Within a school curriculum featuring English as a second language, classes such as History for English as a Second Language and Math for English as a Second Language can play an important role. In these classes, the teacher can present content-subject matter, keeping in mind the linguistic capabilities of the students. Principles are not watered down; rather, they are presented in terms of the linguistic achievement of the student. In math, individual mathematical knowledge determines the placement of the student. Such classes are best taught by the English as a second language teacher, because he knows and understands the linguistic problems of the students and he has more experience with adapting materials for the foreign-born student. When the student's linguistic ability makes competing in English feasible, such classes should be discontinued. (VM)
HESL AND MESL*: THE TEACHING OF HISTORY AND MATH AS COMPONENTS OF AN ENGLISH AS A SECOND ENGLISH PROGRAM

Jay Wissot

The education of foreign-born students has recently been receiving increased attention throughout the public and private school systems of this nation. Much of this new founded sentiment is motivated out of a genuine concern for correcting past injustices and providing a program of instruction that is founded on sound psychological and linguistic principles.

*HESL—History For English as a Second Language
MESL—Math For English as a Second Language

Mr. Jay Wissot is ESL Title I Coordinator (K-8) for the Hackensack Public Schools in New Jersey and part time instructor in English as a second language methodology at Fairleigh Dickinson University. He is the current President of the New Jersey chapter of TESOL (NJTESOL). Mr. Wissot has published in TESOL Quarterly, Florida FL Reporter and other professional publications.
Towards these ends some schools have adopted modified programs of study or individual courses under such description headings as English As A Second Language, or English For the Foreign-born, or Orientation To the English Language etc. ... Irrespective of nomenclature, what all these courses/programs have in common is that they isolate, for varying periods of time, the second language learner from his English speaking counterparts in order to provide some form of specialized instruction.

These programs based on a linguistic foundation introduce listening and speaking practice as direct antecedents to the teaching of reading and writing. Other programs exist really as remedial reading courses with some attention being paid to the fact that these youngsters cannot communicate well orally in English, a fact which, by the way, contributes in no small measure to their status as non-readers. A third program type provides instruction of a rather limited nature for periods ranging from six to twelve weeks and then proclaims that the "orientation" process to English has been completed and the youngster is fully prepared to assume a place in standard academic classes.

The purpose of this paper, however, is not to assess the relative merits of the just described program types, although my own preferences certainly lean heavily in the direction of those programs which foster a basic regard for linguistic learning principles. Instead, this paper will reflect upon the somewhat larger and less easily answerable question of: What should the curriculum in Math, History and other content areas be for non-native speakers? Tangentially related to this larger question and also needed to be dealt with are the following questions:

1) Isn't a specialized English course for foreign-born students enough to reasonably insure a relative measure of success in academic subject classes?

2) Shouldn't the academic class work be held in abeyance until the student has satisfactorily reached a level of language learning necessary to convince both himself and his instructors that he is sufficiently prepared?

3) What part can bilingual instruction (subject area instruction in the student's native language) play in the total second language program design?

HESL and MESL are really two components of a larger English as a Second Language program design originating in the Hackensack, New Jersey, public school system three years ago. For the past two years, Math and History have been taught in grades 6-12 as an addition and complement to the already established English as a Second Language classes. Although the idea for combining English, Math and History instruction under one coordinated banner was neither conceived nor developed first in Hackensack, it has attained a fully recognized equivalent curriculum status on both the local and state levels. Foreign-born students successfully completing course requirements in HESL and MESL are not obligated to repeat similar History and Mathematics courses taken by the remainder of the student body.

The HESL component of the program consists of both beginning and intermediate classes. A student enrolled in a beginning ESL class would also receive daily an hour of History instruction commensurate with the limited oral skills of the youngsters and coordinated to the English grammatical structures and vocabulary being taught in the second language class. The exact same format would be used for students enrolled in an intermediate
ESL class with here both the existing oral and written language realities of the participants being taken into strict account.

All History classes are taught by the same persons who teach the students ESL. These are trained second language teachers with an educational background in History though not necessarily with a certified degree or teaching license. What they lack in technical History skills is compensated for by their awareness of each individual youngster's language achievement record and past performance level in the ESL class. Assisted ably by regular members of the History department who provide source materials and invaluable background charts, it must be pointed out, that the ESL-HESL teachers are not presenting "watered down" versions of the departmental curriculum but rather a partly adapted, partly different creation of their own design. The students are not being cheated out of enrichment but rather being given an opportunity to progress from a point that is more linguistically in tune with their individual language level than could possibly be the case in a regular History class.

