Re-evaluating the speaking and listening demands of university classes for novice international students

Beth Sheppard, Jennifer Rice, Korey Rice, Brendan DeCoster, Rachel Drummond-Sardell, and Nate Soelberg, University of Oregon American English Institute

Abstract
Instructors from an Intensive English Program (IEP) conducted classroom observations in university courses commonly attended by international students to answer two questions: 1) What listening and speaking demands do international students face in courses at our university? 2) How can instructors in our IEP better prepare our students for these listening and speaking demands? A qualitative instrument was used to record classroom events, and common themes were identified from the results through group discussion. Results showed that international students at the researchers’ university likely need more practice in listening to informal lectures and quick announcements, following descriptions of visually presented data, and asking and answering questions. Implications for instructional practice in the IEP are discussed, and this methodology is recommended for other IEPs seeking to update curriculum based on the skills most essential for students in their own local context.

Key Words: speaking, listening, international students, content class, observation, Intensive English Program, lecture

Introduction
One goal of university-based Intensive English Programs (IEPs) is to prepare students with the skills they need to communicate effectively in their university courses after exiting the IEP. With limited time available, IEP curricula need to focus on this key mission. Therefore, oral skills instruction in IEPs should aim to develop the listening and speaking skills most essential for academic success in the university. But what are these most essential areas? What skills will contribute most to our students’ success once they enter the university as international students? Every teacher may have her or his own intuitions about the answers to these questions, but research can shed light on what is actually needed.

Published research is limited on specific oral language skills that international university students need and/or lack, and the research that exists is mostly based on surveys of faculty (see e.g. Johns, 1981; Ferris & Tag, 1996a; Ferris & Tag, 1996b) or students
(see e.g. Ostler, 1980; Ferris, 1998; Kim, 2006), many of which were published in the 1980s and 1990s. Subjects are asked what skills are required, and which are difficult. For example, in Ferris and Tag’s (1996a&b) seminal research, hundreds of professors from four California universities and colleges reported on the frequency of specific types of assignments involving oral skills and the frequency with which international students have specific difficulties with listening/speaking activities, ranked the importance of oral skills such as “pronunciation/intonation/stress patterns of American English” and “lecture note taking,” and provided additional open-ended comments. In a follow up study, Ferris (1998) reformulated the same survey for student respondents. She found very little agreement between the students’ report and the professors’, commenting that “instructors may not always be the best judges of the ways in which their students are struggling” and “students may not be the best informants on what professors actually require” (p. 307).

Indeed, while this self-reported data provides interesting information on instructor and student beliefs, it probably does not provide a complete picture of the listening and speaking behaviors common in university classes. As Powers (1986, as described in Flowerdew, 1994, p. 13) mentions in his analysis of a study surveying faculty about necessary listening skills, “faculty members who are not involved in language instruction may not be competent to analyze listening activities of non-native students, and faculty perceptions are only one of many sources of information (students and ESL instructors being two obvious others) that must be considered in assessing necessary listening skills.” Thus, the observations of ESL instructors would be a valuable source of information to triangulate with data drawn from studies of international students and university professors.

A great deal of research investigates the characteristics of academic lectures, finding, for example, that academic listening requires students to distinguish relevant from irrelevant information, integrate information from different sources, and understand various styles of monologue without much opportunity to request clarification (see, e.g. Flowerdew, 1994). However, little research attempts to bridge the gap between the characteristics of lectures and the learning needs of non-native English speakers. One study by Lee and Subtirelu (2015) uses corpora of both university lectures (Michigan Corpus of Academic Spoken English, or MICASE) and English for Academic Purposes classes (L2CD) to compare the metadiscourse used in those two settings. In this study, metadiscourse refers to any language used “to organize the information for their audience and to encourage them to understand the unfolding discourse in particular ways” (p. 53). Some examples include transition words, hedging language, references to course materials and books, and attitude markers. Lee and Subtirelu’s results indicate that this kind of metadiscourse is pervasive in both EAP and university classes, but that it is significantly more common in EAP classes, probably as a result of the instructors’ perception that more explicit instruction and scaffolding is needed for learners of English. This study looks only at metadiscourse of the instructors’ spoken English, but it does not attempt
to identify language that is or is not taught within the EAP curriculum, nor does it indicate which university lecture language may be challenging for the English language learner.

