Many people played important roles in bringing this project to its final form. I am grateful to each one of them.

I would especially like to thank David Rickard for providing the initial impetus to get something done, for raising the right questions, for demanding better answers, and for providing constant encouragement.

I would like to thank Miho Steinberg and Richard Day for their faith in my work and for giving me the opportunity to devote time to syllabus and materials development as part of my graduate assistantship duties. Specifically, I would like to thank Miho Steinberg for her 'beyond the call of duty' work in distributing the needs analysis questionnaires and contacting the various departments.

My thanks also go to Michael Grossman who, in the course of many conversations, contributed to the underlying ideas in this thesis, and who played an important role in testing materials in the classroom and suggesting revisions. Most important, I want to thank him for his emotional support.

Lastly, I wish to thank the members of my committee--Ted Plaister, Jack Richards, Richard Day--for their time, comments, and encouragement.
ABSTRACT

This thesis presents a semester-long syllabus with sample materials for a lecture comprehension and note-taking class for advanced ESL students in a university setting. The syllabus presupposes a high level of grammatical competence on the part of the students, taking for granted that it is not on the level of lexical or sentential comprehension that the student has difficulty. Rather, problems are assumed to stem from insufficient time of processing due to lack of familiarity with the language and the assumptions concerning lecture discourse in that language. Background information is cited regarding research in connected discourse processing, the effect of culture on that processing, lecture discourse analyses, and lecture comprehension and note-taking pedagogy and skill needs. A needs analysis concerning the listening comprehension, note-taking, and production requirements of university students is presented and discussed.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ............................................................... iii

ABSTRACT ........................................................................ iv

LIST OF TABLES ................................................................. vii

CHAPTER I. INTRODUCTION .................................................. 1

CHAPTER II. RESEARCH IN THE AREA OF LECTURE COMPREHENSION AND NOTE-TAKING .......... 9

Skills Involved in Lecture Comprehension and Note-taking by Native and Nonnative Speakers .......... 9

Cognitive Factors Involved in Lectures Comprehension and Note-taking and the Influence of Culture on These Cognitive Factors ........................................... 17

Discourse Analyses of Lectures and Notes .................................................................................. 26

Lecture Comprehension and Note-taking Pedagogy .................................................................. 35

CHAPTER III. LISTENING COMPREHENSION, PRODUCTION, AND NOTE-TAKING NEEDS OF UNIVERSITY ESL STUDENTS WITH IMPLICATIONS FOR SYLLABUS DESIGN .................................................. 52

Needs Analysis Procedure ........................................................................................................... 54

Analysis of Faculty and Chairman Responses With Syllabus Design Implications .................. 56

Analysis of Student Responses With Syllabus Design Implications ......................................... 65

CHAPTER IV. A SYLLABUS WITH MATERIALS AND METHODOLOGICAL SUGGESTIONS FOR TEACHING LECTURE COMPREHENSION AND NOTE-TAKING TO ADVANCED ESL STUDENTS .................................................. 77

A Listening Comprehension, Note-taking, and Production Syllabus for Advanced ESL Students ................................................................. 77

Materials and Methodological Suggestions For Teaching Lecture Comprehension and Note-taking to Advanced ESL Students ........................................... 84

CHAPTER V. CONCLUSION ..................................................... 115
### LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sequencing For Listening Practice</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>Johns and Johns' Note-taking Syllabus</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>Breakdown of Faculty and Chairman Questionnaire Responses</td>
<td>57</td>
</tr>
<tr>
<td>4</td>
<td>Percentage of Time Devoted to Lectures, Student Presentations, and Discussions</td>
<td>58</td>
</tr>
<tr>
<td>5</td>
<td>Breakdown of Department Course Offerings in Terms of Lecture and Discussion Style</td>
<td>60</td>
</tr>
<tr>
<td>6</td>
<td>Is it Necessary to Take Detailed Notes?</td>
<td>60</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

Nonnative speakers of English coming to English speaking countries for university study are often unprepared for the different levels of aural skill demanded of them. Most probably, they have not been exposed to large amounts of English native speaker speech spoken at different speeds, in different registers, in different dialects, in different contexts. One of these varieties of native speaker speech that is especially essential to these students is lecture discourse. Not only does the vocabulary and syntax of academic discourse differ from conversational discourse, but in addition, the language is presented in a context allowing little room for listener input (e.g. directing the topic, requesting clarification). The addressee in a lecture discourse situation cannot always be satisfied with getting the 'gist' of the talk; rather, s/he will often be held responsible for specific details or ideas. At the same time that the addressee in a lecture discourse situation is listening and processing the content, s/he is often required or feels required to take notes, thereby dividing attention and processing time even further. In order to address these needs, many pre-university ESL programs have instituted courses in advanced listening comprehension with a focus on lecture comprehension and note-taking.
The curriculum, sequencing, and materials of these advanced listening comprehension courses, however, are often vague and haphazard. Rather than teach listening, teachers often end up testing their students and giving them practice in listening. Part of the problem stems from a lack of knowledge of what the listening skill entails.

'What is learned when we learn a foreign language?' This is a crucial question for until we know what we are teaching we will not really know how best to teach it. In some sense, the answer is obvious; we learn reading, writing, speaking, morphology. But we want a different kind of answer, not a taxonomy of language; instead, we seek an identification of the skills, capabilities, and behaviors a learner comes to have. (Melvin and Rivers 1976:73)

In order to know how to teach lecture comprehension and note-taking to ESL students, we must first be clear on what we are teaching.

In the field of ESL, focus is moving from the development of linguistic competence towards the development of communicative competence. Hymes (1966) claims that language, in addition to consisting of rules relating referential meaning to sound, also includes extralinguistic assumptions about roles, situations, cultural norms and values, lexical connotations and associations, etc. If linguistic competence in the Chomskyan sense of being a tacit knowledge of language structure) were the only criterion for effective comprehension, there would be no reason to specify varying demands in different situations. Yet, it can be demonstrated that the interpretive value of the same utterance varies according to
the situation. **Interpreting** language in a face-to-face encounter with a close friend, in a face-to-face business encounter, or in a viewer-television announcer situation requires the same degree of **grammatical** competence. The interpreter **must** be able to transform the string of sounds into meaningful words. However, the same question, "How are you?" spoken in each of these situations will be **interpreted** and reacted to differently. A close friend asking the question night sincerely want to know how his/her friend **feels**; a business acquaintance asking the question certainly expects a mediocre to positive reply and is only asking the question to fulfill the role of polite partner in an interpersonal exchange; the television announcer asking the question to the audience certainly expects no answer at all.

Another factor demonstrating the insufficiency of solely linguistic training is given by Rivers (1966:198) when she talks about a level in the listening comprehension skill in which the learner "may recognize the essentials of the message, but not be able to remember what he has recognized." The grammatical competence is there, but some element--time of processing? memory? different non-auditory background information?--is interfering with lasting or functional comprehension.

What sets the lecture comprehension and note-taking skill apart from listening comprehension of a more general nature? Candlin (1978:1) claims that "access to understanding
venes across discourse types. In all listening situations, the listener must make judgments about the speaker's emphasis, eliminating utterances of a tangential nature. In many general listening situations, however, the listener has the option of asking for clarification. The speaker has the option of asking or testing whether s/he is being understood. In a lecture situation, this two way clarification process is not available to the same degree. The lecturer must, through lexical, syntactic, and paralinguistic means, make clear to the listener what s/he is trying to emphasize. The listener must 'read' these signals correctly and attend to those emphasized items and ideas. The student who treats each linguistic item equally may not, upon leaving the lecture hall, be able to answer the question "what was the lecturer trying to say?". Moreover, the same student treating each linguistic item equally would not be able to take useful notes, lacking the ability to decide immediately what to write down and how to organize it.

Noise (language uncleanness, mechanical failures, outside noise, listener inattention, etc.), in all listening situations, masks some portion of the incoming language. Yet, efficient listeners still interpret the message correctly. Prediction occurs on the lexical as well as the discourse level. The listener hearing the can reasonably predict that a noun phrase will follow. A listener hearing a narrative can reasonably predict that the speaker will describe a
seating near the beginning of his/her talk (Van Dijk 1977b: 153-4). Or. the lexical level, predictive ability can be assumed to be equal across discourse types. On the discourse level, however, each discourse type has its own expected organization, an organization which might very well vary across cultural boundaries (Candlin 1978). Therefore, another aspect of achieving interpretive competence (the listening segment of communicative competence) in an academic lecture situation would be achieving an ability to predict the speaker's train of thoughts and organizational plan.

In any listening situation, the listener is expected to play an active role, making appropriate inductions and deductions. Here, again, the student needs to be aware of the specific organization of lecture discourse. The lecturer expects the listener to follow his/her train of thought and to follow the same rules of interpreting as s/he would. If a lecturer began by giving examples of problems without solutions, the listener can be assumed to know that the lecturer will at some point tie together the seemingly unrelated examples into one conclusion. The lecturer is assuming that one listener is making inductions as s/he listens. Not only, then, does the listener have to predict future organizational patterns but the listener also has to interpret previous discourse in a way appropriate to the seeing. A major question of direct relevance to the ESL student listening to a lecture is asked by Gumperz (1977).
"How can we be certain that our interpretation of what activity is being signalled is the same as the activity that the interlocutor has in mind, if our communicative backgrounds are not identical?"

Most often, listening in an academic lecture environment goes hand in hand with another skill, that of note-taking. Note-taking presupposes interpretive competence on the part of the listener. Note-taking takes up even more of the time ordinarily used for processing and so further stresses the need for predicting, synthesizing, eliminating, and utilizing cues of emphasis. In addition, the process of note-taking requires that the note-taker make immediate judgments as to the relative value of an utterance within the lecture. Part of interpretive competence in an academic lecture environment is the ability to evaluate the importance of an utterance for subsequent retention or noting. A syllabus for a lecture comprehension and note-taking course, therefore, needs to focus on note-taking as a by-product of achieving interpretive competence and also as a manifestation of interpretive competence.

This thesis, then, is an attempt at providing a semester-long syllabus and materials for a lecture comprehension and note-taking class for advanced ESL students in a university setting. The syllabus presupposes a high level of grammatical competence on the part of the students, taking for granted that it is not on the level of lexical or sentential
comprehension that the student has difficulty. Rather, problems are assumed to stem from insufficient time of processing due to lack of familiarity with the language and the assumptions concerning discourse in that language. A course which focusses on the specific skills required in an academic lecture environment would not necessarily be directly transferrable to a general listening situation. The skills and strategies may be the same but the realizations in terms of language may be different. The proposed syllabus and materials will focus in particular on the skills of (1) predicting speaker train of thought and organizational patterns, (2) synthesizing previous information and fulfilling the speaker's expectations of the listener's competence in terms of making appropriate deductions and inductions, (3) eliminating words and phrases that are redundant or tangential to the speaker's essential message, (4) utilizing lexical, syntactic, and paralinguistic cues given by the speaker to highlight important information, and (5) evaluating the relative importance of utterances for retention or note-taking. All of these skills may be based on patterns different from the listener's native language expectations.

Chapter two of the thesis will describe research related to the area of lecture comprehension and note-taking from four different perspectives: (1) from a skill-based perspective for the native speaker (NS) and nonnative speaker (NNS) -- what skills are involved in lecture comprehension and note-taking?;
(2) from a psycholinguistic perspective--how does research in connected discourse processing relate to lecture comprehension? what effect does culture have on this processing? what role does short-term memory play in NNS lecture comprehension and note-taking?; (3) from a discourse analysis perspective--what takes place during lecture discourse in terms of cues and organizational patterns? do NNSs have different expectations?; (4) from a pedagogical perspective--how can advanced lecture comprehension and note-taking be taught?

Chapter three of the thesis will describe a needs analysis concerned with the listening and note-taking needs of undergraduate and graduate students. Analysis is based on the students' perceptions, faculty perceptions, course requirements, and department statistics. In addition, the pedagogical implications of these analyses will be discussed. Lastly, chapter four will focus on individual aspects of the proposed syllabus and present materials and methodological suggestions.
CHAPTER 11
RESEARCH IN THE AREA OF LECTURE COMPREHENSION AND NOTE-TAKING

A. Skills Involved in Lecture Comprehension and Note-taking by Native and Nonnative Speakers

All attempts at trying to enumerate the skills involved in NS listening comprehension have dealt with at least two skills called by Brown and Carlson (1953) "receptive listening" and "reflective listening." Receptive listening focusses on the information content of the message such as the ability to keep related details in mind; reflective listening focusses on the inferential and thought processes involved in interpreting a message such as the ability to recognize relationships between main ideas and subordinate ideas, and the ability to recognize organizational elements.

The generality of such a distinction becomes clear when we look at a list composed by Rankin (in Duker 1966: 25-6) on the abilities possessed by a good listener:

I. Ability to hear

II. Strong purpose to listen in a wide variety of listening situations

III. Important abilities common to most listening situations
   A. Ability to recognize many words the moment they are heard
   B. Ability to acquire new words
   C. Ability to understand readily the meaning of sentences even though they are more or less complex and involved
   D. Ability to understand and appreciate the thoughts, sentiments, and ideals presented
in relatively long units of oral expression. It will include the ability:
1) to concentrate attention on the material being presented
2) to anticipate the sequence of ideas
3) to associate ideas accurately
4) to recall related experience
5) to recognize the important elements
6) to derive meaning from the context

E. Ability to recognize and interpret what may be called oral punctuation—the system of voice inflections and pauses which are so useful in facilitating the conveyance of meaning by word of mouth

F. Ability to utilize in the process of building up meaning, the vocal adjustments and facial and bodily expressions of the speaker

IV. Specific abilities appropriate to specific listening situations
A. Ability to analyze or select meanings
1) to select important points
2) to get the facts accurately
3) to secure answers to questions
4) to obtain materials on a given problem
5) to determine the essential conditions of a problem
6) to follow directions

B. Ability to associate and organize meanings
1) to grasp the speaker's organization
2) to associate what is heard with previous experience
3) to prepare an outline or summary

C. Ability to evaluate meanings
1) to appraise the value or significance of statements
2) to compare statements heard with items from other sources
3) to weigh evidence critically
4) to interpret critically

D. Ability to retain meaning
1) to reproduce to others

V. Ability to select, in a given listening situation, the specific listening mode which is appropriate to the situation

Herschenhorn (1979:67-8) goes into more detail than Rankin concerning what the listener has to listen for in the phonological, syntactic, and semantic code:
I. The phonological code
   A. phonemes
   B. rhythm
   C. stress
   D. intonation patterns and *emotional overtones*
   E. sandhi-variation (including reflections of regional, social, and dialectical variations)

II. The syntactic code
   A. word classes (including affixes and exceptions)
   B. word order (including stylistic variations)
   C. interrelationship of words (including stylistic variations)

III. The semantic code
   A. word meaning (*including* variations within the context)
   B. connotation (culture-tied and often dependent on region as well as individual speaker)
   C. culture (national, regional, ethnic)
   D. idioms, expletives, cliches, colloquialisms
   E. false starts, pauses, fillers (redundancies)

Herschenhom, however, seems to omit the paralinguistic aspect of listening which Rankin does focus on in III E and III F of his list.

Although Rankin goes into detail about the receptive aspect of listening, he seems to glance over the reflective aspect. He does include an ability to evaluate meanings and an ability to associate and organize meanings (IV B and IV C) and the ability to anticipate sequences of ideas (III D 2) and the ability to recall related experiences (III D 4). However, he seems to overlook much of the active listening role of inferencing and interpreting.

Fessenden (in Duker 1966:30-3) talks about levels of listening and seems to focus more clearly on the interpretive role of the listener. He makes it clear that even in a single minute, one might run through all seven of the levels he
suggests. The teaching of listening, to Fessenden, should encourage variation in level, flexibility in shifting levels, and the choice of the most appropriate level for the specific occasion. Fessenden's levels are as follows:

Level 1: isolate sounds, ideas, arguments, facts, organization, and the like—no evaluation or analysis—implies recognition of the presence of specific independent ideas.

Level 2: identify or give meaning to those aspects which we have isolated.

Level 3: integrate what we hear with past experience.

Level 4: inspect the new, and the general configuration of the new and old data (begin to evaluate).

Level 5: interpret what we hear—we become not only concerned with the idea and its relation to other ideas we already possess but also with the possible subtle implications of the idea. Appraise both process and content.

Level 6: interpolate comments and statements that we hear (supply in part that which lecturer doesn't provide: add, insert, guess at meaning behind and between the sound waves, predict the speaker's path).

Level 7: introspect as well as listen. Note effect of words on listener (feeling of being pressured, entertained, etc.)

From levels five to seven, the listener is faced with the task of detecting implications and making inferences.