To speak more specifically, what the ESL-HESL teacher would do would be to lift the basic historical principles and concepts of, let's say, an American History curriculum and adapt them to the needs and levels of his students. Detailed facts necessary to the making of an intelligent historical interpretation would be presented to the students in a revised version faithful to both spirit of the historical period and the syntactical and vocabulary levels of the students. Standard textbooks prove inapplicable because the students aren't to be expected to go home and read long-winded sentences which at this point in their linguistic development would prove only frustratingly incomprehensible. It would be far better to have the living spirit of ideas and value judgments occupying the course's time and not the mere memorizing of recorded facts and data.

Oral teaching approaches which lend credence to this statement include: dialogues with famous people inserts, taped radio news reports and musical recordings from different historical eras. Concept building techniques include: problem solving forms on topical issues, comparative analyses discussions between important events as presently being reported by the media and historical events that have already occurred, categorizing of the differences between the history and development of this country and that of the students native countries.

Visual reinforcement and supplementation on both planes (oral and conceptual) is achieved through drawings, pictures, maps, filmstrips, slides and experiential field trips to readily available historical sites (local, state).

The MESL component operates in much the same manner: One teacher for ESL and MESL, the offering equivalent curriculum credit, the coordination of syntactical and vocabulary structures with the ESL class, a stated policy of not trying to exactly duplicate nor "water down" the school's mathematics course of study.

The only significant difference between the two components is the added variable of mathematical ability in the placement of students for the MESL program. It is entirely possible that a youngster who would be in a first level or beginning ESL and HESL class might possess a rich mathematical background from his native school and would have to be considered too advanced for the first level course offering. MESL I is mainly concerned with the basic computational skills; addition, subtraction, multiplication, division and with the vocabulary necessary to perform relatively simplistic operations. The youngster in question, hypothetically, would probably find such a class exceedingly boring. In that event, he would be placed in a
MESL II class. Here he would be exposed to the rudiments of factoring algebraic equations. Additional time would be spent on linguistically connected areas such as word problems.

In actual practice, the MESL I and II techniques parallel much of the emphasis on the oral and visual found in the History component. Card games, dice, batting average percentages, racing form sheet adaptations, mathematically oriented dialogues, stock market reports on television and shopping visits to consumer agencies like the supermarket are all comprised in a curriculum format which is as potentially stimulating as it is ostensibly baroque.

Why have HESL and MESL components? Or, to pose the question as it was stated before: Isn't a specialized English course for foreign-born students enough to reasonably insure a relative measure of success in academic subject classes? The questions can be answered on both practical and linguistic grounds. From a practical perspective, most foreign-born students refuse to participate in classes with native English speakers. They are conscious of their accents, aware that mispronunciation may lead to the frustrations of being misunderstood, unsure of how they will be accepted by their native-speaking classmates and fearful of making a mistake lest their American peers judge them to be wholly ignorant. Consequently, they say nothing, and lead the teacher to believe they are very bright by nodding all the time or very stupid by staring blankly and uttering nothing when called upon to answer a question. There is little the teacher can do beyond developing extra assignments and offering supplemental tutoring after school. He or she is responsible to perhaps 25 or 30 other youngsters and cannot feasibly take time out from classroom instruction to individually assist foreign-born students. More importantly, the classroom teacher has had very little exposure to the adaptation of existing materials for ESL, HESL or MESL use. To be considered also is the fact that it takes a basic understanding of the language process to evaluate a student's progress in behavioral terms over an extended period of time. The more one works with second language programming, the more abundantly clear it becomes that it is easier to train ESL teachers for content area assignments than it is to train subject matter teachers for ESL assignments.

The linguistic arguments for providing courses in HESL and MESL run a lot deeper than the practical reasons. Basically, the issue or issues center around the different levels of communication and relative abilities in specific skill areas (speaking, reading, writing) of the ESL students. These issues really constitute separate topics for discourse and could best be answered in a wholly separate article. A brief condensation of the contributing facts can perhaps be managed here.

By separating the linguistic abilities of ESL students into three levels of proficiency, it becomes easier to understand why all students receiving specialized language instruction cannot be expected to make transferable use of those skills in the subject area classroom.