Morell (2007) summarizes several studies that examine which characteristics of a lecture aid in English language learners’ comprehension of its content. She lists “lecture schemata, speech modifications, use of visual aids, notetaking, and interaction” (p. 223). In addition, she summarizes some ways in which lecturers can modify their lectures to make them more accessible to English language learners, including “accurate representation of the macro-structure and discourse markers, an adequate speech rate, repetitions, and the possibility of negotiating meaning” (p. 223). While these findings help to inform the lecturer’s practice, they do not necessarily inform ESL instructors about which skills to focus on for improvement.

There is also a body of research investigating ESL instructors’ views on methods and practices in use in the ESL classroom, but no published research in which ESL instructors themselves observe university classes to see what skills students might need there. ESL teachers are familiar with their students’ language abilities, and they have the experiential expertise mentioned by Powers above, to “analyze the [language] activities of non-native students.” They can compare language activities in university classroom directly with the activities for which students are prepared in ESL courses, developing a locally applicable knowledge. This is particularly useful, since the characteristics of university classes, and therefore the listening and speaking skills required, vary from course to course, from instructor to instructor, from institution to institution, and also change over time (Ferris & Tag, 1996a; Kim, 2006).

As IEP instructors, we are preparing our students for the language demands of a very specific academic context, namely our home university. Therefore, we chose to investigate the listening and speaking behaviors in the actual courses our students are likely to attend upon completion of the IEP, for the purpose of updating oral skills instruction in our program on the basis of the results. This study attempted to answer two research questions: (1) What listening and speaking demands do students face in courses at our university? (2) How can instructors in our IEP better prepare our students for these listening and speaking demands?

Our findings may be interesting to instructors and curriculum designers in other university contexts, but it may be more important for those individuals to consider our methods and apply them in their own specific local situations.

**Methods**

A team of six oral skills instructors from our university-based IEP observed almost 40 hours of undergraduate courses at the same university, producing narrative observation logs and then collaborating on an inductive analysis of the results to seek

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**What listening and speaking demands do students face in courses at our university...[and] how can instructors in our IEP better prepare our students for these?**
mismatches between the assumptions implicit in our current instructional practices and the actual needs apparent in the university courses.

**Instrument**

Observation data were recorded using a simple running log to record a narrative of classroom events in which students perceive or produce language, combined with a set of abbreviations for key listening and speaking behaviors to be analyzed. The list of key listening and speaking behaviors was created by the research team through a process of pilot observations, first with video-recorded lectures, and then in actual courses at our university. Selection criteria for key behaviors included frequency and centrality in the observed classes (research question #1) and perceived potential impact on international students, especially in relation to any perceived mismatch with current instruction in our IEP (research question #2).

The final list of key behaviors, each represented by a symbolic abbreviation, included aspects such as question types (e.g. ask for opinion, check understanding), content types (e.g. logistics, definitions, feedback, commands), challenging passages such as humor, slang, culturally specific references, or unusually complex sentences, and non-verbal features such as acoustical challenges and visual supports (see Appendix 1). This list was intended to complement the simple narrative observation notes and guide our analysis of completed observations.

The running observation log, while simple, was also standardized to include separate running logs of what students hear and what students say (left and right sides of the instrument, respectively), annotations of time, basic data to identify the course and observer, and a retrospective question for each observer about the degree of reduction (linking and blending of phonemes, elision, deletion and vowel centralization) in the professor’s speech (see Appendix 2).

**Procedure**

First, the team of researchers normed for use of the observation instrument by independently “observing” two recorded lectures. The team watched videos of these lectures independently and recorded their observations, then gathered to share the results and clarify discrepancies.

Next, a list was obtained from our university of all courses enrolling a significant number of international students over the past three years, including the number of international students enrolled, and total course size. From this data, a list of 40 courses were selected for observation on the basis of the following considerations.

1. Language courses (English for international students, Japanese, etc), and courses in composition, PE, and music performance were eliminated, since English language proficiency is less of an essential factor in these courses.