Inferencing is the process by which we take what is explicitly stated in the text, apply our world knowledge to it, and finally, come up with meaning. Warren, Nicholas, and Trabasso (1979:27) attempt to break down the inferencing skill into
three main inference types:

A. Logical inference
   1. motivation
   2. psychological causative
   3. physical causative
   4. enablement

B. Informational inferences
   1. pronominal
   2. referential
   3. spatiotemporal
   4. world frame
   5. elaborative

C. Value inferences
   1. evaluative

Logical inferences deal with the questions "why" or "how" and involve the causes, motivations, and conditions which allow events to occur. Informational inferences deal with the questions "who", "what", "when", and "where" and involve the people, instruments, time, place, objects, and contexts of events. Value inferences involve the listener's world knowledge about the objects, actions, and events in the text.

Listening, then, involves the following:

(1) facility with the phonemic, syntactic, semantic, and paralinguistic coding of the language involved.

(2) motivation and the interest of the listener in attending to what is being presented.

(3) logic on the part of the listener in associating ideas to one another and grasping the speaker's organization.

(4) evaluation and judgment on the listener's part in deciding what the speaker is emphasizing and what is worthy.

(5) a memory component, taking for granted that the
listener can retain, either in memory or through notes, what has been presented.

(6) an active inferential component where the listener is listening beyond the words being spoken.

For the NNS, there are obvious things to be learned. Rivers (1962) discusses three overall stages in NNS listening comprehension. At first, the foreign language strikes the NNS's ears as a stream of undifferentiated noise. Gradually, the NNS notices some order and begins to perceive patterns. Later, the NNS recognizes familiar elements in the mass of speech but is unable to recognize the interrelationships within the whole stream of sound. Gradually, the NNS begins to recognize the crucial elements which determine the message. At a later stage, the NNS may recognize the message but still not be able to remember what s/he has recognized.

Rivers' analysis, however, is not complete in that it does not take us from the third stage to complete interpretive competence. As she does point out, the NNS must learn a new set of phonemic, syntactic, and paralinguistic codes for the foreign language. Because the cues of emphasis and de-emphasis may differ from cues familiar in the NNS's native tongue, the NNS may have difficulty judging the relative importance of information. Rivers also points out that memory plays a role in NNS difficulty in listening comprehension. Lado (1965), too, has shown that short-term memory in a foreign language has a much smaller capacity than memory in the native language.
This is a problem because the NNS may not be able to keep an item in memory storage long enough to make the appropriate associations and retroactive inferences. Rivers, however, does not consider the stage in which the discourse style of the foreign language and the background expectations of the foreign language inhibit the NNS from full interpretive competence. Because the discourse style and organization principles may differ from the NNS's native language expectations, s/he may have difficulty in grasping the speaker's organization and plan of presentation. Because the ability to make inferences may require cultural background knowledge that the NNS may not have experienced along with expectations of discourse patterns, the NNS is again at a disadvantage.

Rankin (in Duker 1966:26), in his list, includes in the abilities possessed by a good listener "the ability to prepare an outline or summary" and "the ability to reproduce meaning to others." As mentioned before, this note-taking or reproducing ability presupposes a high level of interpretive-competence. Hartley and Davies (1978:219) describe three steps involved in note-taking:

1. identifying and discriminating between elements
2. identifying and discriminating between relationships between the elements
3. identifying the organizing principles

It becomes obvious, however, that "identifying" and "discriminating" are not the only factors involved in note-taking when Hartley and Davies describe in more detail the
process by which successful notes are taken:

(1) the note-taker organizes note-taking in such a way as to ensure that the notes reflect either the framework employed by the teacher or a framework meaningful to the learner.
(2) the note-taker adds any necessary details as examples to the framework rather than records them as isolated elements in the notes.
(3) the note-taker adds to the teacher's details and examples any additional ideas which give personal meaning and insight to the material.

The note-taker's job, then, is not only to receive the input from the speaker's side, but also to add his/her background knowledge and interpretation to that input.

As with the skills of listening, the NNS is clearly at a disadvantage. While the NS is allowed the freedom to organize notes reflecting either the teacher's framework or a framework that is meaningful to the learner, the NNS may misinterpret the teacher's framework by imposing a foreign language and foreign background interpretation. The NNS may interpret emphasis where no such emphasis was intended, relationships where no such relationship was intended. There can be no doubt that notes written in a "framework meaningful to the learner" are essential, but with the NNS, care must be taken to ensure that this framework still reflects the speaker's intention. Hartley and Davies' next two aspects of the process of note-taking are as applicable to the NNS as to the NS. The NNS, too, must add necessary details as examples to the framework and not as isolated elements. The NNS, too, must add to the speaker's ideas that which adds personal
meaning and insight to the material. Again, however, the NNS must be aware that cultural background and associations may not be relevant in a foreign language situation, and that in fact, these associations may be misleading.

B. Cognitive Factors Involved in Lecture Comprehension and Note-taking and the Influence of Culture on These Cognitive Factors

Much research has been done to answer the question, "What goes on in the listener's mind as s/he processes connected discourse for retention?" One of the first researchers to deal with this question was Bartlett (1932). He felt that researchers had to account for the fact that when a passage was recalled, it was not reproduced exactly but was rather reconstructed in the light of a person's "schema" at the time of recall. This concept of listening as being a process of reconstruction based on the listener's own expectations and analysis and requiring the listener's own inferences has resulted in what may most generally be called "schema theory." Adams and Collins (1979:3) describe schema theory:

A fundamental assumption of schema-theoretic approaches to language comprehension is that spoken or written text does not in itself carry meaning. Rather, a text only provides directions for listeners or readers as to how they should retrieve or construct the intended meaning from their own, previously acquired knowledge. The words of a text evoke in the reader associated concepts,
their past interrelationships and their potential **interrelationships**. The organization of the text helps the reader to select among these conceptual complexes. The goal of schema theory is to specify the interface between the reader and the text—to specify how the reader's knowledge interacts with and shapes the information on the page and to specify how that knowledge must be organized to support the interaction.

One type of schema research in Van Dijk's (1977a, 1977b) theory of macro-structures. Van Dijk suggests that information processing involves the retrieval of the macro-structures of the discourse. (These macro-structures may be more commonly regarded as "topic" or "theme".) According to Van Dijk, a complete discourse comprehension model would activate knowledge of frames (units or concepts that are typically related), knowledge of super-structures (the functive use of the discourse e.g. narrative, argument, advertisement), inferences based on frames and super-structures, application of macro-rules (of generalization of information, deletion of information, integration of information, and construction of information) to deduce the macro-structure of the discourse.

As Tannen (1979:138) says, "terms such as 'frames', 'schema!', 'scripts'... all amount to structures of expectations... based on one's experience of the world in a given culture, one organizes knowledge about the world and uses this knowledge to predict interpretations and relationships regarding new information, events, and experiences." Examples of frames are "how people look and behave" or "what the
geography of the world is." In an "eating in a restaurant" frame in American culture, there would be subsets including "eating in an expensive restaurant" and "eating in a diner." Further along in the hierarchy of information of the frame "eating in a diner" would be the concept of "eating at a counter", "tipping the waitress", "reading the newspaper over coffee." Van Dijk (1977b) treats these frames as being a hierarchy of facts, assumptions, propositions, expectations of actions and objects, all of which are stored in semantic memory.

Winograd (1977:81) defines three types of discourse schema:

1. Interpersonal schema - conventions for interactions between the participants in a communication.
2. Rhetorical schema - conventions for laying out a reasoning sequence which the speaker wants the hearer to follow.
3. Narrative schema - conventions for connecting a sequence of utterances into a coherent text.

In most discourse, all three of these schemas are working at the same time. During a lecture, for example, not only are there conventions for laying out a reasoning sequence, but there are also rules of lecturer-student interaction and rules for connecting the logical sequence of utterances within the larger lecture discourse organization.

What then does the listener do as s/he processes connected discourse according to schema theory?

A receiver strategically attempts to develop a message theme as soon as possible. The developed message theme serves as an organizational criterion for relating propositions to one another. It also
serves as a retrieval cue to assess prior semantic memory schema and to decide if a message is complete and ready for long-term semantic memory storage. (Houselel and Acker 1979:28)

Adams and Collins (1979:5) say that "every input event must be mapped against some schema and all aspects of that schema must be compatible with the input information."

Connected discourse processing, then, is very much a matter of hypothesizing and assessing these hypotheses against the incoming information. Two processes in particular take place. One process is "bottom-up processing" which is evoked by the incoming data and tries to find more general schemas that encompass the incoming information. The second processing strategy is "top-down processing" which tries to find lower-level schemas that confirm hypotheses already made.

This concept of the listener first hypothesizing a message and then later assessing the hypothesis is the basis of Halle and Steven's (1967) analysis by synthesis model of connected discourse processing. This model proposes that the listener generates internally a match for the speech s/he hears, a match that is constantly refined by testing it against incoming information. There are two stages in their model: stage one being a period of preliminary analysis and hypothesis finding; stage two being a period of synthesis and hypothesis testing. Oakeshott-Taylor (1979) posits a third stage of storage of semantic content of passage.
and integration with the content of previously heard ideas.

Freedle (1972:183) expands on this notion of hypothesis formation and testing when he states that "the relative difficulty we have in isolating the relevant topic of conversation is related to the size of the set of possible alternatives that we believe might be discussed under a given set of circumstances." If the set of possible alternatives is too wide, possibly due to cultural differences and different expectations, the receiver will have more difficulty with hypothesis formation and testing because his/her chances of forming incorrect hypotheses are greater and his/her chances of not finding that the incoming information is fitting into the hypothesized structure is greater. Freedle later says that those with too narrow a set of alternatives have great problems because they may feel that it is the lecturer who is making an error in topic or who is wandering off the topic,

Rivers (1972) attempts to deal with the problem of the ESL student's having too great a set of alternatives on the lexical and syntactic level. She suggests that those factors which reduce the possibility of occurrence of any particular word or idea should be pointed out and practiced. (These factors could be syntactic relationships, e.g. the necessity for a noun phrase to follow a determiner, combinations of words of high frequency, e.g. as a matter where of fact or of course are the only reasonable alternatives, or cliches, e.g. where there's a will, where there's a way is the only reasonable alternative.)
Rivers (1972) suggests that there is a stage in the ESL students' listening comprehension competence when this information overload can prevent the student from retaining the message s/he has heard even though s/he has understood it. In Spearitt's (1962) factor analysis of the listening comprehension skill, he found that memory span was positively correlated to the skill. Yet, Lado (1965) found that memory span is shorter in a foreign language than in the native language and also that memory span increases with mastery of the foreign language. Craik and Lockhart (1972:675-6) attempt to explain this relation of time of processing to retention in their "depth of processing" model. "Retention," they say, "is a function of depth and various factors such as the amount of attention devoted to a stimulus, its compatibility with the analyzing structures, and the processing time available." The preliminary stages in their depth of processing model are concerned with the analysis of physical or sensory features (lines, angles, brightness, etc.). Later stages are more concerned with matching the input against stored abstractions of past learning. Here, the extraction of meaning takes place. The result of this deeper and deeper analysis is a memory trace "with deeper levels of analysis associated with more elaborate, longer lasting, and stronger traces."

All of these analyses of how connected discourse is processed lead to questions of whether or how culture can
affect this processing. Johnson (in Duker 1966:39) states that "we take for granted that what the speaker means by what he is saying is precisely what we would mean if we were to say the same thing. We forget that the meaning of a word is not in the word; it is in the person who uses it or responds to it, and people differ." This hypothesis was supported in Kintsch's (1976) work when he found that American Indian stories having a narrative structure that is different from conventional Western stories were harder for non-Indian subjects to recall as compared to recalling traditional Boccaccio stories.

Scribner (1979:241) found, however, when comparing the ability to deal with syllogistic logic schema, that "the overwhelming bulk of respondents in all cultural groups showed some grasp of the genre" and that the main differences occurred across literate versus non-literate boundaries. Those from literate societies gave predominantly "theoretical explanations" concerning their answers (i.e. the statements explicitly related the conclusion to the problem's premises). Those from non-literate societies tended to give "empiric explanations" (i.e. the statements justify the conclusion on the basis of what the subject knew or believed to be true). The input is the same but the inferences on the part of the listener and the listener's assumptions in processing the discourse are different.

Scribner then raises the question of "What are the
preexisting schema into which verbal logic problems can be assimilated?" and in answering this question, deals with the problem of what happens when the preexisting schemas differ from accumulated knowledge.

If the relations the problems express are arbitrary, though, not consonant with, or in opposition to accumulated knowledge, their assimilation into preexisting knowledge schemas may militate against, rather than facilitate comprehension, recall, and problem solving. Such assimilation would manifest itself in 'empiric bias' as preexisting schemas become the field of operation for remembering and reasoning activities (Scribner 1979:239-40).

What unifies all of these branches of research is the idea that people do not receive information into an empty receptacle. Rather, the receiver imposes organization and unspoken ideas onto the input. This imposition arises from the receiver's accumulated 'knowledge of how the world works and how speech is used to express how the world works. Tannen (1979:144) notes how this imposition not only aids interpretation but also may shape different interpretations:

This prior experience or organized knowledge takes the form of expectations about the world, and in the vast majority of cases, the world, being a systematic place, confirms these expectations, saving the individual the trouble of figuring things out anew all the time...At the same time that expectations make it possible to perceive and interpret objects and events in the world, they shape those perceptions to the model of the world provided by them...Thus, structures of expectation make interpretation possible, but in the process they also reflect back on perception of the world to justify that interpretation.

Our assumptions about the world are so deeply ingrained as undeniable facts about the world that it may be virtually
impossible to take the jump to see the world and its organization in a different way.

For the ESL student who is called upon to interpret connected discourse in a foreign language, this research may have relevance. The student may need to recognize and make appropriate assumptions about super-structures in the foreign language. Kaplan (1966) discusses the idea of "contrastive rhetoric", the assumption that different cultures expect and call for a different system of presentation to get ideas across. According to Van Dijk (1977: 154), macro-categories (e.g. setting, resolution, episode in the super-structure of a narrative) "dominate sequences of propositions of the narrative discourse" and so, are the building blocks of interpreting a narrative. Listeners from cultures in which the macro-categories are different or very differently expressed may impose the wrong interpretation on the narrative or might end up totally confused at the seeming illogicality of the input.

On a lower level of interpretation, the ESL student must develop a source of frames similar to those assimilated by the native English speaker. Awareness of the pictures that come to mind when a certain topic is raised will lead to greater equivalence in background knowledge among NS and NNS. Rather than taking for granted that the NNS knows the implications of a topic, more attention needs to be placed on the cultural presuppositions about that topic. In terms
of vocabulary, too, implications need to be discussed. Discussion of the word begging needs to include the presupposition that in American culture, begging denotes need or cunning, that it is a degrading practice, and that it is looked upon as a nuisance.

Attention also needs to be focussed on predictive assumptions at the word and syntactic level. Predictions of what grammatical form can fit into a certain slot need to be practiced. Awareness of lexical collocations, words that always come together, need to be introduced. Awareness of cliches and cultural proverbs need to be dealt with.

The strategy that most needs to be worked on in the ESL classroom, then, is the making of correct hypotheses or at least, the making of incorrect hypotheses that can be refined by incorporation of preceding or incoming data leading to correct hypotheses. This hypothesis-making can be practiced on all levels of discourse: on the lexical level, on the syntactic level, and most importantly for lecture discourse, on the discourse level of overall organizational patterns.

C. Discourse Analyses of Lectures and Notes

In order to teach how to listen to a lecture, it is essential that the teacher know what is involved in lecturing. Attempts at analyzing lecture discourse have been carried out by Wijasuriya (1971), M. Cook (1974), J.R.S. Cook (1975),
Dudley-Evans and Johns (in press) note three types of lecture styles: a reading style in which the lecturer reads from notes or speaks as if s/he were reading from notes; a conversational style in which the lecturer speaks informally, with or without notes; a rhetorical style in which the lecturer acts as performer with frequent asides and digressions. Dudley-Evans and Johns focus on the individual lecturer styles, foregoing what may be conceived as an overall lecture discourse.

Other researchers have analyzed lectures to find the commonalities that underlie all lectures despite lecturer style of presentation. M. Cook (1974), for example, bases her analysis of lecture discourse on the supposition that lecture discourse is a process of maintaining and directing relevance in speech. She concludes that smooth transitions are attempted by all lecturers regardless of stylistic differences. This process of making smooth transitions involves three general rules: (1) topic continuation, (2) topic recycling, and (3) topic change. Topic continuation is the use of connectives, enabling the speaker to move from one topic to a related topic and suggesting the relevance between the two topics. As examples of topic continuation, she gives "this whole thing about ___ also applies to ___" and "the same thing took place with regard to ___." She adds that
when topic continuation is applied the speaker has a limited number of choices. *S/he may* (a) repeat a word or phrase from a previous *utterance*, (b) use a synonym for a word in a previous utterance, or (c) use a pronoun whose antecedent was in the previous utterance. Another means of topic continuation is to initially assert an intention of bringing up a number of points and then later marking those points with "the same thing", "now getting back to our four basic ___." The topic recycling rule is applied when the lecturer wishes to elaborate on some previous topic. Recycling can be in the form of examples, contrasts, and analogies (e.g. "___ is a whole separate bag of *worms from___" or "so I guess that the major thing this illustrates is ___"). Finally, at the end of an episode, topic change rules are applied to close off or limit a *previous* topic (e.g. "any comments or questions on ___?").