The first level can best be termed Functioning In English. This level is roughly equivalent to the language abilities of students in a beginning ESL class. Per these students communication is entirely oral. They have not yet reached the developmental stage where they can begin utilizing language forms independent of their teacher or an assisting fellow student. What little oral English they have internalized is largely oriented around the classroom environment and non-transferable to any great extent in the larger school/community environment. Communication at this level is largely a matter of a highly controlled stimulus-response interaction between the student and teacher. The teacher provides the stimulus in the form of a well
practiced question calling for a specific answer or perhaps in the form of an illustrative visual towards which the student has been trained there are a limiting number of possible response choices. Once removed from the safe haven of the classroom itself, however, the student is confronted with an assortment of uncontrolled stimuli and unfamiliar oral models. The wider diversity of possible stimulus inducers and the potentially great differences in dialects between persons of the same speech community place untold burdens upon a youngster for whom communication was just becoming a fascinating maze. To expect such a youngster to achieve measurable success in native-English speaking subject classes is loosely equivalent to expecting a person who has just barely learned to swim a few splashing strokes to enter a one mile endurance contest. Mastery of a skill cannot be assumed simply because a person has begun functioning in the skill area.

By the time a student reaches the second level of communication, Performing in English, he is no longer solely dependent upon the classroom environment, a restricted number of stimuli nor a conveniently familiar speech model. Being able to perform in English involves the more sophisticated forms of language communication; reading, writing and expansive cultural experiences. Without these first two elements, reading and writing skills, the student could be hopelessly lost in a standard academic environment. He would be hard pressed to fulfill even the minimal course prerequisites of completing homework assignments, succeeding on quizzes and unit exams, and doing expected research papers. The often less discernable elements of critical thinking: analyzing, interpreting, synthesizing and communicating abstractions, while formatively developed in the native speakers but unconscious over the years must be consciously practiced by the foreign-born student before assimilation into his linguistic repertoire takes place.

The richness and multi-leveled meanings which native-speakers can attach to cultural experiences is often missed by foreign-born students who are striving for surface or concrete understanding. Perhaps this can best be illustrated by a specific example. Both the native and non-native speaker can give a semantical definition for the English word, baseball. The difference lies in the connotative richness of meaning which the word holds for native speakers which it does not hold for non-native speakers who are limited to the narrow perspective of comprehending the word as no more than a favorite sport of the American people. Ask any ten year old boy to engage in a free association of word experiences related to baseball and the response is likely to run the spectrum of grand slam, pop fly, triple play, seventh inning stretch, etc. The problem is not that the ESL student possesses no advanced linguistic abilities and cultural experiences but that the gap between what he knows and has experienced is so great when compared to what the native speaker of average ability already knows and has experienced.

The ESL, HESL and MESL classes should only be discontinued when the student has advanced to the point where Competing in English with native speakers is a plausible reality. Competing in English incorporates both the oral communication level of the functioning stage and the more advanced linguistic and cultural entities of the performing stage.

The second question asked at this paper's outset was: Should the academic class work be held in abeyance until the student has satisfactorily reached a level of language learning necessary to convince both himself and his instructors that he is sufficiently prepared? Conceding the fact that such a level of satisfaction could be amenable agreed upon by student and teachers, holding course work in abeyance is still a poor educational policy to follow. The student's potential for intellectual growth and experiential advancement would be seriously curtailed.
The possibility exists that the student will interpret his lightened schedule as a reflection upon his inferior mental capacities not his linguistic handicaps, especially since he was in all probability able to succeed in academic subjects when taken in his native language. From an administrative vantage point, the removal of content subjects from the student's program will necessitate the devising of half day schedules. Foreign-born students would arrive at or leave at a different time than the rest of the school, thereby negatively accentuating his differentness from American students and depriving him of much needed linguistic exposure and cultural contact. Lastly, experience has shown that effective interdisciplinary approaches to education reinforce one another and develop strong learning ties. The whole concept of component extensions to an ESL program is rooted in the notion that there must be a decisive inter-relationship between educational parts if meaningful learning is to be derived.

What part can bilingual instruction play in the total second language program design? A most definite and instrumental part indeed. In fact, in those school systems where more than 50% of the student population is comprised of students representing a second language group, the ESL program should submerge its identity and defer its dominant role to become itself a smaller component in a larger whole; the bilingual program.

However, in those school systems where the percentages for any one language group is less than 50%; in the school systems where a multilingual speech communities reside; in those school systems where an ESL course of study and classes have already been established and a bilingual course of study and classes have not; and in those school systems where local boards or state education department decrees demand that academic credit be given only to those subjects taught entirely in English, a personal recommendation is hereby made that the administrators seriously consider the adoption of an extended ESL program incorporating the History and Math disciplines and perhaps the area of science within its organizational framework.

The advocacy of an extended ESL program should not be viewed as a plea for the permanent dismemberment of existing established curriculums but rather for the creation of a "temporary" spot on the education continuum whose subsequent accountability will be measured by its eventual demise.

APRIL, 1971 73