2. Lower division courses were selected (course numbers 100-299), because the great majority of our IEP students continue into these courses after exiting the IEP.

3. Courses with 18 or more international students enrolled (in any one term in the past three years) were selected. For comparison, a list of courses with a high percentage of international students was also drafted, and the
two lists overlapped 55%. We chose to use the list based on simple numbers because we wanted to study the courses most likely to be experienced by any given international undergraduate (not necessarily the courses most affected by the international student presence).

The resulting list included mostly large survey classes in disciplines such as Business Administration, Economics, Math, Accounting, Physics, Journalism, Arts Administration, Computer Science, and Geography. In cases where a class on the list included both lecture and discussion/lab sections, both session types were observed by a member of the research team.

A shared, online document was created on the basis of this list of courses. In each of two academic terms, members of our research team signed up to observe courses on the basis of their availability. Permission was requested from university departments, and instructors signed a letter of permission before their classes were observed. Each course was observed two or three times throughout a given term to get a more representative sample, since classroom activities and behaviors are likely to vary over the course of the term in most university courses. In this way 20 total courses were observed, for an average of 2 hours per course.

At the end of each term of observations, the team met to share observation logs and discuss results and impressions. The discussions at these meetings functioned as an inductive analysis to identify patterns in our data. All team members brought their completed observation logs representing a record of professor and student behaviors, including phrases recorded verbatim and key behaviors highlighted with symbols as described above (see example in Appendix 2). Individual researchers commented on listening/speaking behaviors they found important, and others drew links to additional examples or counterexamples in the data they had collected. In this manner, patterns emerged regarding aspects of the observed classes that seemed likely to cause additional challenge for students (based on the instructional experience of the researchers), and to represent mismatches with our current IEP instruction. The meetings were audio recorded, and members of the research team listened to the discussions and took notes on emergent themes.

On the basis of the written observation records and the meeting notes, the research team was able to identify several major areas of potential mismatch with our current instructional practices in our IEP. These observations were grouped into three themes: lecture style, lecture components, and questions.

**Discussion**

Although we attended both lectures and discussion sections, we found that listening to monologues is by far the most commonly used oral/aural skill in the classes we observed. Even in discussion sections, there was a tendency for graduate teaching fellows to give lectures. In consideration of our knowledge of our intermediate students’ challenges with listening (see e.g. Field, 2011), this result implied that we should focus even more on listening skills in our IEP curriculum, even if this slightly reduces the focus on speaking in our
IEP’s combined listening and speaking courses.

The following sections will describe the three themes that the research team identified and discuss the implications for our IEP curriculum.

**Lecture Style**

As ESL instructors, we noticed several aspects of lectures that may affect students’ general comprehension of the content: US-based cultural / historical references, idiomatic, informal reduced speech, and instructor asides.

First, professors often refer to current events, popular culture, and American history in an effort to make material more accessible to the majority of their students. For example, in a Biology laboratory class, one instructor referred to the lab instructions as being “like a Betty Crocker cookbook recipe.” In another instance, a Psychology instructor used a reference to the D.C. snipers as a key example of “emotion without PFC [prefrontal cortex].” In quick succession, many historical figures and events such as Rosa Parks, the Rodney King beatings, the Great Depression, MLK, and Emmett Till were referred to in an Art Visual Literacy course, and immediately afterwards, the instructor asked students to think about what they could do with historic photographs found at a garage sale. Based on our experience as ESL instructors, these references would likely be opaque to most international students. IEP instructors can play some role in exposing students to this type of knowledge, but more importantly, they can make students aware that such references occur, and teach them how to seek the academic point of an explanation that includes cultural references, even when the reference itself is unknown. International students also need strategies and skills to recognize and ask effective clarifying questions about cultural references that are unknown to them.

