guide" for entering students should be distributed as a supplement to, and reinforcement of, the orientation seminars.
 4. The publication, Into the Academic Mainstream: Guidelines for Teaching Language to Minority Students, should be distributed to all faculty because of its many practical suggestions and strategies for teaching.
 5. The Social and Behavioral Sciences faculty should provide "guides" for ESL students which familiarize them with the nature of the content areas and include glossaries to facilitate the learning of each discipline's language and jargon.
 6. In each of the content area classes, opportunities to write and use English should be provided. For example, short answer tests might be supplemented with an essay question that requires no more than a paragraph of response. The point is that, with such opportunities, the student will improve the ability to write as well as develop a more sophisticated knowledge of the subject matter. To this end, alternative means of testing students should continue to be explored.
 7. The straight lecture should be replaced with opportunities for discussion. As often as possible, student participation should be elicited in order for the teacher to determine whether the lesson's aims are being achieved and whether the information communicated is being understood.
 8. The teaching of each discipline's generalizations and abstractions needs to be concretized with colorful examples and illustrations to which the student can relate.

9. Students need to be encouraged to take notes to which they may refer at a later time, especially when studying for examinations. The teacher might provide models of note taking with handouts or by outlining lessons on the board.
10. The consensus was that faculty development conferences, such as this, be funded and provided on individual campuses so that faculty may continue to explore alternative strategies for meeting the needs of ESL students. It was strongly felt that students with disparate needs be invited to attend and participate in such conferences; their attendance would contribute to the faculty's better understanding of ESL/foreign student needs and help the students better understand how they could help themselves and be helped by the available services and resources.

Faculty who participated in the Social Science Education workshop perceived this conference to have been most helpful in the insights gained and the practical strategies shared.

Workshop: Humanities/Arts

Facilitators: Professor Geraldine DeLuca
English Department
Brooklyn College

Professor John Chaffee
Humanities
La Guardia Community College

Summary by Geraldine DeLuca:

As I remember, we went around the room and each member of the group introduced him or herself and we talked a little bit about the programs at our school. Then we broke into small groups--of three or four--and we filled in the Participant Worksheets. The group in which I participated talked about collaborative learning strategies and other techniques that seemed to work for us, among them:

- * small group work, 3 students for general discussion, 4 or 5 for debate; clear tasks, written out, explicit goals.
- * reading: high interest texts, leading questions, cognitive maps, dialectical notebooks. Have students ask: Who is the writer? Who is the presumed reader? Who am I? Have students formulate their own questions from the reading: questions they can answer and questions they can't.
- * writing: emphasis on process, revision, use of portfolios, word processors, responses in writing to reading, use of tutors who are non-native speakers.
- * listening: mini-lectures of 15 minutes or less followed by questions that summarize and clarify content, and that involve the drawing of inferences and conclusions. Ask students to write in response to the lectures. Let students become aware of how writers move logically from one place to the next. Let one student speak while listeners each prepare at least one question in response.

Workshop: Engineering/Technology

Facilitators: Professor Mary Alice Browne
Radiologic Technology
New York City Technical College

Professor Gary Benenson
School of Engineering
The City College of New York

Summary by Mary Alice Browne:

- * Faculty should design clearly understandable course objectives.
- * Develop cross-reference vocabulary lists that will enable students to learn required terminology.
- * Encourage active participation through discussion topics, reading, and writing assignments.
- * Schedule writing conferences with ESL students that will promote effective sentence processing and editing.
- * Give students written assignments and projects that focus on contemporary issues.
- * Design visual aids that engage student learning e.g., films, videos, slides, and transparencies.
- * Structure courses around student experiences. Carefully plan discussions, where students can share experiences and express their opinion.
- * Have students summarize classroom work and give them essay examinations that integrate thinking skills.
- * Design course linkages that foster the success of students in other courses.
- * Understand and tap the strength and talent these students possess and bring to the classroom.

At City Tech, seminars have been offered to sensitize faculty to the characteristics of students from different cultural backgrounds. Discussions included informal exchanges on effective classroom technique.