M. Cook's analysis does bring to light many of the actual verbal cues to lecturer intention and organization; however, she does not touch upon the many nonverbal or inferential cues that are needed to interpret lecture discourse correctly. She focusses only on the surface form of the lecture.

In an *unpublished* study done in 1981, I analyzed transcripts and videotapes of lectures in order to discover what cues existed to transmit the speaker's concept of the lecture goals to the students. I noted a *number* of emphasis markers, concluding that it was often a combination of
emphasis markers that gave a point its "emphasis weight." Some of these emphasis markers are (1) lexical markers which draw attention by organizational means ("certainly a third point we have to think about is ___"), (2) lexical markers which denote emphasis and draw attention by semantic means ("now this is astonishing"), (3) a concentration of lexical or semantic repetition ("bradychardia...only found in certain animal types like whales have it, seals have it, I'm sure dolphins have it, man also has it"). (It should be noted that lexical repetition alone has a cohering function and unless supplemented with other emphasizing markers may not play an emphasizing role.) Other emphasis markers include (4) the elicitation of frames that connote emphasis ("it is this man then whom we're going to focus on as the bearer as the revealer of this amazing way" with "bearer" and "reveler" eliciting a frame of someone bringing an important message), (5) the use of highlighting transformations (clefting, pseudo-clefting, movement rules), (6) the use of rhetorical questions which serve to highlight the information that follows by setting up an expectation. In terms of kinesics, it was noted chat (7) hand position may denote emphasis by pointing or counting or by imitating the rhythm of the speech and (8) body position may visually demonstrate the relation between utterances (e.g. a lecturer is comparing two ideas and turns his body to a different side when expressing "the other side of the story").
In this study, I also attempted to analyze the lectures in terms of speech acts of (1) topic initiation (TI), (2) topic continuation (TC), and (3) topic break (TB). TI speech acts are characterized by lexical units which denote the speech act itself (e.g. "I'll talk about pidgins and creoles in general and try to focus on creole in Hawaii."), by emphasis markers, and are often preceded by TB speech acts. TC speech acts are less a distinct class but rather a more de-emphasized continuation of the topic that is raised in the TI speech act. TC serves to clarify, exemplify, define, or paraphrase the preceding ideas. Even though the boundaries between the TI and TC speech acts are vague, the functions of the TC speech act are separate. Sequencing may either proceed from the TI to TC or vice versa. Finally, TB speech acts are characterized by (1) lexical markers such as "uh...", "now", "OK", "all right", (2) longer than average pauses, or (3) a culmination of the new information in the preceding discourse often marked by a lexical cue of "so", "therefore", "as you can see."

This analysis may have relevance for the advanced lecture comprehension class. For one thing, exercises geared to pinpointing the end of an introduction and the first TI can make use of markers denoting TI speech acts. Also, knowledge of markers indicating TB can lead to an overall awareness of lecture subsections and increase the student's predictive ability concerning upcoming information.
Skills such as "re-entering" a lecture after losing attention or becoming confused can be taught by way of an awareness of markers of TB and TI speech acts along with ordering restraints imposed on each speech act. An awareness of emphasis markers and speech act functions also has ramifications for teaching note-taking skills. Note-taking, being the process by which ideas are noted so as to show the hierarchy of emphasis, needs to be a process of making value judgments while listening to the lecture. Knowledge of markers of emphasis can be a basis for teaching note-taking skills to ESL students.

Murphy and Candlin's (1979) analysis of engineering lecture discourse provides a thorough analysis of the many processes involved in lecture interpretation. In particular, they analyze the overall coherence of the discourse, do a textual analysis of the cohesion of the lecture (meaning that no attempt is made to identify structural elements above the sentence) and finally, analyze the role of kinesics in lecture discourse.

To begin with, they applied the Sinclair/Coulthard (1975) model of discourse analysis to their lecture corpus. They were able to identify several strategies such as "marker" ("well", "right", "now") "starter" ("well now let's get on with the engineering"), "elicitation" ("I think that most of you have met the result before, haven't you?"), "accept" ("yes ... good"), "informative" ("for the three forces to be in equilibrium, their vectors must form a closed triangle"),
"comment" ("more usually known as the triangle of forces"), "aside" ("running out of blackboard space here"), "meta-statement" ("I want to mention two types of generator"), and "conclusion" ("so there you've got three forces which are in equilibrium").

Murphy and Candlin state that lecture discourse has much in common with general classroom discourse. They found that lecturers often proceed as if involved in a two-way interaction, providing dummy responses and feedback by themselves. They also note that lectures show the same type of focussing move which is unique to teacher dominated discourse ("I want to mention..."). Although it may appear that the lecturer is talking to him/herself, Murphy and Candlin stress the interactive nature of the lecture. The main distinction, however, is that the lecturer always wants the floor, and his/her audience is not meant to join the interaction verbally.

Murphy and Candlin include in their analysis a description of J. Cook's model of discourse analysis. J. Cook looks at a lecture as being composed of a number of "expositions." These expositions are composed of an optional episode of expectation, an obligatory focal episode, an obligatory developmental episode along with a number of optional developmental episodes, and an obligatory closing episode followed, again, by optional closing episodes. Further down on that hierarchy, each episode is composed of moves, beginning with
a focussing move, followed by at least one other move (not including focussing or concluding moves), and ending with a concluding move. Cook's list of categories of moves (as reported in Candlin and Murphy 1979:17-8) is as follows:

- Focussing move
- Concluding move - a justificatory statement; a focal episode with a concluding function; a summary statement
- Describing move - subdivided into description of processes and causal sequences; previous events; operations; states
- Asserting move - assertion of fact, opinion, rule, physical law
- Relating move - making intratextual and extratextual relationships explicit
- Summarizing move - giving a resume of the immediately preceding discourse
- Recommending move - giving support to an opinion, course of action, method, etc.
- Justifying move - offering justification for a proposition, assertion, recommendation, etc.
- Qualifying move - placing reservations on, partially retracting from a prior assertion, proposition, etc.
- Contrasting move - drawing a parallel of comparison or contrast between a previous fact, event, etc., and a second one contained in the statement that initiated the move
- Explaining move - expounding or making explicit a prior assertion, description, causal chain, etc.

J. Cook suggests teaching recognition of the moves within lecture discourse as a means of raising the student's awareness of the lecturer's organization and goals.

When Murphy and Candlin analyzed the lecture text for cohesive devices, they considered five specific devices: reference, substitution, ellipsis, conjunction, and lexical
cohesion. They divided reference items into exophoric references and endophoric references, "exophoric" referring to the context of the situation, "endophoric" referring to items within the text itself. The endophoric reference items were further broken down into anaphora and cataphora.

Anaphoric reference refers backwards in the text and may, according to Murphy and Candlin, be more difficult for the foreign student because it expects him/her to link up different parts of the text and may place an excessive load on the foreign student's short-term memory. Cataphoric reference is a warning of what is to come. These endophoric references are realized through the use of demonstrative pronouns ("the proof of that is..."), personal pronouns and possessives, comparative reference ("this case is different" implying that it is different from a preceding one) and lexicon such as "same", "similar", "other", "different", "likewise", etc.

Substitution is a device whereby information is related to other information by a grammatical device such as replacement of nouns ("one"..."ones", "same"), verbs ("do" as in "John has a car. Jim doesn't."), and clauses with "so" and "not" ("Have I got that wrong? I hope not."). Ellipsis is substitution by zero ("so the magnitude of one force then defines the magnitude of the other two" where "forces" was elided after "two"). Conjunctive elements serve the function of relating linguistic elements that occur in succession but are not related by other structural means. These conjunctive
elements relate two elements in an additive manner (e.g. "furthermore", "for instance"), in an adversative manner (e.g. "yet", "nevertheless"), in a causal manner (e.g. "so", "for this reason") and in a temporal manner (e.g. "previously", "to return to this point"). Candlin and Murphy stress the importance of adversative and causative conjunctions in particular. Some causatives, they note, such as "so", "then", "therefore", may mark concluding moves in the discourse. The causatives signal that what follows will be information that the learner should be focussed on. Adversative correction of meaning, they say, also signals important information in that it reflects what has preceded and focusses attention on what follows. A last device of cohesion was lexical cohesion, the practice of reiterating items in referential terms and then relexicalizing that item at the start of a new exchange.

Candlin (1978:22) stresses the need for integrating speech and visual materials and paralinguistic behavior:

Although it is generally the case that lecturers control the discoursal strings...interpreters...need to be aware of the careful and close integration of the visual, paralinguistic elements with the spoken word, if they are going to understand the constant interplay in lectures between what Sinclair calls the main-and the subsidiary planes of discourse--the essential argument and the audience-directed subsidiary comment. Eye contact and particular gestures serve to clarify this interplay in lectures...and importantly...there is ample evidence to show that kinesics is culture specific...we cannot assume that learners will have equal opportunity for interpretation of these crucial discoursal patternings.
Candlin and Murphy (1979) found that much of the research done on kinesics in dyadic interaction had relevance in the lecture situation. They note that lecturers, when making asides or when trying to appeal to the audience, change their voice quality or get physically closer to the audience. They note that lecturers often make exophoric references and use hand gestures to refer to diagrams on the board. Other hand gestures, however, are not overtly linked to something visual. They give the example of a wave of the hand from the vertical with palm facing the body, to the horizontal palm up, accomplished with a slight lowering of the forearm, conveying the meaning of "I am now going to offer the less acceptable alternative." Eye contact, a kinesic device signalling affiliation, seemed to follow completion of drawing or touching a diagram or during a crucial point in an argument. Candlin and Murphy also observe that eye contact can signal discourse boundaries in that speakers tend to look at the audience during concluding remarks. Often, eye contact was discontinued before proceeding on to the next section of the lecture either by moving from one place to another or looking down and consulting notes.

What does become clear in all the analyses, no matter how indefinable or general, is that within the context of a lecture, the lecturer does attempt to signal to the listener what aspects of the lecture are important or unimportant, and how the lecturer has organized the lecture and wants it
to be perceived. The ESL teacher can work towards helping students become aware of different acts and moves and their realizations within a lecture. An awareness of these verbal and nonverbal markers can lead, on the listener's part, to greater ease in prediction and greater ease in following the lecturer's thoughts. Not more important, yet more concrete, is the need to give students practice in dealing with cohesive devices (especially reference, substitution, ellipsis, conjunctions, and syntactic devices of highlighting).

Winskowsky (1978), rather than analyze lecture discourse, analyzed her own notes to focus on note-taking discourse and the competencies that underlie successful classroom skills. She suggests six major competencies involved in acquiring classroom skills:

1. recognize the professor's definition of the field
2. recognize course requirements
3. recognize the paradigm (the discipline's way of looking at the world and how it is organized)
4. recognize perspective
5. recognize the professor's portrayal of the professional role
6. take notes
(Winskowsky 1978:14)

Under the competency of note-taking, she specifies fourteen conventions that were included in her notes:

1. includes a phrase titling a series of things
2. includes the nominal-complement structure—a word or phrase separated by a dash or colon from another word or phrase, holding one of the following relationships: label, title, or nominal — meaning, referent, explanation, or definition
These lecture discourse and note-taking analyses serve to provide teachers with a more concrete base in what to teach. From this perspective, the question of how to teach can be dealt with.

D. Lecture Comprehension and Note-taking Pedagogy

Morrison (1978), Snow and Perkins (1979), Mason (1981) and Dudley-Evans and Johns (in press) have all presented syllabuses and/or exercises attempting to deal with the teaching of lecture comprehension. The syllabuses and materials vary most fundamentally on the level of adaptation concerning the lecture material to be used in the course. Weissberg (1974) and Montassir (1976), for example, propose the use of "mini-lectures" (two to three minute taped presentations recorded by native speakers using non-simplified vocabulary and syntax and unaltered pronunciation), James (1977) and Jordan and Matthews (1978) propose syllabuses which begin with two to three minute taped texts and proceed to longer taped texts. Snow and Perkins (1979) propose the use of both formal interviews and informal conversations as the material base for a lecture comprehension class. Johns and Johns (1976) propose focussing on tapes of semi-formal discussions of academic subjects. Morrison (1978) and Mason (1981) propose using tapes interrupted at various points for analysis and exercises. Dudley-Evans and Johns (in press) propose a team-teaching syllabus with the language teacher working hand in hand with the content teacher. Candlin, Kirkwood, and Moore (1975) propose using live, authentic, lectures on language and academic skills as the basis of their syllabus.

All stress the need of authenticity, that is, the use of language that is used in lectures, the use of cues that
are used in lectures, the use of paralinguistic features that are used in lectures, and the inclusion of pauses, false starts, and other performance features of live lectures. However, only Dudley-Evan and Johns (in press) and Candlin, Kirkwood, and Moore (1975) do actually live up to this level of authenticity. By basing their syllabuses on live lectures, they sacrifice the certainty of what will be taught and what needs to be taught. They gain, however, the realism, knowing that whatever is taught is actually used. Those syllabus designers who use tapes (Snow and Perkins 1979; Mason 1981; James 1977; Jordan and Matthews 1978) gain in terms of concreteness of materials and exercises, yet lose in terms of authenticity because all of the visual cues are missing. Those syllabuses that rely on tapes that were originally prepared in written form to focus on particular cues of organization (Weissberg 1974) are useful in that a segment of the overall lecture comprehension skill can be recognized clearly and practiced. These tapes, however, lack realism in that the lecturer is not talking naturally. In addition, there is no guarantee that the cues focussed on or that the style used is, in actuality, used in a lecture situation.

An additional difference between the various syllabuses suggested is the type and sequencing criteria of exercises. James (1977) and Jordan and Matthews (1978) sequence texts by beginning with a two to three minute lecture covering the material in general terms, used for dictation. The next
stage is a longer version of the dictation used for listening and doing exercises concerned with general ideas, details, vocabulary, and grammar. The last stage involves the same lecture topic, further expanded with exercises focusing on taking notes in outline form. Their sequencing factors seen to be the length of the lecture and the difficulty level of exercises (grasping general ideas and details and focusing on lexical and syntactic features deemed to be less difficult than note-taking).

Snow and Perkins (1979) also feel it necessary to give the student contextual information before giving the complete lecture. They first give students a general summary to read. Later, another summary may be given out which includes a selective list of things to listen for. The students listen to the tapes, take notes, do exercises, answer questions, and listen again. They note that the tape may be worked through in segments to focus on particular points. Sequencing criteria include sequencing questions from discrete point questions to questions which entail processing knowledge about the real world in addition to knowledge gotten from the tapes. Other sequencing criteria for exercise formation are making the syntax of the question itself more or less difficult, varying the topic so that students have more or less prior knowledge of the topic area, and altering the speed and style of delivery of the speakers.

Dudley-Evans and Johns (in press) appear to make
similar decisions about sequencing. They proceed from understanding the general points and details of the lecture to follow-up work which emphasizes evaluation of information and application of the general principles of the lecture to other tasks. Similarly, McDonough (1977) distinguishes between "localized" comprehension and "global" comprehension. Localized comprehension is concerned with immediate or verbatim perception and segmentation (e.g. lexicon, stress, intonation, syntax) while global comprehension is concerned with categorization, ordering, and recall over long stretches of discourse. He stresses that although localized comprehension is essential to global comprehension, it is global comprehension that is the ultimate goal of a lecture comprehension course.

Montassir (1976) in his syllabus makes three assumptions about sequencing of materials and exercises. The first is that conversational type material is easier to comprehend than lecture type material. The second is that short passages are easier to comprehend than long passages. The third is that listening for specific information is easier than unfocussed listening in which information must later be recalled from memory. His first two assumptions, however, may be open to argument in that conversational speech may, in actuality, be less clear in that the phonology is more careless and the assumptions about background knowledge may be more easily taken for granted. In addition, in conversational
speech, organization principles may be less overtly signalled. As for the second assumption, it may be possible that longer passages include more redundancy and more expansion than shorter passages so that the overall picture is clearer, allowing more time for processing.

Morrison's (1978) procedure involves listening to tapes and stopping at designated moments to do exercises. During the first session of listening to a tape, questions under the heading of "understanding" are dealt with (covering lexicon, idioms, structures, allusions, and implications). Other questions cover aspects of phonology such as assimilation, reduction, stress, pitch, and intonation. During the second session of listening to the same tape, questions deal with items of cohesion, reference, general comprehension, and brief note-taking.