Second, the language used in lectures was in many cases quite fast and informal, with a great many idioms, reductions, and features of spontaneous speech (such as false-starts, self-corrections, and even un-corrected mistakes, see e.g. Lynch 2009 pp 15-18). For example, in an Economics course, the instructor cautioned learners to not “lose the forest for the trees,” using an idiom that many international students would probably not be familiar with. In most of the courses observed, informal, reduced speech was regularly used, with the centralized vowels, assimilation and elision typical of such speech. To illustrate, in a Philosophy course, the instructor asked students what society does to people who are deviant by posing the question (in reduced form), “Whadda we do? We lock ‘em up. Get some medication goin’.” These aspects point to a need to emphasize authentic or realistic texts for academic listening, and to draw students’ attention to informal and reduced speech when listening. IEP listening teachers can select textbooks with more realistic recordings, or
supplement textbooks with authentic recordings found online. They can raise students’ awareness of these challenges with visits to carefully selected university classrooms. They can also provide intensive listening practice in the form of short dictations or cloze activities with reduced forms.

Finally, we noted that professors sometimes employed a different delivery style for parenthetical asides than for the well-planned body of their lectures, speaking more quietly and quickly, with even more reductions. These asides were introduced by phrases such as “I had this buddy once…” “I think that’s all… oh yeah, I actually wanted to…,” “‘member we switched that?”

Significantly, logistical announcements were sometimes presented in this same manner while many students were entering or leaving the class, creating even more of a listening challenge because of rustling papers and bags, squeaking chairs, and echoing footsteps. In addition, many of those announcements were not posted on slides or other visual aids. This observation leads to several challenges for international students. First of all, if logistical announcements (such as changes in office hours or exam schedules) are not available from other sources, students who cannot follow them during class will be at a disadvantage. Also, it can be difficult for international students to know for certain whether a given aside is important for them to understand or not, especially in light of the fact that essential logistics are sometimes presented in this way. Finally, even if it does not affect course success, it can be discouraging not to be able to follow asides to the lecture content, which may be humorous and rapport-building in nature (see e.g. Strodt-Lopez, 1987; Mason, 1994). IEP instructors can draw examples of this type of parenthetical announcement from recorded lectures and have students practice listening and comprehending the key information, or have them discuss the challenges presented by this type of discourse and work on strategies.

Lecture Components

As ESL instructors, we noted three special components of lectures that stood out as challenging and important because they were not being covered adequately in our IEP courses: the use of visual aids, the presentation of examples and definitions, and the way students took notes during lectures.

Because visual aids are meant to make lectures more clear, and they provide an alternate channel of information to the verbal, one might think that they would be an easy part of a lecture to understand, but we found that visual aids were often presented and described without the use of a pointer. This required the instructor to use fast, unstressed, specialized language (e.g. “axis,” “legend,” “apex,” “on the right-hand side,” “this little guy”) to pinpoint the part of the visual that was being discussed. The ESL instructors involved in this study concluded that this factor could lead to significant challenges for international students, and decided to update instruction with a variety of activities and exercises to help prepare international students to understand their professors’ references to visual aids. For example, IEP teachers can explicitly teach language for directing attention to a visual aid or have students analyze recordings of lectures [1] using visual materials and find patterns of vocabulary usage and presentation of information.
Then students can practice understanding short clips from lectures exemplifying these aspects, and later they can practice giving presentations that refer to charts and other visual aids.

In addition to visuals, it is essential for international students to understand the presentation of examples and definitions. We were surprised to see how often professors stated a term or concept only after presenting the definition or example that students need to apply to it. In IEP courses and course books, the pattern is that a new word is followed by its definition, but in our observations definitions often occur as a description of the word first, followed by the phrase “also called”, and then finally the target word. It seems likely that this rhetorical pattern will create extra challenges for international students, who are already expending more of their cognitive capacity on decoding the language they hear, and so have limited capacity remaining to figure out the relationships between ideas (e.g. Rost, 2011). It may be useful to draw IEP students’ attention to this and other rhetorical patterns in their listening materials, for example by pausing recordings at key points to ask about rhetorical structure.