Workshop: Business/Mathematics

Facilitators: Professor Gloria Paulus
School of Business
Baruch College

Professor Shirley Zaragoza
Business Management
Borough of Manhattan Community College

1. It is very important to learn about cultural differences and styles of learning. Some cultures tend to be less verbal for example. One business professor begins the term by asking each student how their parents do business in their countries. This stimulates discussion.
2. Several math professors discussed the fact that there are different methods of subtraction and division, as well as currencies. This can be a learning process for the instructor. It is important; however to emphasize why we have the system that we do.
3. Professors may need to rephrase their points. Students should also be allowed to rephrase in their own words for clarification, e.g., word problems, double negatives. More reading & writing exercises could be included in order to balance the various skill areas.
4. A 10-15 minute mini-lesson would be helpful. This reinforces the lecture while it is still fresh. Any visuals or related videotapes serve as highly effective reinforcements.
5. Professors should allow time for questions as a headstart to the homework.
6. Professors should also encourage study groups outside of class, especially since some students do not ask questions in class. Students should be paired according to strengths & weaknesses. Students should also be encouraged to ask questions after class.
7. It would also be helpful if the ESL teachers would ask students what other courses they are taking in order to integrate some of the content areas into their lesson.
8. Finally, some of the professors spoke of their own experiences as ESL students. They empathized with some of their students' concerns and suggested that a mentoring program could be established.

Workshop: Science

Facilitators: Professor Roger Persell
Department of Biological Sciences
Hunter College

Professor Joseph N. Muzio
Biology
Kingsborough Community College

Summary by Roger Persell:

Following JoAnn Crandall's major introductory remarks, our group --comprising faculty from the natural sciences, the health sciences and nursing-- continued the discussion inspired by her talk. By the end of the discussion period several points about the teaching of ESL students had been articulated.

- * The major point agreed upon is that ESL students must be integrated into traditional classes as early in their education as possible. Separate ESL courses were thought by many to be a disservice to ESL students and non-ESL students, in part because separate courses imply an inferiority and can reinforce biases about the capabilities of ESL students.
- * One important way to help bring ESL students into the traditional classes within each discipline is to increase faculty sensitivity to the needs of both ESL students and native English speakers with poor language skills. Regular faculty development workshops, organized with the support of senior administration, were felt to be an absolute necessity. In fact, today's conference received the group's high approval because it helped many of us formulate our own thoughts and experiences about the language needs and preparation of our students. We concluded that workshops can help address faculty biases about ESL students.
- * Faculty can come to realize that ESL students, whatever their difficulties with English, can bring new perspectives and benefits to the classroom. Pairing ESL students with more proficient students offers benefits to both. ESL students, for example, can be encouraged to give examples from their own culture to help elucidate a particular topic. Also, ESL students give other students an opportunity to learn academic material by tutoring.
- * An important strategy for all faculty in the disciplines is to encourage a variety of arrangements with ESL faculty. Nursing faculty at LaGuardia College had sought advice from ESL faculty when traditional assumptions

proved false about the academic and language preparation of incoming nursing students. By joining together and coordinating ESL courses and nursing courses, students and teachers felt that considerable progress was made in reducing frustration and improving learning.

- * The group concluded that ESL faculty and those from other academic disciplines are usually unaware of what each other expects from students. Discussion centered on what the role of ESL education, as it now functions, is. One science faculty participant asked, "How can ESL faculty help me teach my course?" The sense of most of the science faculty was that it is important to acknowledge the priority of their disciplines for the students' intellectual and economic future and that ESL courses cannot be viewed as independent from the academic requirements of faculty within the disciplines.
- * Several additional issues emerged. It was pointed out that gender issues were very important for all students, but particularly for ESL students because different cultural perspectives often led to serious misunderstandings by faculty. It was reiterated that ESL students, and students with poor communication skills in general, should be encouraged to voice their opinions and share their experience whenever possible. Often, their experiences can be a departure point for a new angle on an intellectual issue. Writing and reading were encouraged for all disciplines. Too often, the sciences overlook the benefit of writing in the development of new and sophisticated language skills. As Crandall pointed out, time spent helping students learn to take notes increases a student's familiarity with language as well as with the course's material.
- * The workshops ended with an agreement about the value of meeting with each other to establish a conscious appreciation of student language problems. Bringing together ESL faculty and faculty from other disciplines was a major step in articulating assumptions about our expectations for students and in working toward an educational environment for their success.

Statement by Professor Joseph N. Muzio:

The Biological Sciences and E.S.L. Programs

There is no doubt that New York City is the city of cultural diversity in the United States. Other major urban centers are experiencing similar diversity, but New York reflects the widest range of ethnic and cultural diversity. From all indications, students with limited proficiency in English will continue to dominate the city's educational system well into the 21st century. This translates into increased population diversities right on through the undergraduate, perhaps graduate college levels. (See The New York Times, April 28, 1993, p.A18)

Whenever there is an identified problem, educators with the best of intentions usually come forward and offer ideas, courses, and programs that are meant to address that problem. Historically, we have seen programs related to sex education, preventing drug usage, AIDS education, even the metric system, as well as other selected topics institutionalized into the K-12 curricula. Sometimes these programs are continued right on through the community college curricula and beyond. Academic institutions expand their curricular realms to include these more recent topics, which are added to their existing programs. Naturally, the existing ones are continually modified in response to the knowledge explosions. Thus, we have more and more educational experiences added on, and seldom are there any curricular deletions. No wonder almost every sensitive and concerned educator cries out "I never have enough time to cover the material!" Perhaps we need to become more focused on learning processes and not be concerned as much about being intellectual blankets.