Mason's (1981) materials also involve detailed analysis of the lecture discourse while listening to a tape. The student, at appropriate points in the tape, is introduced to rhetorical elements of exposition and cues to this rhetoric. In addition, the student is given comprehension questions and incomplete outlines to fill in. Later assignments are concerned with understanding particular facts and understanding the overall organization and logic.

Hughes (1974) does not deal with the question of sequencing but notes four types of exercises that are applicable to different aspects of the listening situation. These are
predictive and retroactive listening, construction listening, and inferential listening. In predictive listening, the student tries to predict what the speaker will say. In retroactive listening, the student enters the middle of a speech and tries to figure out what the topic of the speech is. In redundancy listening, the student has to extract the essence of a speech, removing all that is redundant. In construction listening, the student reorganizes segments of a speech based on his/her knowledge of the world, knowledge of the discourse style, and awareness of linguistic cues. Lastly, in inferential listening, the student makes inferences based on information presented orally.

Godfrey (1975) begins with paraphrase and imitation exercises aiming at reducing processing time by getting students to do more with an utterance than to simply process the forms and meanings expressed within that utterance's boundaries. He later suggests instruction in linguistic devices that specify relationships and attain cohesion in discourse using exercises suggested by Hughes (1974), above.

Black (1971) does not suggest a syllabus, but does present suggestions on how listening comprehension practice can be sequences. He bases his suggestions on three criteria: type of exercises, type of material, and subject matter. His hierarchy is shown in Table One and is organized from least difficult to most difficult.
### Table 1

**Sequencing For Listening Practice**

<table>
<thead>
<tr>
<th>Type of Exercise</th>
<th>Type of Material</th>
<th>Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. true/false</td>
<td>1. simplified material with standard pronunciation</td>
<td>1. materials relating to common experience</td>
</tr>
<tr>
<td>2. yes/no</td>
<td>2. impromptu speech with standard pronunciation</td>
<td>2. popularizations of specialist material</td>
</tr>
<tr>
<td>3. fill in the blanks</td>
<td>3. prepared speech with standard pronunciation</td>
<td>3. difficult specialist material</td>
</tr>
<tr>
<td>4. true/false/ not stated</td>
<td>4. impromptu speech with nonstandard pronunciation</td>
<td></td>
</tr>
<tr>
<td>5. classify by concept</td>
<td>5. impromptu discussion at a low level of abstraction or specialization</td>
<td></td>
</tr>
<tr>
<td>6. correct/incorrect inferences</td>
<td>6. carefully prepared speech</td>
<td></td>
</tr>
<tr>
<td>7. multiple choice questions</td>
<td>7. speech in non-standard dialects</td>
<td></td>
</tr>
<tr>
<td>7a. comprehending factual content</td>
<td>8. impromptu discussion with a high level of abstraction or specialization</td>
<td></td>
</tr>
<tr>
<td>7b. inference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7c. interpreting the speaker's intention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7d. interpreting emotive or figurative language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7e. developing an overall view of the entire passage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Most of the listening comprehension books on the market are geared to a lower level ESL audience than the proposed syllabus and materials (e.g. Improving Aural Comprehension by Morley (1977), Developing Listening Comprehension For ESL Students: The Kingdom of Kochen by Plaister (1976), Listening Contours by Rost (1979), Listening and Note-taking by Ferguson and O'Reilly (1977). Improving Aural Comprehension (1977) focusses entirely on linguistic competence and never ties individual exercises into coherent, realistic, lecture situations. In Developing Listening Comprehension For ESL Students: The Kingdom of Kochen (1976), Plaister attempts to get beyond the solely linguistic aspect of lecture comprehension and aims at guiding the student to focus on key words and pass over filler words. In Listening Contours (1979), Rost also attempts to get beyond the solely linguistic aspect of listening and focusses on the organization of the lecture samples. (Rost limits himself to three organizational patterns--process, narrative, and classification.) Neither book (Plaister's nor Rost's), however, is designed for the very advanced ESL student. The lectures in both books take from one to three minutes to present and are quite controlled. The lectures in Plaister's book are written out so as to make sure that the student focusses on the cues that are necessary. The lectures in Rost's book use a higher concentration of redundancy of key ideas than normal speech so that the students can gain practice in noting information
when heard at a normal spoken speed. Ferguson and O'Reilly in *Listening and Note-taking* (1977) begin by presenting three to seven minute talks with an outline that demonstrates the organization of the talk. Only at the end of the book do students begin taking notes on their own leading from one to two sentence "talks" to five minute "lectures."

At the same level as the proposed syllabus and materials is *Listening and Note-taking* by Yates (1979) and *Better Listening Skills* by Sims and Peterson (1981). Yates' book begins with one to three sentence utterances and ends with seven lectures of approximately ten minutes each. She focusses attention on cues, organizational patterns, and outlining. Sims and Peterson's book contains five lectures, approximately ten minutes in length. Each lecture is followed by a number of exercises focussing on vocabulary, derivations, organizational patterns, outlining, general and detail comprehension. A drawback of each of these books is the limited number of full and realistic lecture possibilities. This allows for little opportunity to gear lecture topics to students' and teachers' interests and needs. Another drawback of both books is that they depend on lecture transcripts or tapes for lecture material. The realism of the lecture is minimized by not having a live lecturer. As mentioned before, tapes and transcripts often do not realistically provide for the normal hesitations, disruptions, digressions, etc. of the live lecture. Most important, by
fixing the style and vocabulary of lecture suggestions, there is no opportunity to vary linguistic level, lecture speed, or lecture style.

Syllabuses and guidelines for teaching note-taking, in particular, have been suggested by Aaronson (1975), Otto (1979), Johns and Johns (1976), and James (1977). Many of the lecture comprehension syllabuses and materials mentioned in this chapter also include a note-taking component.

Aaronson (1975) suggests an approach to note-taking that acknowledges the student's role as interpreter and judge of incoming information. She suggests two columns: the first column, the "recording" column, records the lecturer's flow of ideas and also records the hierarchy of ideas by means of outline form or indentation; the second column, the "recall" column, records the student's cue words, summaries, topics, questions, key phrases, definitions, and comments.

James (1977) attempts to explain the problems that NNSs have when taking notes. He says that one problem is faulty decoding due to the problem of English stress-timed rhythm and arbitrary lexical stress. He says that NNSs are not used to vowel reduction and differential stress on words. A second problem is in miscomprehension due to the message being wrongly or partially decoded because of incorrect predictions on the part of the student because of insufficient
or different background knowledge and (2) lack of facility with lecture discourse. He mentions four steps that the note-taker must follow in order to take *successful* notes: (1) understand the message; (2) identify important points; (3) decide when to write; and (4) write quickly and clearly. His exercises, therefore, proceed from decoding and comprehending the message, making judgments about importance of the item within the whole discourse, filling in gaps in a skeleton outline, and finally, taking notes without the aid of an outline format.

Otto (1979) in his program focusses on four goals: (1) the transfer of the spoken word to the written text; (2) listening for key words and phrases; (3) selecting relevant details; and (4) recognizing topic and main ideas. To achieve these goals, he uses a combination of dictation exercises, cloze exercises, and mini-lectures with fill-in outlines.

The note-taking and note-reconstruction syllabus proposed by Johns and Johns (1976) is the most detailed and structured. Their course has four main components: (1) the elimination of redundant material (with note reconstitution focussing on restoring grammatically redundant elements); (2) rephrasing and reordering information (e.g. using a single lexical item to express a complex idea); (3) using conventional abbreviations (for technical and nontechnical lexicon (e.g. w/ = "with"); and (4) using
symbolic representations of logical relationships (e.g. \( \rightarrow \) = "causes", "leads to", "brings about"). Each unit practices both note-taking and note reconstitution in both the written and spoken mode. Johns and Johns'syllabus is represented in Table Two.

Table 2
Johns and Johns' Note-taking Syllabus

<table>
<thead>
<tr>
<th>Note-taking</th>
<th>Note Reconstitution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written</strong></td>
<td></td>
</tr>
<tr>
<td>Taking notes from sentences (at first only inserting symbol), progressing within each unit to taking notes from paragraph (target notes at first 'gapped': extent of gapping gradually increased).</td>
<td>Restoring notes already taken on sentences and paragraphs to 'full form': writing paragraphs from given notes (target paragraphs at first presented in gapped form).</td>
</tr>
<tr>
<td><strong>Spoken</strong></td>
<td></td>
</tr>
<tr>
<td>Taking notes from spoken sentences, progressing to 'mini-lectures'. Some gradual withdrawal of assistance as above.</td>
<td>Reading aloud from notes already taken. Telling jokes, giving short 'mini-lectures' from given notes,</td>
</tr>
</tbody>
</table>

(Johns and Johns 1976:227)

The above mentioned syllabuses for listening comprehension and note-taking vary in the methodology and materials used for achieving the goal of lecture comprehension and note-taking competence. They all, however, base some of their ideas on similar assumptions about the learning of language.
as communication. Candlin (1978:40) elucidates these assumptions in the following list concerning what must be dealt with in order to help the learner cope with problems of discoursal misunderstanding:

1. Assume that learners need to be sensitized to the cultural presuppositions which imbue particular utterances, and that this sensitivity is a prerequisite to understanding language as communication.

2. Assume that the relationship between essence and force depends on continuing evaluation of the social view of and by speaker and hearer/writer and reader.

3. Assume that this sense/force relationship will be underlain by culture-specific rules of discourse (and also by some pan-cultural rules) which constitute the chief objective of language learning.

4. Assume that such rules are realized through interaction, and as a consequence the data for language learning ought to be presented in transactional context.

5. Assume that communication is a process of applying these rules of discourse to convey meaning via a range of linguistic and para-linguistic signs and that these signs are culturally and socially specific.

6. Assume that deriving meaning is a process of dynamic inference.

7. Assume that (as a consequence) meanings are plural and variable in value as the communication proceeds.

8. Assume that identifying strategies of interpretation can both serve to elucidate discourse as well as act as a language learning objective.

These assumptions will provide the basis for the syllabus to be proposed in this thesis. Before presenting the syllabus, however, it is important to have a better idea concerning the audience for whom the syllabus is proposed. In the next chapter, a detailed needs analysis concerning the actual and perceived listening comprehension, note-taking, and production needs of university students will be presented.
CHAPTER III

LISTENING COMPREHENSION, PRODUCTION, AND NOTE-TAKING
HEEDS OF UNIVERSITY ESL STUDENTS WITH
IMPLICATIONS FOR SYLLABUS DESIGN

The needs analysis was conducted in order to best be able to generalize about the audience and their perceived and actual academic listening needs. This chapter will begin with a description of the needs analysis instrument and process after which a description of the actual listening needs of the students will be presented (based on teacher and department chairman data). Next, a description of the students' own perceptions of their academic listening needs and weaknesses will be discussed. Throughout this chapter, implications for syllabus design and classroom materials and methodology will be dealt with.

Although the syllabus proposed in this thesis will only concern itself with methodology and materials for teaching lecture comprehension and note-taking, it seems appropriate to include in the needs analysis instrument related demands on the academic competence of the student. Therefore, questions concerning other academic listening situations are included (small classroom lecture, seminar, large amount of student interaction, etc.) as well as questions concerning production demands placed on the student—syllabus based on this needs analysis will allot time for these differing demands although the materials and methodological suggestions
will focus only on lecture comprehension and note-taking.

A syllabus for an English for Academic Purposes (EAP) course in lecture comprehension and note-taking normally considers a number of student variables: age; academic level; academic background; previous exposure to English; present study situation (in-country, out-of-country, simultaneously taking courses in English, etc.); linguistic ability (in conversational English, written English, etc.); academic goals and major; psychological factors (motivation, need, learning styles, etc.); sociological factors (prestige of English in student's home country, attitudes towards English speakers, etc.). In addition, staffing and implementation factors are normally considered (e.g. experienced or inexperienced teachers, teaching styles, available machinery, etc.).

As can be imagined, a syllabus based on these variables as realized in a particular situation would have a narrow range of applicability. Therefore, this needs analysis focusses on the much more general perspective of the listening comprehension, production, and note-taking needs of the foreign university student. The needs analysis was carried out by administering questionnaires at the University of Hawaii at Manoa but most likely has relevance to any American university. Student respondents in the needs analysis span the range of the afore-mentioned variables. Their common
factors are only (1) a common aural comprehension level at which problems in lecture comprehension are based more on overall discourse comprehension than on linguistic problems at the sentence level and (2) a common need for English as a means to their academic goals.

One of the goals then of this needs analysis is to determine to what degree it is practical to base a lecture comprehension and note-taking course on such a general population. Are, for example, the needs of undergraduate and graduate students so different? Are the needs of prospective natural science students so different from prospective liberal arts majors? It may be important to narrow down the general learner profile and delineate separate syllabuses for certain major variables. On the other hand, it may be that the general need for English as a means to the same goal (success in an English speaking academic environment) may provide a clear enough needs base for all students despite certain variables.

A. Needs Analysis Procedure

The needs analysis procedure consists of three questionnaires—student questionnaires, faculty questionnaires, and department chairman questionnaires (see Appendix A)—and personal communication with language teachers. Specifically, needs analyses are broken down as follows:

(1) In order to find out what actually are the
listening **comprehension**, production, and note-taking demands placed on the students in the university, information was obtained from a) **department** statistics, b) faculty requirements, and c) students' own perceptions.

(2) In order to find out where foreign students have problems meeting these demands, information was obtained from a) faculty perceptions, b) student perceptions, and c) **personal communication** with language teachers.

(3) In order to find out what students themselves want most out of an EAP course in lecture comprehension and note-taking, information was obtained from a) students' responses on questionnaires and b) personal communication with language teachers.

(4) In order to find out whether courses would best be divided along subject matter lines, or **graduate** versus undergraduate lines, information was obtained from a) department statistics, b) faculty requirements, and c) students' own perceived needs.

Student questionnaires were given to 68 persons. Of these, 42 were at the level of just beginning a course with the proposed syllabus. The remaining 26 were near the end level or median level of a course with the proposed syllabus.
Faculty and chairman questionnaires were sent out to ten departments (History, Economics, Political Science, Agricultural Engineering, Oceanography, Travel Industry Management, Civil Engineering, Architecture, Philosophy, and Religion). Departments were chosen on the basis of (1) whether they offered courses required of all students, (2) whether they had a large number of foreign undergraduate or graduate students, and (3) whether they fit into the desired sample of natural science versus humanities subject areas. Forty-nine faculty questionnaires were returned covering 88 classes. Six department chairman questionnaires were returned. The sample for graduate classes covers 24 classes and 20 different teachers. The sample for undergraduate classes covers 64 classes with 38 different teachers. A breakdown of the sample into subject area groupings shows a graduate science group (Agricultural Engineering and Oceanography) with 9 classes and 5 different teachers and a graduate humanities group (History, Philosophy, and Religion) with 7 classes and 7 different teachers. Table Three demonstrates this breakdown of responses.

B. Analysis of Faculty and Chairman Responses with Syllabus Design Implications

The introductory question on the faculty questionnaire asks, "How would you describe each of your courses in terms
<table>
<thead>
<tr>
<th>DEPT.</th>
<th>TOTAL NUMBER OF FACULTY RESPONSES RETURNED</th>
<th>NUMBER OF COURSES COVERED</th>
<th>CHAIRMAN RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>GRADUATE</td>
<td>UNDERGRADUATE</td>
</tr>
<tr>
<td>History</td>
<td>11</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Economics</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Political Science</td>
<td>7</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ag. Eng.</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Oceanog.</td>
<td>5</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>Travel Industry Management</td>
<td>6</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Civil Eng.</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Arch.</td>
<td>3</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Phil.</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Religion</td>
<td>9</td>
<td>3</td>
<td>13</td>
</tr>
</tbody>
</table>
of percentage of time devoted to teacher lectures, percentage of time devoted to student presentations, percentage of time devoted to class discussion?" Table Four shows this breakdown of class time.

Table 4
Percentage of Time Devoted to Lectures, Student Presentations, and Discussions

<table>
<thead>
<tr>
<th></th>
<th>Overall Response</th>
<th>Grad. Courses</th>
<th>Undergrad. Courses</th>
<th>Grad. Science Courses</th>
<th>Grad. Humanities Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>% lecture</td>
<td>65.97</td>
<td>48.84</td>
<td>71.68</td>
<td>74.71</td>
<td>38.33</td>
</tr>
<tr>
<td>% student presentation</td>
<td>8.92</td>
<td>21.84</td>
<td>4.61</td>
<td>4.29</td>
<td>25.83</td>
</tr>
<tr>
<td>% discussion</td>
<td>20.03</td>
<td>24.21</td>
<td>18.62</td>
<td>8.57</td>
<td>35.83</td>
</tr>
<tr>
<td>% other (lab, studio, exams, etc.)</td>
<td>5.08</td>
<td>5.11</td>
<td>5.07</td>
<td>12.43</td>
<td>-</td>
</tr>
</tbody>
</table>

It seems that the great division is not due to the fact of being undergraduate or graduate but rather, very different needs emerge across subject areas. The science graduate students are overwhelmingly confronted with lectures and only occasionally confronted with production requirements and discussion comprehension. Their class situation is closely akin to the overall undergraduate requirements. The humanities graduate students, on the other hand, differ greatly from
both the undergraduate and the science graduate students. They very definitely need presentation and discussion production and comprehension skills along with lecture comprehension skills.