Finally, we observed that note-taking practices in university classes did not match well with the kind of note-taking advocated by many academic ESL textbooks and practiced in some of our IEP courses. In many cases, university professors made copies of their PowerPoint slides available before class, and students simply annotated their printouts of the slides. In other cases, most students seemed not to take notes, or to copy into their notebooks only those sentences that were projected on a slide or written on the board, and it was unclear that effective note-taking was an essential skill for success. As a result of these observations, we felt that the emphasis in our IEP on taking formal outline-style notes could be relaxed into a system that views notes as a tool, not as an end into themselves. We could provide a variety of methods and models to students, including how to effectively annotate PowerPoint slides, and then let them decide for themselves what sort of notes work for them.

**Asking and answering questions**

In classes we observed, students commonly asked and answered questions. International students need to be able to understand professors’ questions and the answers given by other students, and they need to be able to ask and answer questions quickly and clearly. Our observations confirm that instructors tend to ask general questions (e.g. “How would you describe…,” “This is an example of what?,”) to the class and let the first volunteers give the answers. In order to participate in this dialog, students need to process the questions and formulate their answers quickly. In the IEP, instructors can have students practice strategies such as predicting professor questions during a lecture, so they can prepare to answer them. We can emphasize fluency with activities such as 3-2-1 drills[2] using questions and answers in order to build students’ ability to articulate their ideas under time pressure. To practice the situation students will face in class, we can stop when speaking and call on a student to quickly ask a question.

In our observations, we also saw frequent use of i-clickers[3] to ask questions of larger classes; responses to these clicker questions were displayed as a graph and sometimes recorded and
scored as a quiz. Once again, processing time for both understanding the question and reading the multiple choice answer options can be an issue for international students, and it may be valuable to provide extra practice in the IEP.

When the time comes for students to ask their own questions of professors, they need to either interrupt appropriately (a culturally-influenced skill, see e.g. Ferris & Tag, 1996b) or respond very quickly when professors pause to invite questions (wait times were seldom more than five seconds). In addition, we observed some international students trying to ask questions and struggling to make clear precisely which part of the content material they were asking about, and exactly which aspects of it they did and did not understand. We came to realize that asking questions in class is a much more complex skill than just knowing where to put the auxiliary verb in a question form. It seems useful for upper-level IEP students to study the parts of complex academic questions, perhaps drawn from a published corpus or recorded lectures from the internet. IEP teachers might also create short lectures that include a nonsense word or a deliberately confusing point and have students work together to create effective questions. This activity could be done under gradually increasing time pressure.

Conclusions

This qualitative research project has filled some gaps in our knowledge of what oral and aural skills international students will need when they exit our IEP and take undergraduate courses at our university. In short, we should focus more of our IEP curriculum on academic listening skills associated with authentic lectures that include reduced and informal speech, instructor asides, visual aids, and different patterns of defining words. Our IEP curriculum also needs to emphasize the importance of asking and answering questions quickly, and perhaps de-emphasize the formal outline style of note-taking that is currently taught.

Ideally, this will be an ongoing project at our institute, providing many instructors with greater first-hand knowledge of what to emphasize in upper-level IEP classes. This is especially important in light of the lack of published observational research on oral/aural skills needed by international students at US universities.

Since course practices vary between universities and over time, a local approach may be most effective, with each IEP investigating its own local context and needs, in order to inform its instructional practices. This approach has certainly been fruitful in our IEP, giving rise to changes that we have already implemented in our oral skills classes, as well as ideas for future implementation. It would surely be useful for instructors in other Intensive English Programs as well.

Endnotes

[1] Authentic recorded university lectures are available from a variety of online courses such as academicearth.com, the YouTube and webcasting sites of specific universities, and scholarly resources such as the Michigan Corpus of Academic Spoken English (MICASE).

[2] A 3-2-1 drill is a commonly-used fluency exercise in which students repeat the same task (often with a different
partner each time) three times, with less
time available to complete the task each
time.

[3]i-clickers are wireless electronic
devices registered to individual students
with which they can answer multiple
choice questions in real time. These
questions are often presented on
PowerPoint slides, and the aggregated
class results can be displayed
immediately.

