DO TEACHERS MODIFY THEIR SPEECH ACCORDING TO THE PROFICIENCY OF THEIR STUDENTS ?

David Owen

Abstract

This article examines ways in which teachers may modify their language according to the competence of their students and is based on research conducted using two groups of students who were receiving part-time EFL instruction at a college of Further Education in the UK. An essential ingredient of this research project was the fact that instead of having two teachers, one for each group, only one teacher taught both groups thus removing from the corpus one of the most important variables, namely differences between the speech of two or more teachers.

After presenting a list of parameters by which the corpus for both groups of students can be analyzed and suggesting a new unit to be used in the analysis of spoken discourse, a comparative analysis of the results for both groups will be presented. This will be used to support the hypothesis that teachers do modify their speech according to the competence of their students. An awareness and understanding of why this happens and the role of these modifications in SLA pedagogy will be discussed.

Introduction

Over recent years there has been an increasing interest in spoken discourse and its analysis. In their attempt to produce a descriptive model for such an analysis Sinclair and Coulthard chose to collect data produced in classrooms where the mother tongue was the medium of instruction. They chose this setting for it offered.

> "..... *a simple type of spoken discourse, one which has {an}..... overt structure .....*" (Sinclair and Coulthard 1975:p. 6)

Their main interest was in classroom interaction and the discourse it produced so as to formulate their descriptive model for spoken discourse whose prime purpose was a linguistic one.

Since that time however, others have become interested in the analysis of spoken discourse of classrooms for pedagogical reasons. This is in part due to Krashen's hypothesis about "*comprehensible input*" and statements such as:

> "..... *the defining characteristic of a good teacher is someone*
> *who can make input comprehensible to a non-native speaker...*"
> (Krashen 1982: p. 64)

Long (1983) discusses at length how input can be made comprehensible to learners - two important ways being through **linguistic** modifications and **interactional** modifications. The former refers to input that is adapted in some way to the level of the recipient - for example, using shorter utterances, modifying vocabulary, using self repetitions. These features which are characteristic of "foreigner talk" (see Hatch 1983 for a review) are also thought to be features of "teacher talk" though as Ellis suggests seem more "to reflect the special characteristics of classroom settings - in particular the need to maintain orderly communication". Ellis 1994:583. The latter way of making input comprehensible - through interactional modifications - is thought to be important in SLA because learners presented with input that is just beyond their level of comprehension, may "negotiate" comprehensible input by such means as clarification requests, demands for repetition or reformulation. However, the opportunities for such interactional modifications to occur in teacher-led classrooms are less than clear - most research has focussed on the quality and quantity of meaning negotiatons on the basis of the type of task and mother tongue of the participants (see Doughty and Pica 1986, Gass and Varonis 1985, Varonis and Gass 1985) rather than on the amount of interactional adjustments that occur in teacher talk.

In this article, the focus will be on the **linguistic** adjustments made by teachers to make their input comprehensible to their students. Whilst it is true that we do not really know what makes for "good" teacher talk, or on what basis teachers modify their input to learners, by analyzing the spoken discourse of second language (L2) classrooms it may be possible to identify some of the ways in which teachers attempt to make input comprehensible and so incorporate these into the general corpus of ELT methodology.

The Method of Data Collection

Two groups of students taught by the same teacher were selected. One group consisted of students identified as beginners, false beginners and post-beginners and this group was designated as the Beginner's Group. The other group consisted of students identified as upper-intermediate and advanced and was designated the Advanced group. One lesson for each group of students was recorded on consecutive days with each lesson lasting approximately two hours. These lessons were transcribed verbatim (though lack of space does not allow these transcripts to be inserted here).