A question that needs further research is whether undergraduate needs can be broken down into science versus humanities needs. Would the predominance of lectures (and the comparative unimportance of production skills) in science-oriented courses show up again or would it be that at the level of undergraduate work all courses are primarily teacher-talk? My guess would be that undergraduate work in the humanities and sciences is largely concerned with the feeding of information and it is primarily in the graduate work in the humanities that emphasis is placed on students' critical thinking and input. Department statistics concerning course offerings support this hypothesis as shown in Table Five.

For question three ("Is it necessary for students to take detailed notes in your class?"), the same dichotomy (graduate humanities students versus undergraduates and science graduate students) holds true as shown in Table Six. Although note-taking is very important for all students, it is decidedly less important for the graduate humanities student.

Questions four, five, and six give an indication of what teachers do to help their students comprehend their
Table 5

Breakdown of Department Course Offerings in Terms of Lecture and Discussion Style

<table>
<thead>
<tr>
<th>DEPT.</th>
<th>GRADUATE</th>
<th>UNDERGRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of courses mainly lecture</td>
<td>% of courses mainly discussion</td>
</tr>
<tr>
<td>History</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Religion</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Poli. Sci.</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Economics</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>Ag. Eng.</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Travel Industry Management</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table 6

Is it Necessary to Take Detailed Notes?

<table>
<thead>
<tr>
<th>UNDERGW.</th>
<th>GRAD.</th>
<th>GRAD. (Science)</th>
<th>GRAD. (Humanities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>80.657</td>
<td>19.35%</td>
<td>60%</td>
<td>40%</td>
</tr>
</tbody>
</table>
lectures. Since this is most likely a question of individual teacher style, answers to this question best serve to give an indication of what techniques would be usable in an EAP class to simulate authentic lecture technique. Question four indicates that a very high percentage of teachers give handouts to students summarizing their lectures at least occasionally (75% of graduate courses; 45.9% of undergraduate courses). Question five asks teachers what method they use to help their students receive from a lecture or discussion what they want them to receive. Some of the responses given include "questions either before or after the lecture," "outlines on overhead projector," "oral summaries," "review sheets," "diagrams," "readings to support lecture notes," "outlines on board." For question six ("Do you write essential points on the board?") 87-88% of all respondents answered "occasionally" to "always."

Question seven ("Do you use movies or video tapes in your class?") shows that it is primarily live language that the students come into contact with. Only 20% of the graduate courses and only 30.65% of the undergraduate courses reported using media anywhere from "occasionally" to "always." The remainder used media "rarely" or "never." It seems then that the only justification of more than moderate use of tapes or films in the language class is as a teaching tool, not as a simulation of actual classroom behavior. Video tapes of lectures can most easily be justified as a teaching
tool. Movies are inauthentic in the sense that the voice is generally off screen with visuals playing the dominant part. In the same sense, tapes are inauthentic in that the voice is 'off screen' with absolutely no visuals.

In question 11, faculty were asked to check the aspects of listening comprehension, note-taking, and production that they felt were essential for success in their class. Next, they were asked to rank the four most essential skills for success in their class. Results show that the major goal of the faculty is that the students be able to listen, take notes, and participate at the same time. However, a large number of teachers place high priority on just listening or just following the speaker's train of thoughts without note-taking. Implications for syllabus design seem to be that note-taking should not be the main goal of the course, nor the deciding factor concerning passing or failing. Class time can be realistically spent listening to a lecture, taking questions, and discussing the implications of the lecture. Class time does not have to revolve around listening to lectures, taking notes, and taking tests based on those notes.

The need for students to "be able to request clarification from the teacher" was considered quite important by teachers both in this question and in question 12 concerning teachers' perceptions of foreign students' difficulties in their class. Implications for syllabus design would be
including components on the appropriateness of requesting clarification and analysis and practice in how to interrupt and request clarification. In terms of productive skills, teachers clearly want their students to "be able to raise questions and ideas that would generate discussion." Again, language classroom interaction should simulate this situation as much as possible. Controversial or thought provoking issues might be best for this. It is important that lecture topics cover areas that the students want to know something about or share ideas about. As with clarification skills, analysis and practice in how to take part in discussions (getting a turn, giving a turn, etc.) is necessary. It is interesting that understanding everyday conversations had a fairly high priority. Perhaps the teachers feel that classroom discourse is equivalent to everyday conversations. As mentioned before, it seems that movies, tapes, video tapes, etc. have little importance for success in the university. Other items not considered important by the faculty are "understanding different speakers," "learning test taking skills," and marginally, "learning to give presentations."

On the whole, then, analyses of faculty and department chairman questionnaires indicate a possible advantage to splitting up students into groups of undergraduates versus groups of humanities graduate students. Although statistics concerning time allotment for lectures, student presentations, discussions, amount of participation required, and note-taking
needs all group the science graduate students with the undergraduates, common sense seems to indicate that if numbers permit, maturity and area of interest: might indicate a beneficial separation of the two. The syllabuses for those two groups may be the same, however, differing only in content and possibly 'depth' of discussion.

The syllabus for undergraduate students and the syllabus for science graduate students should include at least \( \frac{3}{4} \) time listening to lectures (with moderate to heavy emphasis placed on note-taking) and \( \frac{1}{4} \) time spent on language production (discussion skills and optional presentation skills). The syllabus for the graduate humanities students should include approximately \( \frac{1}{3} \) time listening to lectures (with moderate emphasis placed on note-taking), \( \frac{1}{3} \) time on discussions and discussion skills, panels, and debates, and \( \frac{1}{3} \) time on required presentations.

Analysis of results further indicates that if the language classroom is to be authentic, aids to listening can be and should be used such as outlines on the board, handouts, oral summaries, pre- and post-questioning, etc. There seems no reason to make the language classroom situation more difficult than the real situation. Furthermore, class time spent on movies and tapes lacks the realism of the typical university class and should be avoided except for specialized needs. Video tapes of lectures, however, may act as a teaching tool as well as a simulated classroom
Lastly, results indicate that the goal of a lecture comprehension, production, and note-taking class must be varied. Because note-taking is a highly visible and highly correctable skill, it may be tempting to place too much emphasis on it. Teachers' responses, however, suggest that listening without note-taking ("following the train of thought and organization of the speaker," "thinking critically," "getting the main idea and less important points without note-taking") is at least as important if not more important than taking notes. In addition, teachers indicate that the productive skills of asking for clarification and raising questions and ideas that generate discussion are very important skills. The emphasis is on comprehension of ideas more than transcription of facts. This, however, may be more the teachers' ideal concerning their classroom interaction and not necessarily actuality.

C. Analysis of Student Responses With Syllabus Design Implications

To begin with, it was found that of all respondents, 72% had never before taken a course in an English speaking university. Since the proposed syllabus is aiming at generality of situation, it would be unfair to claim this as being true beyond the situation of the University of Hawaii at Manoa. It seems logical, however, to gear the syllabus to
this audience and to take it for granted that students do have to learn the cultural expectations for teacher-student interaction in lectures, classrooms, and seminars. This does not mean to say that students need all study skills. They may very well have (or not have) note-taking skills, study techniques, etc. in their native language. What the students need to learn are the culturally based differences (e.g. Is it allowable to approach the lecturer with questions? Where? During class? During an appointment? How much can you expect the lecturer to go over with you individually? A whole lecture? Is it acceptable to ask a fellow student to borrow his/her notes? To give you the answers to an exam?).

In terms of expected listening situations, results show that it is only the undergraduates plus the graduate science students who expect to find themselves in lecture halls. The graduate humanities students sampled do not expect to be in that situation. The large lecture hall situation, however, proved to be quite a problem for those finding themselves in that situation. (Approximately 57% of all respondents claim in question four that the large lecture hall situation is most difficult for them giving reasons, in order of difficulty, such as note-taking problems due to lack of feedback and opportunity for clarification, language reception problems, and physical problems including noise, distractions, sound quality, and boredom.) Syllabus design
should include some large lecture hall experience for all undergraduates and for graduate science students. As it would be unrealistic to reserve a large lecture hall for a small class of students, one possibility would be to go as a group to a lecture situation in progress and return to class to discuss questions and notes. Another possibility would be to attend community lectures as a group, perhaps at an art museum or a community center. For the graduate humanities student syllabus, the situation need not be dealt with at all.

For all groups, however, the majority of listening situations take place in the classroom (although for undergraduates the margin is closer to 50-50 for large lecture hall versus classroom). Most of the language classroom work then can be realistically done in the classroom. Except for science graduate students and business undergraduates, students seem to feel that many of their classroom situations will or do include a lot of student talk and discussion. Although as a single group, the classroom lecture (75% teacher lecture; 25% discussion) has the largest number of responses for all groups, there are quite a large number of responses indicating that classroom situations (25% teacher lecture; 75% discussion) and seminars (100% discussion) are also expected or experienced. This does not mesh with faculty responses which indicate that for undergraduates, production (e.g. discussion, presentations) is not highly valued or
necessary. This perceived need on the part of the students may indicate their desire to speak more, or their incorrect assumption about undergraduate university curricula and expectations. Because discussion can add life to a class and provide students with confidence in their spoken ability, it seems illogical to delete it from a syllabus because it is 'unrealistic.' Therefore, even though for undergraduates language production is not a necessity, it should be allowed optional time in any syllabus considerations. It is interesting to note that the second most difficult situation indicated in question four is listening and note-taking in classroom discussions (31%). Students indicate that language reception is the major problem (different student accents, lack of ability to follow the train of thought in the discussion) and that note-taking is a problem. It seems that students do feel the need for experience or training in how classroom discussions work (how people add on to someone else's previous comment, how people interject new comments, etc.).

Question five asks students to put a check next to those skills on a list that they think they need. Then, they are asked to rank those skills from one to four indicating the four most important skill needs. Results were compiled from students who would be entering a course with the proposed syllabus. The three highest priorities (which not only have the highest number of total responses but also have the higher ranking responses) are "listening, note-taking, and
participating at the same time," "differentiating between main points and less important points," and "understanding vocabulary and idioms." Although note-taking is included in the "listening, note-taking, and participation" category, what stands out is that the other two priorities deal solely with listening. Work in the syllabus needs to focus on academic listening separate from note-taking as well as along with note-taking. "What was the speaker trying to say?" types of exercises in which the students have to paraphrase and extract the essence of a message would be useful parts of a syllabus. Vocabulary and idiom work, particularly those items common to an academic register, need to be included in a syllabus. Particular attention should be paid to those idioms that indicate discourse relationships or emphasis such as "for the most part," "with respect to," "not to speak of," "in view of," "above all," etc.

The next group of priorities begins with "organizing ideas into well-written notes." The students do feel that this is a needed skill. It is an especially important component of the syllabus because it is the one aspect among listening comprehension, production, and note-taking in which the students can often see marked improvement. In addition, it is the one component that can be most easily evaluated. Considering the high percentage of faculty who reported that it is necessary for students to take detailed notes in their
class (80.65% undergraduate courses; 83.33% graduate (science) courses; 57.14% graduate (humanities) courses), it makes sense to include note-taking as an important component of the course syllabus, although still secondary to listening.

Following priorities are "hearing the main idea of long talks without note-taking," "understanding speech where the speaker is not present (movies, tapes, radio, etc.)," and "finding the key words to note down during long talks." All of these emphasize the above two conclusions. As for "understanding speech where the speaker is not present," although faculty responses indicate that tapes and movies are rarely, if ever, used in their courses, the use of tapes and movies in the classroom could be an interesting diversion for the students. In the syllabus, however, it should be kept in mind that this is not one of their academic needs, and would only be fulfilling what the students foresee as their need.

Two other fairly high priorities are "learning to raise questions or present ideas that start and contribute to class discussions" and "learning to give organized presentations." As mentioned in the analysis of faculty responses, the only ones for whom these skills are absolutely essential are the graduate humanities students. Therefore, for all undergraduates and for graduate science students, it should again be kept in mind that these are not necessarily their academic needs, but that they could be useful in
fulfilling a perceived need and a psychological need. Rather than making discussion skills and presentation skills a requirement in the undergraduate syllabus and in the graduate science student syllabus, it should be an option based on students' desire.

Although not priorities, the following skills are perceived to some degree as being a need: "hearing the main idea of short talks without note-taking," "understanding everyday conversational English," "understanding different speakers," "following the speaker's system of presentation and organization," "understanding statistics and writing them down," "listening to and participating in discussions without note-taking," "finding the key words to note down during short talks," "learning test taking skills," and "learning how to politely interrupt speakers in order to ask them to go over a point or to make a point clearer." These skills may be included as segments of the syllabus but certainly not as essential components.

When analyzing graduate student responses separately, there seems little difference. The graduate students on the whole do place a higher priority on "raising questions and ideas that stimulate discussion" and "giving presentations" and surprisingly "learning everyday conversational English." This emphasis on discussion and presentation skills is largely on the part of graduate science students, completely contradicting the faculty response of spending
little time on presentations and discussions in graduate science classes.

Questions six, seven, and eight deal with the situations the students feel they can handle upon arriving into a course with the proposed syllabus. Results show that the students do not feel they need work on getting the main idea of a lecture or discussion. More problems are indicated when the students need to differentiate main ideas from details. Still, there seems to be less of a feeling of difficulty here than is indicated in question five where students placed "differentiating between main points and less important points" as being a very high priority. At least 50% of students in all situations are aware of problems when it comes to note-taking. It is interesting to note that there seems to be little difference in amount of difficulty whether listening to a short talk, a long lecture, or a discussion. This, too, contradicts the response to question four which indicates that students found listening to a classroom discussion (mainly student participation) plus note-taking to be their second most difficult situation (preceded by listening and note-taking in a large lecture hall). Although this information about students' perceptions of their own abilities is important from a psychological perspective, it should be taken with a grain of salt. From personal experience and from talking with language teachers, many of these same students say that they have comprehended something, but when
asked to answer questions or perform a task based on that comprehension demonstrate a high degree of miscornprehension. For planning a syllabus, then, it seems necessary to incorporate the skill of differentiating between main points and less important points and discussion skills into a framework in which the students do not feel babied or unchallenged (e.g. as one or two questions among other more thought provoking questions).

Question nine deals with the problems students perceive when listening to lectures in English. Results were compiled for students who are approximately at the beginning point of the proposed syllabus. The greatest problems are "speaker talks too fast" and "speaker doesn't give me time to think about what I have heard." Since it is unlikely the case that the blame for these two problems is so often on the speaker, it is more likely that the student at this level is having difficulty in terms of time of processing, and not necessarily in terms of linguistic difficulty with the lexicon or grammar of the lecture. Besides practice and increased familiarity with lecture discourse, awareness of cues and practice in prediction along with awareness of the redundancy in lectures can help ease this time of processing burden.

Since students indicate "speaker uses a lot of unfamiliar vocabulary and idioms" as the next major problem, it is logical to assume that there is a lexical component to students' difficulty. Work on academic register vocabulary
and idioms and where possible, subject specific vocabulary and idioms should be incorporated into the syllabus. Work, too, on using context to predict meaning is important. In addition, students should be psychologically prepared to expect not to understand every word in a lecture. (With an awareness of the redundancy in lectures and an awareness of native speaker's inattention to individual words and segments in a message, students can be led to be more at ease with this incomplete comprehension.)