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*The authors are current or former instructors in the University of Oregon’s American
English Institute. They have presented on this topic at multiple national and regional
conferences.*
Appendix 1
Observation Symbols Defined

Primarily used for **Students Hear** side

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Student</td>
</tr>
<tr>
<td>P</td>
<td>Instructor</td>
</tr>
<tr>
<td>V</td>
<td>Visuals (use of some sort of visual aid (.ppt, pictures, websites)</td>
</tr>
<tr>
<td>Vdiag.</td>
<td>Diagram used is necessary to understand speaking</td>
</tr>
<tr>
<td>NV</td>
<td>No visuals used</td>
</tr>
<tr>
<td>A</td>
<td>Acoustic challenges (background noise, quiet speech)</td>
</tr>
<tr>
<td>Q</td>
<td>Question (Content question is asked)</td>
</tr>
<tr>
<td>Q√</td>
<td>Question is asked to check for general understanding (“Does everyone understand?”)</td>
</tr>
<tr>
<td>*</td>
<td>Humor/ Sarcasm / Idioms / Slang / Cultural references</td>
</tr>
<tr>
<td>X</td>
<td>Extra challenging narrative (long sentences with many clauses, etc. Please provide notes here to explain situation)</td>
</tr>
<tr>
<td>L</td>
<td>Logistics (dates, places, times, deadlines, schedules, plan for the day, order of the lecture, etc.) Please note which one!</td>
</tr>
<tr>
<td>D</td>
<td>Definition (definition of important terms are given)</td>
</tr>
<tr>
<td>Redo</td>
<td>Self-correction</td>
</tr>
</tbody>
</table>

Primarily used for **Students Speak** side

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Give clarification</td>
</tr>
<tr>
<td>C?</td>
<td>Ask for clarification</td>
</tr>
<tr>
<td>E</td>
<td>Encouragement / positive feedback</td>
</tr>
<tr>
<td>Com</td>
<td>Command</td>
</tr>
<tr>
<td>K</td>
<td>Knowledge-based answer</td>
</tr>
<tr>
<td>K?</td>
<td>Knowledge-based questions- like Socratic method questioning</td>
</tr>
<tr>
<td>O</td>
<td>Give an opinion</td>
</tr>
<tr>
<td>O?</td>
<td>Ask for an opinion</td>
</tr>
<tr>
<td>Ag</td>
<td>Agree or disagree</td>
</tr>
<tr>
<td>T</td>
<td>Pass off a turn or interrupt in a group</td>
</tr>
</tbody>
</table>
Appendix 2
Sample Observation Data

<table>
<thead>
<tr>
<th>Date:</th>
<th>Course:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observer:</td>
<td>Instructor:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Students Hear</th>
<th>Students Speak</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15</td>
<td>P-Vdiag - D - constructive/destructive interference of waves</td>
<td></td>
</tr>
<tr>
<td>10:18</td>
<td>P - aside - mumbling</td>
<td>S - C2</td>
</tr>
<tr>
<td>10:23</td>
<td>P - Comm. (1st Reading quiz w/ clicker) (40 sec. to read &amp; answer)</td>
<td>S - K</td>
</tr>
<tr>
<td>10:28</td>
<td>P - Vdiag - K?</td>
<td>S-K? (can you do...?)</td>
</tr>
<tr>
<td>10:31</td>
<td>P - V - D</td>
<td>Ss watch simulation + fill in worksheet (not turn)</td>
</tr>
<tr>
<td>10:37</td>
<td>P - Vdiag (demo in front) - k?</td>
<td>Ss to do in grps.</td>
</tr>
<tr>
<td>10:40</td>
<td>P - V - D</td>
<td>Silence - no interaction</td>
</tr>
</tbody>
</table>
| 10:42 | P - Comm. | "Everyone OK with that? Write your answers now - OK to talk w/ people."
| | | "OK to talk w/ people to learn best like that."
| 10:50 | P - K? - Vdiag | Ss - K |
| | P - V - D | Ss - K |
| | P - Vdiag - Comp. Simulation | Ss - K |
| | P - Vdiag - demo of Doppler shift (ball w/ speaker) | Ss - K |
| | P - "Thank you." | |

After the observation:
Was the Instructor’s speech mostly reduced (informal speech that is linked, blended or illustrates elision, deletion, or centralization (moving toward a schwa sound))? Yes No Don’t know