Because the presence of an observer and recording equipment in the classroom may have had an adverse effect on the performance of some of the students particularly of the Beginners' Group, the following procedures were adopted:

a) The recording equipment consisted of only one omnidirectional microphone which was placed on a small table in a central position in the classroom and connected to an audio cassette recorder placed under a desk.

b) I sat at the back of the class out of direct visual and verbal contact with the majority of students making notes at salient points of the lessons (e.g. the late arrival of students which produced a particular series of exchanges at unexpected points in each lesson) and noting the use of gestures by the teacher for such things as clarification and exemplification. In addition, I noted any visual materials employed by the teacher and displayed on such things as a blackboard and overhead projector and collected copies of any handouts that were distributed as well as keeping a record of any text books that were used.

Setting the Parameters for the Analysis of the Data

Chaudron (1988) offers numerous ways by which teachers can modify their speech according to the the competence of their students and from these the following were chosen:

Pauses

Vocabulary

The address

Rate of speech

Pauses

The occurrence of pauses in teacher talk (hereafter referred to as TT) and the reasons for their occurrence are both very interesting topics. As Chaudron points out, pauses may be brought about for various reasons:

a) as a result of a more careful articulation of speech.

b) because teachers spend time planning how to modify their speech to the competence and needs of their students.

c) as a comprehension aid, giving students more time to process the input from TT.

(Chaudron 1988: pp. 69 - 70)

Additionally, pauses may have another important purpose, that of prompting the use of the target language by students. Thus, pauses were analyzed according to their total number, their uses and their lengths.

Vocabulary (token-type ratios and polysyllabic words)

Modifications made by teachers to TT may be reflected in the vocabulary they use. One way of measuring vocabulary is the calculation of token-type ratios which indicate the ratio between the total number of words measured and the occurrences of different words. For example, consider the text below.

"*I once sacrificed my life to keep my parents' promise. This means nothing to you, because to you a promise means nothing. A daughter can promise to come to*

dinner, but if she has a headache, if she has a traffic jam, if she wants to watch a favorite movie on TV, she no longer has a promise."

Amy Tan: The Joy Luck Club

This text has 58 words (or 58 tokens). There are however only 37 *different* words so that the token: type ratio is 58:37 or 1.56. Essentially then the nearer the token: type ratio is to 1 the more "difficult" the text is at least in terms of different words used.

Another area of interest is the size and occurrence of polysyllabic words as these may take more time to process. In addition, they may prove vital in the establishment of a basic unit for the measurement by which the rate of speech may be calculated (see **Rate of Speech** below). For the purpose of this study a polysyllabic word was taken as a word which consisted of 3 or more syllables according to the pronunciation of the teacher. For example, the words "*different*" and "*general*" were taken as two syllable words instead of ones of three syllables. The hypothesis is that teachers will adjust both the range of vocabulary they use and the length of their words depending on the language level of the group as they see it. In this context, complexity of vocabulary will refer to the number of different types of words used and the syllable length though it can be argued that this is a somewhat simplistic measure of lexical complexity.

The Address

In the analysis of classroom language and teacher talk, an important focus will be who talks to whom - and in particular to whom do teachers "address" their input and how often. The data for each group of students was first divided into speech produced by the teacher and that produced by the students. By doing this, it was possible to compare TT and the speech of students (SS) of both groups.

The data of TT was further divided into that directed at individual students (called here Individual TT) and that directed at groups of students (called here Group TT). This was done so as to determine if the teacher made any modifications to her speech when she spoke to individual students and when she spoke to groups of students. In order to analyze Group TT and Individual TT a suitable unit of discourse was needed.

Chaudron offers some definitions of units for the analysis of spoken discourse. For example, he defines an "utterance" as:

"..... *a string of speech by one speaker under a single intonation contour and preceded and followed by another speaker's speech or a pause of X seconds.*" (Chaudron 1988: p. 45)

and a "turn" as:

"..... *any speaker's sequence of utterances bounded by another speaker's speech.*" (Chaudron 1988: p. 45)

However, Crookes quotes another definition for an "utterance" provided by Crookes and Roulon (1985: p. 9). This states that an utterance is:

"..... *a stream of speech with at least one of the following characteristics*
1) under one contour
2) bounded by pauses and
3) constituting a single semantic unit." [Crookes 1990: p.187]

However, by dividing TT discourse into Group TT and Individual TT neither of these units, as they are defined here, appear to be appropriate as an analytical tool. So, a new unit of was needed that took into account the interlocutors that were targeted at any one particular time. This new unit may be defined as:

The total number of words directed by a speaker at an interlocutor (or interlocutors) before the same speaker selects a new interlocutor (or interlocutors) or another person starts to speak.