The next two major difficulties support some of the points previously made. Students have difficulties with "speaker tries to cover too much subject matter" which, although possibly being a reflection on speakers, more likely indicates a time of processing difficulty. Students also have problems with "speaker doesn't make clear what points are important and what points are unimportant." This confirms the need to begin work on the level of extracting the essence of talks, charting the relationships between ideas (support, examples, lists, etc.), analyzing the overall discourse structure of lectures and seeing how a lecturer makes a point and then talks around it and about it, and analyzing and being aware of the cues that indicate the relative importance of pieces of information within discourse. The teaching of grammatical means of focussing (Wh-cleft, pseudo-cleft, paraphrase, etc.) could prove to be useful aids in evaluating information.
Lastly, in question ten, students were asked to indicate the frequency of certain problems concerning note-taking. Almost 100% of the students responded that, at least occasionally, they "miss a lot of the lecture because (they) are writing while the teacher is talking." Many times students will try to write everything the teacher says, making no allowances for relative value of utterances. In addition, students tend to write useless non-information bearing words, or even attempt to write in complete sentences. This problem is also reflected in the high response to "I can't understand what is important to note and what is less important to note." This again raises the, by now, overly reiterated point which is that the students need to make value judgments concerning the importance of utterances within discourse as well as judgments concerning the relation between utterances within the discourse. Better note-taking would seem to be a function of better and more critical logic when listening. Attention in the syllabus needs to focus on listening to discourse and writing the minimum number of words usable to express the essential ideas. Attention also needs to focus on the amount of note-taking necessary depending on the situation (i.e. Does the situation call for comprehension of concepts? Does the situation call for memorization of facts?). Again, awareness of discourse structure, cues to organizational patterns, and cues to
emphasis would all aid better note-taking. Outlining would be a useful skill to teach to aid awareness of the hierarchical value of information. However, it seems important to stress flexibility in note-taking style rather than any one particular style. It would also be useful to include a component in the syllabus on note-taking abbreviations (word abbreviations as well as organizational abbreviations).

In the following chapter, a syllabus will be presented, taking into account all of these actual and perceived needs and their implications.
CHAPTER IV
A SYLLABUS WITH MATERIALS AND METHODOLOGICAL SUGGESTIONS FOR TEACHING LECTURE COMPREHENSION AND NOTE-TAKING TO ADVANCED ESL STUDENTS

A. A Listening Comprehension, Note-taking, and Production Syllabus For Advanced ESL Students

In preparing the syllabus design, it seemed most reasonable to base sequencing and goals on a skill-based perspective. The components of the syllabus, then, focus on what the student needs to be able to do in the language, and not necessarily on the language itself. Although different syllabuses will be presented for undergraduate students and science graduate students versus humanities graduate students, the lecture comprehension and note-taking component for all courses will be the same. The differences are in terms of time allotted to the different skills of lecture comprehension, note-taking, and production.

The syllabus will be presented in outline form divided into three major headings: time allotment, topics, and skills goals and syllabus components. If an item refers to only one group (undergraduate, science graduate, humanities graduate), it will be specified. Where no group is specified, the item refers to all three groups.
I Time Allotment

Undergraduate Syllabus and Graduate (Science) Syllabus:
Approximately 75% of class time should be spent on listening to lectures (occasionally in lecture halls; most often in the classroom). Of that 75%, approximately 40% of the time should include note-taking practice; approximately 35% of the time should be solely listening practice. Approximately 25% of class time (or less, if students are not receptive) should be spent on discussion or presentations with approximately 10% of that time spent on note-taking practice.

Graduate (Humanities) Syllabus:
Approximately 33% of the class time should be spent on listening to lectures in the classroom. Of that 33%, approximately 15% should include some note-taking practice. Approximately 33% of the time should be spent on discussions with approximately 10% of that time spent on note-taking. Approximately 33% of the time should be spent on student presentations with approximately 10% of that time spent on note-taking.

II Topics

It seems impossible to have all of the lecture topics be in the students' fields of interest. Because it is important that information presented in the lectures
be new information, it is unrealistic to expect language teachers to know more about a subject than majors within a field. (Student presentations, however, can provide an opportunity for students to share their specializations in a field with others in the same field.) In addition, even with groups such as graduate science students or graduate humanities students, there will still be a wide variety of fields represented. It makes most sense to choose topics of general interest, especially controversial or thought provoking issues.

III Skills Goals and Syllabus Components

A. Listening

1. The student should be able to differentiate between main points and less important points in lectures by (a) doing oral and written summaries which require extracting the essential points, (b) outlining and seeing the visual hierarchy of ideas, and (c) analyzing discourse and being made aware of cues of emphasis and grammatical means of emphasis. For the graduate humanities student, these skills would be practiced in discussion situations as well as in lecture situations.

2. The student should be able to follow the speaker's
train of thought and organizational patterns by (a) analyzing discourse (through transcriptions and on video tape) thus leading to an awareness of cues that indicate organizational patterns as well as the overall patterning of lecture discourse and (b) outlining. For the graduate humanities student, these skills would be practiced in discussion situations as well as in lecture situations.

3. The student should be able to make reasonable predictions about future discourse in lectures by (a) doing cloze-type exercises on lecture transcripts having words and groups of words blocked out, (b) predicting unfinished discourse during live lectures or video tapes of lectures, and (c) being made aware of the culturally based systems of logic.

4. The student should be able to comprehend vocabulary and idioms in context by (a) practice in guessing at meaning from context, (b) practice in getting the overall gist of lexically difficult messages, and (c) analysis of discourse (through lecture transcriptions and video tapes) thus gaining an awareness of academic register vocabulary and idioms especially those that indicate relationships and emphasis.
B. Note-taking

1. The student should be able to take lecture notes for a variety of different purposes (e.g. in order to describe a concept, in order to get facts, in order to get directions) by (a) practice in taking down the minimum number of words to express the most important ideas and relationships, (b) an awareness of abbreviations expressing relationships and lexical items, and (c) by practice in A1, A2, A3, and A4 of the listening component of the syllabus.

2. The student should be able to listen to and take notes with a variety of lecturer styles (e.g. highly organized, rambling, fast-paced, slow-moving) by doing the same activities as B1 above using video tapes or live lectures demonstrating these different styles.

3. The student should be able to take notes in a variety of lecture environments (e.g. in a large lecture hall, in a classroom) by doing the same activities as 31 above in different environments.

4. Graduate humanities students should be able to take notes during a discussion by (a) doing the same activities as B1 above using video
tapes of live discussions and (b) analyzing transcripts of discussions and video tapes of discussions in order to become aware of the cues that indicate new topics or additions on to another person's previous comment. For the graduate science student and for the undergraduate student, this skill is optional.

5. The student should be able to rewrite haphazard notes so as to represent the organization of the lecture and make it clear for future reference by (a) learning outlining skills and (b) becoming aware of the culturally based systems of logic.

C. Production

1. The student should be able to ask for clarification by (a) gaining an awareness of the cultural aspects of asking for clarification (e.g. when you ask, who you ask, how much time can be expected) and (b) gaining an awareness of the sociolinguistic aspects of asking for clarification (e.g. how to form the request, how to interrupt).

2. The graduate humanities student should be able to raise questions or present ideas that start and contribute to class discussions by analyzing discourse and watching video tapes of discussions, thus becoming aware of how to enter a discussion,
how to give up a turn, etc. This skill is optional for the graduate science student and for the undergraduate student.

3. The graduate humanities student should be able to give organized presentations by (a) discussing the organization of presented lectures and (b) getting guidance in preparing and giving his/her own presentation. This skill is optional for the graduate science student and for the undergraduate student.

D. Optional Activities and Skill Goals

1. The student should be able to comprehend discourse in which the speaker is not present (tapes, movies, radio, etc.).

2. The student should be able to understand different speakers (accents, dialects, etc.).

3. The student should be able to understand statistics and write them down.

4. The student should know how to make intelligent guesses on exams based on a lecture.

5. The student should know how to answer essay exam questions based on a lecture.

The next section of this chapter will present sequencing suggestions, sample materials, and methodological suggestions based on this syllabus.
B. Materials and Methodological Suggestions For Teaching Lecture Comprehension and Note-taking to Advanced ESL Students

Materials development and methodological suggestions are based on Phillips' (1981) four principles of Language for Specific Purposes (LSP) methodology:

1) Principle of reality control - control of the difficulty of the task demanded of the LSP student is exercised by means of the procedure of simplification appropriate to the field of activity constituting his or her special purpose. (Phillips 1981:97).

In this case, the "special purpose" is the acquisition of interpretive competence in academic English.

2) Principle of non-triviality - the learning tasks required of the student must be non-trivial; that is, they must be perceived by the students as meaningfully generated by his/her special purpose. (Phillips 1981:99).

3) Principle of authenticity - the language that the student acquires through following the LSP course must be authentic; that is, it must be the language naturally generated by his/her special purpose. (Phillips 1981:101).

4) Principle of tolerance of error - errors of content and of formal adequacy are to be judged as unacceptable only to the extent that they entail errors of communicative adequacy. (Phillips 1981:103).

The principles of reality control, non-triviality, and authenticity will be adhered to in the materials by making all lectures in the form of content outlines. The actual lectures will not be written out in transcript form according to what a lecture is thought to be, but rather all lectures will be presented live, spoken spontaneously, as if giving
a 'real' lecture. For a more concrete and uniform control of materials, lectures may be put on video tape, still abiding by the same rules of presenting a lecture from outline notes, and not using a word-for-word transcription.

The last principle, tolerance of error, will need to be put into practice by the classroom teacher. What this means in the context of lecture comprehension and note-taking is that linguistic form need not be corrected, except when it interferes with the communicative goal of interpreting the lecture, taking notes that interpret the lecture correctly, and taking part in activities based on the lecture or notes (e.g. discussion, test taking, essay writing).

The materials for the course will be sequenced into four stages:

1. Stage One aims at training awareness of factors affecting lecture comprehension;
2. Stage Two aims at introducing students to the concept of judging the relative value of information in discourse and noting the minimum number of words to represent the ideas and their relative value;
3. Stage Three aims at introducing students to the logic of lectures so as to increase their predictive and evaluative abilities;
4. Stage Four aims at giving students the opportunity to practice the skills they have learned in less controlled and longer situations.
Stage One exercises include transcripts of actual lectures with some intact and others with blanks for practicing predictive skills. There are three activities involved in this stage. First, using transcripts of actual lectures, students cross out non-essential words, circle cues of emphasis or de-emphasis and cues to organization, and pinpoint context cues for figuring out unknown vocabulary. The following is a sample transcript with one possible interpretation of essential versus non-essential information and cue words:

Lecture Transcript - Language

let's first look at one aspect of language...I want to look at the sociological or sociolinguistic way of looking at language...all right from this point of view some linguists have come up with the idea that language is a game...football, soccer, baseball...each person who speaks in any particular language or any community knows all the rules of this game...they know how to do it...somebody who comes from a different one as you know well may not know all the rules so you have some problems with communication...no matter what we do are very well defined...
may not know what they are but they're very clear rules of what you can do and what you can't do in any situation... usually in any use of language people are trying to accomplish something... trying to do something... that's why they talk... sometimes you just talk to yourself for no reason... some crazy people talk for no reason but most people talk because they want to accomplish something... basically some linguists have set up five categories of accomplishing things... we use language to describe... tell about the world that we see... there's a chair over there... there's a person over here... someone is from China... or whatever... another thing is that we use it for is to tell people to do something... please close the door... please open the door... do your homework... do this... do that... now we might not always say do it but we have a way of telling people to do something... another way a third way is we use Language to tell people what we're going to do... I'm going to tell you about language... I'm going to open the door... another way to look at language... two other ways... one is to tell about feelings... express what's inside of us about the world... not only that there is a chair but that I don't like that chair or I do like that chair... and the fifth way or the fifth thing we use is to change the world... certain things that you say change the world... if I say you fail this course... that language changes the world... just my four words make you unhappy and hate me... something has changed because of my words and nothing else except those words... so we can
change the world with language. Now, since we have all these different purposes and you probably can think of other purposes with which we want to use language to win or accomplish what we want inside, so it's kind of like a game that way.

One important consequence of this activity is that it gets students to be aware of the 'tricks' the lecturer uses to indicate what is important, what is unimportant, what s/he plans to say, how s/he plans to say it, when s/he is planning to end a topic or begin a new one. A second important consequence of this activity is that it gets the students to be aware of how much in a lecture is redundant or without new information. In discussing this activity, the teacher should point out how much of the lecture is devoted to paraphrasing, giving examples, giving further explanation, appealing to the audience, and digressing.

The second activity involved in Stage One is the use of incomplete transcripts of actual lectures in which students have to pinpoint cues and use logic to predict what could possibly be missing. A sample exercise with actual responses given by two students ("A" and "B") follows:

Incomplete Lecture Transcript - Language

... now Language is also like a game in a A) way of other A) games B) ways ... basically, like a B) conversation you usually
need more than one person to play language...

usually a person talk to somebody else or some-

A) body talk to a group of people...sometimes you talk to yourself but that's more unusual than usual except if you're thinking not outright talking...it's a game because it's rules...something that we play together...

A) with one...another is that the players...one person...a new person comes into...three or four persons are standing together they may all be playing...one may leave and a substitute may come in...so it's like a game in that way...another thing is of course like I said, you're out to win something just like in any other game we do...you want to win the game you want to kick the ball in the goal...we're usually out to accomplish something...something tangible...or something intangible, like emotional satisfaction...

something to that effect...OK...another thing...A) concerning...
A) language
B) ———— is that everybody has his own style of

A) play
B) doing things like B) A goes to bed early; 3 takes

of playing games
a bath at night etc. just like

that some speakers are very good at certain ways of speaking

and have certain individual styles of speaking... everybody is

A) different
B) speaking in his own style nobody speaks the

same... also, like a soccer player or like any game player you

can change your style... A) similarly, you can choose your

B) ————

A) style of play
B) ———— so styles change as well

as the fact that each person has his own style... all right and

the last thing is that we have rules for the game... just like

we have rules now... when I talk you

A) listen
B) listen to me

unless I give you some signal that says it's time for you to talk or I stop talking... there are very definite rules for

not interrupting and B) disturb... and for all kinds of

things... we all know these rules but we probably

A) ———
B) may not

A) ———
B) know all the rules of language... when you're
talking about football you can say it's \textit{played} in a field so big so wide you can't kick the ball off the field...it has
A) rules and everybody can learn those B) rules
and tell us what they are...language is a little different...
A) you eight
A) not know how to explain it B) not know how they work...but there are very definite rules and we all know what they are...
the only time problems come in is when you know Chinese or
Korean rules and I know American rules and we don't
A) each other rules B) each other's
A) problem...then we have B) problem
and lack of communication, we don't know each other's
A) rules B) rules...for example...if you know B) how to play basketball
A) - B) ball and you try to play with the rules of a soccer game...of course A) you cannot play B) you cannot kick the ball into the net...you're not going to be able to accomplish what you want to accomplish...so...in terms of the sociolinguistic way of looking at language...language
is a kind of rule-governed behavior...of interaction between

A) - people...like a  B) game...everybody knows the B) rules

they're mutually intelligible...we all know within a given

A) - community we know what B) the rules are...B) we

knows how to play...now the big question for you probably

and for me if I'm trying to learn a language... A) is to

A) learn the rules of the game B) possible for me to learn all the rules

...so part of the definition...we can say is a rule-governed

social behavior is one way of looking at language from a

sociological kind of viewpoint.

The teacher's role in this activity is to get students
to see what cues they used to predict what was coming. Where
students can't predict, the teacher can discuss concepts of
repetition, parallelism, reference, repeated organizational
patterns (such as repeatedly making a statement and then
comparing it to a sports game), cliches, etc. As stated
in the principle of tolerance of error, the teacher need
not correct students or even provide answers except where
the student's answer is illogical in terms of meaning.

The third activity in Stage One is to show a video tape
of a lecture (five to ten minutes) and have students note or discuss any non-linguistic or paralinguistic cues of emphasis or non-emphasis they notice or hear. The goal is to get students to be looking beyond the words, not necessarily to come up with an uncontestable rule.

Stage One serves to introduce students to the concepts of cues, organizational patterns, redundancy, and expansion by looking at transcripts—a concrete representation of the sounds and words that pass by quickly when spoken. In Stage Two, the students begin to listen, still noting cues, organizational patterns, redundancy, and expansion. They use this knowledge at this point to choose what to note, writing as few words as possible to express the most information, and to judge the relative value of information in the discourse.

Stage Two has two main parts. The first one involves having students listen to one to three minute talks and having them note (or discuss) words that carry content—the minimum number of words usable to note the main idea in a form that represents visually the relative importance and relation between different points. These one to three minute segments are related and consecutive and make up part of a longer lecture. Two segments from a larger grouping on "earthquakes" follow. The teacher giving these talks has the freedom of stopping and discussing at different junctures—more often, if the students are overwhelmed; less often, if
it seems too easy

Stage Two Material

1. What I'd like to talk about today is earthquakes—what scientists know or think about the causes of earthquakes, what developments have occurred concerning the prediction of earthquakes. As you may already know, earthquakes are one of the most unpredictable of natural occurrences. Most often, they strike without specific warning. One such unexpected earthquake occurred in Italy in December 1980; another occurred in Algeria in October 1980. In 1976, an earthquake measuring 8.2 on the Richter Scale occurred 90 miles southeast of Peking, killing as many as 650,000 people. This earthquake also had caught seismologists by surprise. It almost seems that at the present level of research, nature always surprises man.