However, regarding ESL programs, there are two critical points that must be emphasized if we are to accurately understand and respond to the needs and purposes of ESL educational efforts: 1) There is a long, historical perspective to ESL curricula in the United States (Continental Congress Acts, 1774-1779), it is not simply something recently developed in response to the heightened cultural diversity our nation has been experiencing; and 2) there are major legislative actions, especially at the Federal level (The Civil Rights Act of 1964; Bilingual Education Act, 1968; The Amendments Act, 1978), as well as Supreme Court decisions that have mandated many aspects and conditions for ESL programs. Naturally, such legislation and decisions must be complied with as ESL programs are implemented. Also, at some state (Massachusetts mandated bilingual programs in 1971) and local levels, enlightened educational systems have enhanced ESL programs well beyond the legislative and judicial instructions and guidelines,

although generally the state programs mimic the federal mandate.

ESL programs and concepts continue to be controversial. As in so many arenas, particularly in educational ones, there are persuasive and compelling arguments on either side of the controversy. There are strong views in support of ESL programs, and equally powerful views that are critical of such programs. Beyond such arguments as to whether or not ESL programs serve any purposes, there are even widespread views on how such ESL programs should be implemented, their philosophies, their modes of operation, what staffing, funding and political factors need to be considered, etc. And once again, there is considerable controversy regarding each of these issues. No doubt, the overall desire of these programs is to recognize that there are major difficulties requiring our attention. ESL students need to have educationally agreed upon levels of English comprehension, not merely social and interpersonal skills, but more complex levels for cognitive learning.

Perhaps we are going to have to perceive our educational systems in markedly different ways: Students who come into our system lacking English skills will be seen as accomplished in another language (their native one), but needing comprehensive programs to develop their English; and all students already fluent in English will receive the benefits of studying a second language beyond English. The final outcome will be total student populations fluent in at least two languages, one of them English. Once such commitments are made to this concept of language duality, then we can rethink the entire issue of teaching/learning strategies, as well as curricula and course offerings in relation to a particular language.

After saying this, there are certain concerns that must be addressed with regard to the biological sciences, the area about which I am most familiar. Certain suggestions that I would like to make are the following:

- 1) It would be helpful if the ESL specialists were to work **directly** with the faculty members in the biological science disciplines. Such an approach could possibly lead to a greater understanding between the two areas, with written and spoken language materials prepared in a more supportive way for the students. Most of us on the biological sciences faculty are not especially knowledgeable about ESL learning materials. This interdisciplinary approach would be helpful for faculty development and provide a clearer understanding of these matters.

- 2) New approaches must be sought by those of us on the biological sciences and ESL faculty. The pairing of staff, the identification of funding, and the arranging of ongoing

meetings to examine and evaluate these approaches could assist in breaking down any barriers and resistance to increased ESL efforts within the biological sciences. The language of the biological sciences and its subspecialties has been considered complicated, almost a second language for even English speaking students. The added dimension of ESL students in the biological sciences introduces new factors warranting our attention.

3) There needs to be increased faculty recruitment of biological sciences faculty members who are capable of instructing in languages beyond English. Such recruitment efforts will promote greater diversity within the faculty and will offer teaching opportunities with more flexibility. The decisions as to where and what languages are desired would be, obviously, predicated upon the demographics of the ESL student populations, and future projects too.

4) Tenured faculty members who are interested in becoming more proficient in languages beyond English would be given educational and travel opportunities and stipends, to study another language. Historically, such language programs have been offered by the military and diplomatic services. The goal would be to develop a cadre of faculty members capable of using more than one language as quickly as possible. Also, graduate students and tutors who are fluent in other languages must be sought out and given critical supportive responsibilities. Such persons would be outstanding interpersonal bridges and resources for the ESL students.

5) One realm that seldom receives attention is related to that of telecommunications. That is, learning materials in a wide variety of different languages must be identified in the biological sciences, and easily accessible through technologically advanced delivery systems. They could be offered for students' independent study, and integrated into the learning and teaching approaches for the particular subject area. We should not only think of ESL opportunities in relation to course structures, instructor-driven, formal processes. We need to look afresh at available telecommunication programs, and the benefits of developing new ones.