2. Even so, as time passes, the earth's behavior is becoming much less mysterious. Less than 300 years ago, as late as 1750, the Bishop of London told his followers that two recent quakes had been warnings from an angry deity. Today, scientists, thinking that they're somewhat closer to an answer, prefer another explanation. This explanation is known as the theory of plate tectonics (write on board).

In talk number one, the teacher might begin by asking what the organization and goal of that section of the talk
was. Students might bring up the idea that one of the goals was to outline the direction of the talk ("what I'd like to talk about today...") or to get people interested in the talk (by discussing the damage done by earthquakes), or to hint at the tone of the talk ("at the present level of research, nature always surprises man"). In terms of rhetorical organization, a student might bring up the idea that the lecturer makes a statement ("they strike without specific warning") and then gives examples to back up that statement.

The teacher might then proceed by asking students what notes they took or asking students to write their notes on the board. The quality of notes should be judged on the basis of conciseness combined with accurate representation of important ideas. For example, for the section in talk number one, "What I'd like to talk about today is earthquakes--what scientists know or think about the causes of earthquakes, what developments have occurred concerning the prediction of earthquakes," one student writes (1) EARTHQUAKES. Causes Predicting

Another writes (2) EARTHQUAKES - what are causes? how to predict? Another writes (3) what scientists think about causes of earthquakes, what developments concern prediction of earthquakes? Teachers and students can see that the first representation is the most concise and also visually represents that the main topic is "earthquakes" with subtopics being
"causes" and "prediction." In addition, the shape of the notes (the column type approach) predicts ahead allowing room for later information to be incorporated. The second representation uses a few more words and is not as visually clear. The third representation uses way too many words and does not have any visual emphasis.

At the end of talk number one, the teacher might ask the students where they think the talk is heading. They will probably predict that the body of the lecture will begin with either the causes or prediction of earthquakes. The teacher should accept any logical possibility. The goal is to have students feel free to guess. Instead of going directly into all of talk number two, the teacher may begin slowly with, for example, only the first sentence, allowing students to modify their original guesses. Talk number two begins with, "Even so, as time passes, the earth's behavior is becoming much less mysterious." After asking whether there are any further predictions of lecture direction or any modifications of previous predictions, the teacher may point out the cue "even so" (a cue that the following information is somewhat of a contradiction of the previous statement that "nature always surprises man") or the cue "as time passes" (a reference to time up to the modern day). Students may be able to guess that the talk will continue about theories of earthquake causes or prediction in the past to the present. The teacher may now
continue the rest of talk number two, and follow the same procedure of examining people's notes and discussing the best representation. Again, at the end of talk number two, the teacher may ask for predictions concerning lecture direction.

The second part of Stage Two is also involved in extracting the essence from a talk--this time, not in the form of notes, but in the form of a two to three sentence summary of a five to ten minute talk. Judgment of summaries is based on whether the student saw the general organizing principles of the lecture, eliminating the details. A sample lecture followed by examples of student summaries follows:

Lecture: Understanding Headaches

Introduction: Headaches can be debilitating, socially, physically, and psychologically

General causes of headaches: disease of sinuses, teeth, eyes, brain, infections, injuries, etc.

Many types of headaches

I Causes and treatment of specific types of headaches

A. tension headache - due to muscle contraction brought on by anxiety, stress - treatment by lying down, relaxing, hot showers, heating pads, aspirin

B. withdrawal headache - due to body cells getting used to substances such as caffeine, nicotine, alcohol, and then getting inadequate supply - treatment by high fluid intake - otherwise will go away over time
C. **Migraine** headache - believed to be tied to blood vessels in head opening and closing - most painful - treatment by aspirin, codeine, see doctor

II How to tell if **headache** is serious - when to see doctor

A. if different pattern from usual headache
B. if tied to other trouble (e.g. fever, dizziness)
C. if headache is associated with seizures
D. if headache follows a head injury

III Which pain medicine is best?

A. aspirin
B. buffered aspirin
C. decongestants

Sample summaries:

(1) There are three kinds of headaches: tension, withdrawal and migraine. You should treat them by seeing a physician and finding the right cure for each headache.

(2) The lecture talks about what causes a headache. It explains the differences and what (1) tension, (2) withdrawal, and (3) migraine headaches are and how one should treat them. The talk explains what a serious headache is and how one should seek advice from a doctor or which medicine is best to use for an everyday headache.
In summary number one, the student noticed the organizing point of talking about three kinds of headaches but did not notice that the causes and treatments for each one of them was discussed. In addition, she had misinterpreted the lecture, stating that they should all be treated by seeing a physician. She also missed two other subsections of the lecture—how to tell if the headache is serious and what pain reliever to use. The second summary, on the other hand, avoids the details but gives a concise description of the general organization of the talk.

At this point in the course, lectures containing information of a statistical nature and practice noting numbers might be included. In preparation for this, practice in listening to numbers in isolation may be introduced. Later, lectures containing a lot of statistics should be used so that students can use all of the strategies available for interpreting statistics (expectations, redundancy, etc.).

The goal of Stage Three is to introduce students to the overall discourse of lectures. In order to introduce the concept of discourse coherence (the manner in which different speech acts are strung together), this stage begins by taping a lecture and playing it back line by line (or two lines at a time) constantly stopping and asking: Where is the speaker heading (in a general sense)? What will come next? How do you know? Is this important information? The following demonstrates an idealized interaction. (In the classroom,
the teacher would most likely give more clues to elicit these ideas and would probably give many of his/her own ideas concerning analysis.)

<table>
<thead>
<tr>
<th>Lecture Segment</th>
<th>Teacher-Student Interaction</th>
</tr>
</thead>
</table>
| Let's turn to the Tao Te Ching itself... | T: **Where** is the speaker heading?  
S: He'll **look** at what's in the book... the ideas in the book... |
|                  | T: **What** will come next?  
S: one main idea from the book? the first page of the book? the book's organization? |
|                  | T: **How** do you know?  
S: "turn to the book itself"...so he's not talking about the **background of the book**...he wants to look at the content of the book... |
|                  | T: Is this important information?  
S: Yes...the lecturer is telling us his focus...**directing our attention**... |
| now...the center of this book is in this word "Tao" (written on board)...this is the heart... | T: **Where** is the speaker heading?  
S: he wants to talk about what "Tao" means...wants to **talk** about how whole book relates to "Tao" |
|                  | T: **What** will come next?  
S: a definition of "Tao"?...what "Tao" is? |
T: How do you know?
S: he uses words like "center", wrote the word on the board...stresses "this is the heart"
T: Is this important information?
S: yes...further subcategorizes topic from Tao Te Ching to "Tao"

so...if you can know what this word is trying to say...and the way you know it is not by sitting down and intellectualizing...must be by feeling...
T: Where is the speaker heading?
S: ...how can you know what this word means...
T: What will come next?
S: he says the way is not by sitting down and intellectualizing...must be by feeling...
T: How do you know?
S: first he says we can know what "Tao" is but then he tells us how not to find out...he must intend to tell us later how we can find out...
T: Is this important information?
S: maybe...it seems that the important information will come...this is leading up to it...

the way you know is the way of letting go...
T: Where is the speaker heading?
S: he's going to tell a story about "letting go" and relate that to the
you remember the Tao Te Ching...

famous story I told you about S: a story about "letting go"...
the professor who came to the Zen monk...

T: What will come next?
S: a story about "letting go"...

T: How do you know?
S: he asks students if they remember... just in case they don't, he'll probably retell it... also "the way you know is the way of letting go" is important information... he wants to stress it by giving examples and expanding on the idea...

T: Is this important information?
S: "the way you know is the way of letting go" is very important... the story is just support...

The remainder of the materials and activities for Stage Three involve lectures printed in outline form, grouped under six different rhetorical headings: (1) define/describe, (2) deductive/hypothesis-proof, (3) inductive, (4) enumerative/exemplification, (5) chronological/historical/process, and (6) classification. Each rhetorical heading begins with a description in outline form of that rhetorical pattern. In addition, for each rhetorical heading, there is a list of sample cues or vocabulary applicable to that style. For each heading, there is a choice of lectures,
varying in length, topic, and lexical complexity. However, because the lectures are in outline form, the teacher giving the lecture has the freedom to make the lecture more or less difficult by altering his/her style of speaking, speed of speaking, number of tangents, choice of vocabulary, amount of redundancy, etc. Lastly, as a means of contextualization, each lecture begins and ends with discussion questions. At the beginning, these discussion questions serve to give the student the cultural background knowledge required for understanding the lecture. At the end, the discussion serves to tie the talk together and give it personal relevance, applying it to other areas and ideas.

For each style, a sequence might be as follows:

Lecture one (of that style) - ten minutes; listen without note-taking; summarize orally or in writing; discuss organization of lecture; listen to the same lecture again; take notes and compare in groups; have groups rewrite notes into a format in which the hierarchy of information is visually clear.

Lecture two (of that style) - (optional) - ten minutes; analyze the lecture line by line; discuss clues that tell the student how to organize this lecture on paper and in his/her head; with each line, discuss what might be noted or what might follow.
Lecture Three (of that style) - ten to fifteen minutes (possibly including tangents); listen and take notes; collect notes; do exercises based on content or discuss notes.

Black's (1971) hierarchy of listening exercises and situations ranked from least difficult to most difficult (discussed on pages 44-5 above) would be useful criteria for judging exercise sequences and lecture presentation style.

At this stage, the teacher might stress that lectures rarely fall into any one category of rhetorical style. Rather than giving the student set rules of lecture discourse, the teacher is giving the student some insight into the underlying processes of lecture coherence. It is through exposure to these styles in comparative isolation that the student will more easily see the different styles in a longer, less organized lecture.

Samples from the chapter "Inductive Style" follow:

Inductive Organizational Style Outline

(Introduction):

Statement of intended topic:

Anecdote(s), narrative(s), test description(s), observation(s) based on above topic:
Conclusions based on the above anecdote(s), narrative(s), test description(s), observation(s):

(Summary of points covered):

Sample Vocabulary Cues For Conclusions in the Inductive Organizational Pattern

Thus,

Therefore,

As a conclusion,

To conclude,

This \{ shows \} that
\{ demonstrates \}
\{ implies \}
\{ ... \}

\{ Taking all of this into account, \} we can \{ see \} \{ conclude \}

Based on X,

If we examine X more closely,

\{ Obviously, \} X \{ tells \} \{ us \}
\{ Clearly, \} \{ shows \}
\{ Logically, \} \{ ... \}
Sample Lecture in the Inductive Style

Pre-Lecture Discussion: What do you know about the changing role of women in the U.S.? What about in your countries? Is the trend good or bad? How do you personally feel for yourself or your wife?

Introduction: many opinions about changing role of women; often an emotionally charged subject; women now feel that they have control over the direction of their lives but this, too, may cause conflict; in fact, some people say that women's liberation puts more strain on women than ever before;
in any case, women now must often decide a major question: Should I work/pursue a career? Or should I stay at home and raise a family? Or should I do both?

I Should a woman work, stay home, or do both?

A. One factor to take into account when making this decision—which is emotionally and physically more beneficial?

1. Physical
   a. Previously, it was thought that men's higher heart attack rate was due to their working, usually in more stressful jobs than women
   b. Now, however, with 50% of women in job market and still an uneven heart attack rate—this theory has lost credibility
   c. In February 1980, a test showed that women who have joined the work force appear to be at no greater risk than non-working women (for heart disease)

2. Emotional
   a. a study done at three universities and colleges—participants
      (1) compared working women who are or who have ever been married and housewives
      (2) employed women (mean age 33) ranged from
secretaries to professionals and executives

(3) most of women in both groups were college, educated

(4) for purposes of another part of study, most were in consciousness raising groups

b. Procedure

(1) test was designed to study who was emotionally stronger

(2) emotional strength = degree of psychological distress to which someone reacts to a life crisis

(3) criteria for judging psychological distress

(a) anxiety

(b) irritability

(c) somatic complaints

(d) depression

(e) problems in thinking and concentrating

c. Results

(1) Though housewives generally experience lower levels of stressful life events than employed women, they seem to react to life crises with more psychological
distress than employed women.

(a) employed women have more stressful situations in their lives--both at work and in their marriages

(b) employed women show fewer signs of psychological distress

II Conclusions

A. the test seems to imply that employment may equip women better for coping with stressful life events than does staying at home

B. the researchers caution that other factors--social class, job status--may contribute to these differences

1. the results may apply only to certain types of women in certain situations

Discussion: Does this experiment sound logical to you? Do you see anything wrong in the methodology of the experiment? Do the conclusions seem logical to you? Why?

Vocabulary:

trend, an emotionally charged subject, strain, stress, to lose credibility, to be at no greater risk, consciousness raising group, distress, life crisis, criteria, anxiety, irritability, somatic/psychosomatic complaints, depression,
cope with life events

Comprehension Exercises

1. In one or two sentences, summarize the essence of the lecture.

2. How did the researchers define "emotional strength"?

3. What criteria did the researchers use for judging "psychological distress"?

4. True or False?
   a. The test compared working women who have never been married and housewives.
   b. The working women were generally professionals and executives.
   c. Most of the working women in the test were college educated while most of the housewives were not.
   d. Employed women experience more stressful events in their lives than housewives (according to the test).
   e. Housewives show more signs of psychological distress when reaching to life crises than employed women.
   f. The test seems to show that employment has negative effects on a person's mental health.
   g. The researchers feel that this research applies to all women.
5. Write a one page essay on either of the following topics.

a. This talk concluded with the idea that employment may equip women better to cope with life's stress than if they had stayed at home. Yet, nowhere in the talk are reasons given as to why this might be so. If the conclusion sounds logical to you, discuss some of your own hypotheses as to why employment equips women better to cope with life's stress.

b. This talk concluded with the idea that employment may equip women better to cope with life's stress than if they had stayed at home. Does this sound logical to you? If not, discuss your doubts and skepticism about the experiment. Discuss some of your own hypotheses as to why employment does not or might not equip women to cope better with life's stress.

Note-taking Activities

1. In order of importance, note the details that you remember or wrote,

2. If you were to rewrite your notes, how might you concisely write them so that important points stand out and important relationships are clear?
Using the outline of inductive organizational style as a guide, how might you organize your notes?

<table>
<thead>
<tr>
<th>Inductive Organizational Style</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Introduction)</td>
<td></td>
</tr>
<tr>
<td>Statement of intended topic</td>
<td></td>
</tr>
<tr>
<td>Anecdote(s), narrative(s), test description(s), observation(s) based on above topic</td>
<td></td>
</tr>
<tr>
<td>Conclusions based on the above anecdote(s), narrative(s), test description(s), observation(s)</td>
<td></td>
</tr>
<tr>
<td>(summary of points covered)</td>
<td></td>
</tr>
</tbody>
</table>

Activities based on the lecture are important. Quizzes concerning the content of lectures can provide feedback to the teacher and student on how much the student understood and whether the student's problems center around missing general points or missing details. Furthermore, practice in quiz taking can bring to light some of the academic skills of guessing, eliminating choices, etc. Other academic activities can be the answering of essay questions and the discussion of
how best to present essay answers. Practice in raising questions for discussion and taking part in discussions or preparing a case for a debate based on the content of the lectures can also be classroom activities.

Stage Four gives the students opportunity to practice skills of listening and note-taking in less controlled and longer situations. At this stage, lectures are not grouped into discourse styles. A sequence for lecture presentation might be as follows:

1) listening without note-taking—immediate recall of subject and details for later discussion.

2) listening with optional note-taking. Context should be given and listening strategies and note-taking styles appropriate for that context should be discussed (e.g. "You are in an anthropology class in which the professor stresses the general principles discussed in class and is not terribly concerned with specific examples."). Discussion, test-taking, or comprehension activities follow.

3) section by section listening with class discussion of organizational style, cues, notes, etc. Stress the interplay of organizational patterns.

4) listening and note-taking with group work in rewriting. Discussion and comparison of notes. It is at this stage that different media might be used such as slides, video tapes, and films. In addition, different
lecture situations and styles may be simulated: in a large lecture hall or a classroom; giving a lecture with or without allowing audience interruption; giving a highly organized lecture or giving a lecture with numerous tangents, etc.

At the end of these four stages, the student should be able to carry out the following skills detailed in the listening comprehension, note-taking, and production syllabus for advanced ESL students on pages 77-83 above:

I. Listening to lectures
   A. The student should be able to differentiate between main points and less important points.
   B. The student should be able to follow the speaker's train of thought and organizational pattern.
   C. The student should be able to make reasonable predictions about future discourse.
   D. The student should be able to comprehend vocabulary and idioms in context.

II. Note-taking
   A. The student should be able to take lecture notes for a variety of different purposes.
   B. The student should be able to take notes from a variety of lecturer styles.
   C. The student should be able to take notes in a variety of lecture environments.
   D. The student should be able to rewrite haphazard notes so as to represent the organization of the lecture and make it clear for future reference.
CHAPTER V
CONCLUSION

The syllabus and materials presented in this thesis attempt to incorporate four areas of research: (1) the pedagogical concepts concerning teaching lecture comprehension to NSs and NNSs; (2) the theoretical concepts explored in the field of psycholinguistics; (3) lecture discourse analyses; (4) the results obtained from a needs analysis concerning the listening comprehension, note-taking, and production needs of university students.

In terms of skills to be developed, the syllabus attempts to expand the NNS's knowledge of the phonemic, syntactic, semantic, and paralinguistic codes of the language of academic lectures. It attempts to expand the NNS's abilities to comprehend the lecturer's logic and make associations, inferences, and evaluations that need to be made, whether as a function of the rhetorical structure of the lecture or as a function of the cultural background assumed in the lecture content. It attempts to reduce the NNS's time of processing by an awareness of repetition, paraphrase, overall discourse style, cues to prediction of content, and cues of emphasis and de-emphasis.

Studies in the discourse of lectures provide the teacher with an awareness of what might be taking place during lecture discourse and can serve as guidelines to classroom teaching
with the assumption that "identifying strategies of interpretation can both serve to elucidate discourse as well as act as a language learning objective" (Candlin 1978:40).

These strategies of interpretation include awareness of cohering and cohesive devices of lectures (lexical, syntactic, and paralinguistic) as well as an awareness of devices that serve to emphasize information (lexical, syntactic, paralinguistic, and organizational cues). It should be noted, however, that the teaching of lecture comprehension cannot be accomplished solely by analyzing the strategies of listening. Input and practice must be extensive, with discussion of strategies serving to facilitate and impose order on incoming information.

Studies in the cognitive processes involved in lecture comprehension and note-taking are further removed from actual classroom interaction than the discourse analyses and skill-based analyses of lecture comprehension and note-taking. However, models of comprehension such as "schema" models, "analysis by synthesis" models, and "depth of processing" models do provide the teacher with knowledge of why s/he is teaching what s/he teaches. Hypothesizing that comprehension involves mapping incoming information against some schema presupposes that the listener's schema is compatible or flexible enough to incorporate the lecturer's schema. Hypothesizing that comprehension is a process of analysis and hypothesis finding and testing suggests the importance of
guessing and predicting when listening to lectures. An awareness of how culture may affect the mapping process or the hypothesis finding and testing process suggests the need to expand the NNS's cultural awareness by giving context to topics and elucidating various assumptions that NSs would make while listening to a lecture.

In terms of actual materials, the syllabus stresses realism and relevance to the student's academic situation. For this reason, outlines of lectures to be presented 'live' by a lecturer are used rather than using tapes or lecture transcripts. In this way, the language, the cues, the kinesics, and the many haphazard performance features of live lectures (pauses, hesitations, false starts, etc.) are guaranteed to be realistic. To further stress the realism, aids to lecture comprehension (handouts, review sheets, oral summaries, outlines on the board) should accompany lecture presentations. Exercises are varied, some focussing on localized comprehension, others, on global comprehension. Within the global comprehension exercises, tasks vary from answering true/false questions about concrete examples to making inferences to answering essay questions incorporating outside knowledge.

Note-taking is taken to be a by-product and a manifestation of interpretive competence. In order to take notes, the NNS needs all of the skills involved in listening mentioned above, and, in addition, needs further time for evaluating
what needs to be noted and judging how best to represent the material visually so that the hierarchy of information is clear. The syllabus attempts to practice and develop these skills by adding, along with listening strategies, other strategies specifically applicable to note-taking: using cues of emphasis; using symbols and abbreviations that simplify representing ideas and words; using organizational short cuts that visually represent what information is important or less important (outlines, indentation, categorization, etc.).

The syllabus and materials suggested in this thesis cannot, at this point, be evaluated empirically in terms of effectiveness in increasing lecture comprehension and note-taking skills in the classroom. Murphy and Candlin (1979: 68-71) do, however, suggest some criteria for evaluating lecture comprehension and note-taking materials and syllabuses.

**Murphy and Candlin's Criteria**

<table>
<thead>
<tr>
<th>Proposed Syllabus and Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Is each text for use a piece of spoken discourse?</td>
</tr>
<tr>
<td>Yes. Transcripts used in Stage One are used as a vehicle to understanding authentic lectures. After Stage One, all lectures are presented live or spoken from outlines or on video tape.</td>
</tr>
</tbody>
</table>
(2) Is there accompanying visual material?

Depends on teacher. It is suggested in the syllabus that teachers incorporate into their lectures the same aids used by subject matter teachers (e.g. handouts, outlines on overhead projectors, diagrams).

Yes. The syllabus stresses that activities based on the lecture content need to be done in order to avoid the practice of confusing listening and testing. These activities should be based on demands that would normally be found in the academic environment which include taking quizzes, writing essays, asking questions to stimulate discussion, taking part in discussions, and debating.

Yes. The syllabus stresses focusing attention on lecture discourse which includes these aspects of cohesion. By
substitution, and ellipsis?

(5) Is there provision for teaching and practice in recognition of discourse features and their communicative function: moves of focusing, describing, concluding, etc., acts such as the marker, conclusion, aside?

(6) How is note-taking integrated with other elements of the course? What provision is made for teaching it? ("The teaching of this skill will need to progress through various stages, from guided exercises to free ones..."

Note-taking is integrated into the syllabus as both a by-product of interpretive competence and a manifestation of interpretive competence. It is introduced in a sequenced manner beginning with noting the minimum number of words in the most concise representative form to express a 30 second segment of speech.

analyzing discourse in segments or through transcripts, realistic practice is attained.

Yes. As with the cohesive devices mentioned above, the syllabus also stresses cohering devices and how the parts of the lecture are put together rhetorically.
Learning how to use cues, predictions, pauses, etc. is gained through stopping lectures at varying points and discussing notes, and reasons for noting. Note-taking is not seen as the essence of the syllabus, but is rather perceived as an important academic skill.

Further research and evaluation do need to be done concerning points mentioned in this thesis and the syllabus and materials. First, it still has to be empirically proven that analysis and awareness of strategies of listening can lead to better listening. Research comparing two groups—one given instruction and guidance in analysis eventually leading to listening to full lectures; the other, given only equivalent times of exposure listening to lectures—could tell more about whether learning to listen is a matter of exposure or a matter of strategy development.

Even if the need for strategy development is acknowledged, research needs to be done into whether these strategies are teachable and also whether and how these strategies differ with NNSs of different languages. Some questions that need to be answered are: Do all literate people have approximately
the same schema for listening to lectures? Is there a lecture schema? If so, what exactly is it? Do lecture schemas vary from culture to culture? Can analyses of notes made by NNSs help define some of the problems of misinterpretation and clarify what types of schemas are used? Will teaching of cues and the organization of lectures be of use to the NNS when listening? Are schemas so ingrained that awareness of new schemas will only be of analytical concern but of little relevance when processing information? In terms of giving cultural background and information and cultural frames for topics, are those skills that can only be gained by direct experience and time in the culture?

This thesis is an attempt to provide a syllabus that would not only practice but would also teach. The exercises and sequencing are based on theories of what occurs when listening, yet no empirical tests have been done to determine which strategies and exercises are, in fact, used by and useful to the student when s/he listens to lectures and takes notes. The syllabus does, however, provide the student with a stronger base in knowing what s/he needs to do when listening and note-taking, and provides the teacher and students with a clearer view of the ultimate goal and the steps and reasons for each step leading to that goal.
Appendix A: Needs Analysis Questionnaires

Form A: FOR DEPARTMENT CHAIRPERSON

LISTENING COMPREHENSION AND NOTE-TAKING NEEDS OF STUDENTS AT THE UNIVERSITY OF HAWAII AT MANOA

DEPARTMENT ________________ CHAIRPERSON ________________

<table>
<thead>
<tr>
<th></th>
<th>Graduate</th>
<th>Undergraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total majoring in dept. (as of Fall 1981)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total foreign students majoring in dept. (as of Fall 1981)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of students taking courses in dept. (as of Fall 1981)</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Total number of foreign students taking courses in dept. (as of Fall 1981)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Among the courses offered by your department, approximately what percentage are:

<table>
<thead>
<tr>
<th></th>
<th>Graduate</th>
<th>Undergraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% lecture (in a large lecture hall)?</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>lecture (in a large lecture hall) plus lab?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>approx. 75% classroom lecture; 25% class discussion?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>approx. 25% classroom lecture; 75% class discussion?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% class discussion (seminar format)?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Do not include native speakers of English under heading 'foreign student' (e.g. from U.K., Australia, etc.)
If the above divisions are not applicable to your department, how would you best describe the breakdown of courses offered by your department?

Graduate:

Undergraduate:

<table>
<thead>
<tr>
<th></th>
<th>Graduate</th>
<th>Undergraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. how many students are there in one lecture section (in a large hall)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approx. how many students are there in one classroom lecture section?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approx. how many students are there in one lab section?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approx. how many students are there in one seminar section?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional comments about class size not covered above:

Comments about foreign students' needs, preparation, etc. in your department (especially in terms of listening comprehension and note-taking ability):
FORM B: FOR TEACHING STAFF

LISTENING COPPREHENSION AND NOTE-TAKING NEEDS OF STUDENTS AT THE UNIVERSITY OF HAWAII AT MANOA

DEPARTMENT ___________________ NAME ___________________

Description of courses presently teaching:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Grad. or Undergrad.?</th>
<th>Hours/Week</th>
<th>Number of Students</th>
<th>Number of foreign Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How would you describe each of the above courses in terms of percentage of time devoted to teacher lectures, percentage of time devoted to student presentations, percentage of time devoted to class discussion?

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Lectures</th>
<th>Student Presentations</th>
<th>Class Discussion</th>
<th>Other? (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the following questions, if individual courses vary, please specify course numbers.

1. Do you require active class participation? ___ Yes ___ a minimum amount of participation is sufficient
   ___ No

Can a student pass your course without taking part in class discussions? ___ Yes ___ No
2. Do you require student presentations? __Yes  
   __No
   If so, please describe the number, type, length, and expected preparation.

3. Is it necessary for students to take detailed notes in your class? __Yes  
   __No
   If not, what kind of notes (if any) do the students need to take? Why might they not need detailed notes?

4. Do you give handouts to your students summarizing the main points of a lecture? __Yes. For all lectures.  
   __Often  
   __Occasionally. For exceptionally hard or important lectures.  
   __Rarely  
   __Never

5. Do you use any method to help your students receive from a lecture or discussion what you want them to get (e.g., visual aids, outlines, review sheets, an oral summary at the end of a lecture)? Please explain any method used and the frequency of use (often, occasionally, rarely, never, always).

6. Do you write essential points on the blackboard? __Yes. Always  
   __Often  
   __Occasionally. For exceptionally hard or important points.  
   __Rarely  
   __Never

7. Do you use movies or video tapes in your class? Specify which. __Yes. Often  
   __Occasionally  
   __Rarely  
   __Never
8. If a student read and understood the text for your course but did not follow lectures or class discussions, could s/he pass your course?

Yes.

Yes, but the student will have missed so much that s/he can only pass minimally (a 'D')

No.

9. Rate the following skills in terms of their importance for success in your course (with '1' being the most important).

- Reading Comprehension
- Writing
- Listening Comprehension and Note-taking
- Speaking

10. What is the minimum listening comprehension and note-taking competency you expect from your students?

11. What aspects of listening comprehension and note-taking do you think it would be most important for the ELI to work on in the ELI listening comprehension classes? Put a check next to those skills you think would be essential for success in your class. Put a '1', '2', '3', and '4' next to the four most essential skills for success in your class.

- Hearing the main idea of long talks (20+ min.) without note-taking
- Understanding everyday conversational English
- Understanding speech where the speaker is not present (movies, tapes, radio, etc.)
- Comprehending main points and less important points without note-taking
- Understanding different speakers (accents, speed of presentation, etc.)
- Understanding statistics and writing them down
- Listening to and participating in discussions without note-taking
- Organizing ideas into well written notes
- Listening, note-taking, and participating at the same time
- Learning test-taking skills
- Learning how to give presentations
- Following the speaker's train of thought or organization
12. Of the foreign students you have had or have in your classes, what do you think their largest obstacle was or is in terms of listening comprehension, participation, note-taking, etc.?

13. Additional comments:
ELI STUDENT QUESTIONNAIRE

LISTENING COMPREHENSION AND NOTE-TAKING NEEDS OF STUDENTS AT THE UNIVERSITY OF HAWAII AT MANOA

ELI ___ Section ___

1. Are you a graduate or undergraduate student?
   What is your major?

2. Have you ever taken classes for credit at an American or British university? ___ If so, what were your experiences in those classes?

3. Put a "1" next to the situation that you are most often in (or expect to be in). Put a "2" next to your second most common situation (or expected situation).

   - lecture class in a large lecture hall (100% teacher talk)
   - lecture class in a large lecture hall (100% teacher talk plus lab for questions and discussions concerning lecture.)
   - classroom with 15-30 students (approximately 75% teacher lecture and 25% class discussion)
   - classroom with 15-30 students (approximately 25% teacher lecture and 75% student discussion)
   - seminar (fewer than 15 people) (100% class discussion)
   - Other ______________________________

4. Which listening and note-taking situation is most difficult for you?

   - listening to a lecture in a large lecture hall and taking notes
   - listening to a lecture in a classroom (15-30 students) and taking notes. Some opportunity for student questions and small amount of discussion.
   - listening to a classroom discussion (mainly student participation) and taking notes.
   - Other ______________________________

   Why is the situation you chose most difficult for you?
5. Put a check next to those skills that you think you need.

 Put a "1", "2", "3", and "4" next to the four most important skills for you (in that order--"1", being the most important).

   ___ Hearing the main idea of short talks (5-10 min.) without note-taking.
   ___ Hearing the main ideas of long talks (20+ min.) without note-taking.
   ___ Understanding everyday conversational English.
   ___ Understanding speech where the speaker is not present (movies, tapes, radio, etc.)
   ___ Differentiating between main points and less important points.
   ___ Following the speaker's system of presentation and organization.
   ___ Understanding different speakers (accents, speed of presentation).
   ___ Understanding vocabulary and idioms.
   ___ Understanding statistics and writing them down.
   ___ Listening to and participating in discussions without note-taking.
   ___ Finding the key words to note down during short talks (5-10 min.).
   ___ Finding the key words to note down during long talks (20+ min.).
   ___ Organizing ideas into well-written notes.
   ___ Listening, note-taking, and participating at the same time
   ___ Learning test-taking skills.
   ___ Learning how to politely interrupt speakers in order to ask them to go over a point or to make a point clearer.
   ___ Learning to raise questions or present ideas that start and contribute to class discussions.
   ___ Learning to give organized presentations.
   ___ Other

6. With a 5-10 minute lecture, can you now:

   ___ get the main idea?
   ___ differentiate between main ideas and details?
   ___ organize these ideas into useful notes?

7. With a 20 minute or longer lecture, can you now:

   ___ get the main idea?
   ___ differentiate between main ideas and details?
   ___ organize these ideas into useful notes?

8. With a class discussion, can you now:

   ___ follow the main ideas that people are presenting?
differentiate between main ideas and details? ____
organize those ideas into useful notes? ____

9. Below are a list of possible problems concerning the speaker that you might have when listening to lectures in English. Check how often you have each problem.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Always</th>
<th>Often</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Speaker talks too fast.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Speaker's handwriting on blackboard is unclear.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Speaker speaks too low or pronounces unclearly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Speaker talks in an unfamiliar accent.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Speaker's logic and organization of the lecture is unclear.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Speaker doesn't make clear what points are important and what points are unimportant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Speaker uses a lot of unfamiliar vocabulary and idioms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Speaker seems to get off topic too often</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. Below are a list of problems concerning note-taking that you may have when listening to lectures in English. How often you have each problem.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Always</th>
<th>Often</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. I write too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. I miss a lot of the lecture because I am writing while the teacher is talking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. I write too little and don't write major points</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. I can't understand what is important to note and what is less important to note.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do you have this problem?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>Often</td>
<td>Occasionally</td>
<td>Rarely</td>
<td>Never</td>
<td></td>
</tr>
</tbody>
</table>

E. I can't understand my notes a week later.

F. Other problems

11. What help with lecture comprehension and note-taking do you hope to gain through this course?
BIBLIOGRAPHY


McDonough, J. 1977. English for academic purposes: some factors in listening comprehension. In Languages For Special Purposes #4. Autonomous Metropolitan University, Mexico City, Mexico. ERIC # ED 148 104


Snow, B. and K. Perkins. 1979. The teaching of listening comprehension and communication activities. TESOL Quarterly 13, 1:51-63


Stanley, John. 1978. Teaching listening comprehension. TESOL Quarterly 12, 3:285-95