6) Regarding future curriculum development in the biological sciences, from now on such developments must contain specific sensitivities and opportunities for ESL students. The selection of learning materials, the use of tutors, even efforts to identify more appropriate examples of our cultural diversity could make the curriculum more responsive to our ESL populations. This is by no means an easy task, but it must be done if the curriculum development is to be more inclusive and reflective of our changing society.

There is much work to be done, and our efforts must take place before the matter becomes even more difficult to focus upon. We want to avoid a crisis-mentality situation. Perhaps the CUNY system needs to provide ongoing, regular programs in relation to the continually increasing needs and population of ESL students. Finally, I would offer two references: *Bilingual Education, a Sourcebook* by Alba N. Amtert and Sarah E. Melendez, Garland Publishing, New York, 1985, and Mary Atwater's "Multicultural Science Education," *The Science Teacher*, March, 1993, pages 33-44. Both are excellent sources of information and additional references for future developments in ESL programs.

APPENDIX

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*as of February 3, 1993

ACTIVITIES FOR AN INTERMEDIATE/ADVANCED ESL CLASS

Submitted by: Norma D. Miles
Kingsborough Community College

This lesson emphasizes student-centered activities that rely to a greater extent on student participation than on teacher control. It utilizes stimulating activities that enable students to use language productively, thereby enabling them to improve both their oral and written language production and thus facilitating retention and learning. The lesson is suitable for adult ESL learners at the intermediate or advanced college level. It integrates all four skills areas in a variety of activities in small-group and whole-class settings.

TOPIC: Almost any topic in the news will be appropriate:

- Sex education in public schools
- Sexual harassment
- Homosexual rights
- Abortion rights
- Recent immigration trends in New York
- Public individuals and their private lives

FOCUS: American culture, developing main ideas and appropriate supporting details, ethics in journalism.

Let's select the last item, "Public individuals and their private lives," with the aim of conducting a one-hour lesson, culminating in a homework essay assignment. (For any other topic, an appropriate 5-minute warm-up writing exercise would replace the one suggested in this lesson).

The teacher hands out a brief 5-minute warm-up writing exercise, preferably without engaging the students in any detailed discussion about the ultimate goal of the writing at this point. (A suitable handout is attached; source unknown).

Students write individually for five minutes about a make-believe incident that results in their names being in the newspaper, boldly visible in the headlines of a special "Extra" supplement. They will use some of the vocabulary provided in the handout and will supply others themselves.

After five minutes (no more), the teacher interrupts the activity to solicit individual voluntary readings of the students' written work. The reaction of classmates to these written pieces is usually unmistakably positive because the content of the written pieces is usually phrased to elicit laughter. The teacher too can participate by writing her version of her make-believe experience directly on the blackboard or on paper, sharing her "moment of fame" with

the students. An alternative to the individual readings is "read-around groups," where students get into groups, each group reading a different set of the writings. Then the groups decide among group members which work is the best of those they have read. The teacher, or the writer of the piece, can then proceed to read aloud the selected piece from each group.

After the laughter has subsided, the teacher engages the students in a discussion about American culture: democracy, freedom of choice, freedom of speech, the news media and ethical conduct in news reporting, and so on, to prepare them for the main part of the assignment.

The teacher divides the class into two groups for a debate (Pro/Con). Each side will argue the question based on the following issue.

ISSUE: Should public officials be judged by their private behavior? (In other words, should we take private conduct into consideration when we vote for public officials?)

[Recall President Clinton's alleged marital indiscretions and those of President Kennedy and his brothers, and of Dr. Martin Luther King, Jr., and now those of Senator Packwood; also, recall Mayor Dinkins' failure to file income tax returns for a number of years, and numerous other incidents where public officials have been placed under scrutiny because of some (usually) private behavior].

The students should be given enough background information to enable them to debate issues involving the conduct of the news media and, relatedly, the public's right to know. Tie in this discussion with the 5-minute writing exercise about themselves, when they were in the spotlight of the news media. Do news media overstep boundaries sometimes? Does private behavior affect public performance? (It would be interesting to know how similar situations are perceived and resolved in the students' home countries).

Students should be prepared to draw reasonable conclusions with appropriate supporting details based on the debate, on class discussions, on newspaper articles and on their own experiences, the experiences of others, newspaper sources, and so on.

Each student will work to formulate a thesis statement to be expanded overnight into a well-written essay, with teacher guidance, as needed.

The teacher collects and corrects the assignments and assigns further rewriting and editing or other follow-up activities, as necessary.

**ESL Students in the CUNY Classroom:
*Faculty Strategies for Success***

Conference Proceedings

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