To this new unit I have given the title **the address**. According to the definitions above for both the "utterance" and the "turn", the address is superordinate to the "utterance" and subordinate to the "turn". To support the validity of this new unit and its definition consider the following 2 examples both of which are drawn from the corpus of this study in which T = teacher and S = student:

Example 1

> *T "Did you have a nice holiday?"*
>
> *S "Yeah."*
>
> *T "Where did you g ?"*
>
> *S " Um, France."*
>
> *T "You went to France."*

Here, the teacher obviously speaks to only one interlocutor who remains the same throughout this series of exchanges and this segment of spoken discourse can be analyzed as consisting of 5 different addresses: 3 by the teacher and 2 by a student.

Example 2

> T : *"Yeah, okay, right. Okay, uh. You remember last week, we were talking about dates, yeah, and we said all the dates of our birthdays, yeah. So. I want you to talk about dates to begin with. Uh, just here. Tell me what this date is. What is this date?"*

With this example there is only one speaker, but what of the interlocutor or interlocutors? Sometimes an indication can be drawn from the content of TT as the teacher would often nominate a student or ask all the students to say something (i.e. choral drilling). However, at other times, as in Example 2 above, her intentions were not so clear and so it was necessary to examine SS for an indication as to who was (were) the intended interlocutor(s). For example, if a teacher initiated an exchange without nominating a student but more than one student replied simultaneously then it was assumed that the teacher's intention, as perceived by the students, was that anyone one of them could respond and therefore the initiation was not directed at one particular interlocutor. If on the other hand, the teacher initiated an exchange without nominating a student but only one student responded it was assumed that the intention was to target an individual interlocutor. Other factors that were used to try and determine the teacher's intentions as to the choice of interlocutors were such things as the tone and volume of her voice. Both of these will usually drop when a single person is being spoken to or raised when a group of people are the targeted

interlocutors. With some of these factors in mind it is possible to analyze Example 2 as a series of 3 addresses as follows:

> T *"Yeah, okay, right.*
>
> *Okay, uh. You remember last week, we were talking about*
> *dates, yeah, and we said all the dates of our birthdays, yeah. So. I*
> *want you to talk about dates to begin with. Uh, just here. Tell me   what*
> *this date is.*
> *What is this date?"*

For the first address the interlocutor was an individual student, for the second address all the students were the targeted interlocutors and for the third an individual student was the sole interlocutor.

Rate of Speech

The rate of speech normally refers to the the number of words per minute (w.p.m.). However, Tauroza and Allison think that is this type of measurement is unsatisfactory. After taking numerous samples from a variety of sources they came to the conclusion that:

> *"..... for the purpose of assessing whether speech is delivered at a normal rate, syllables should be used as the unit of measurement in preference to words. This would bring the people working in the realm of TEFL in line with other areas of linguistics where the tradition of describing speech rates is either syllables per minute or   syllables per second."* (Tauroza and Allison 1990: p. 102)

As there is some doubt about which is the better unit to use the rate of speech was calculated using both measurements employing the following formulae as appropriate

number of words in a sample X 60

number of seconds

number of syllables in a sample X 60

number of seconds

In order to calculate the rate of speech, samples of TT were taken (14 for the Beginners Group and 12 for the Advanced Group): some when individual students were the recipients of TT and others when groups of students were targeted. The results for both the word and the syllable count are given under the results section below.

RESULTS

The results are presented below but before looking at the individual results for the four possible modifications to teacher talk addressed in this study, a comparative analysis of the data for both groups is presented.

A Comparative Analysis of the Data for the 2 Groups of Students

<u>Teacher Talk (TT) and the Speech of Students (SS)</u>

	Beginners' Group	**Advanced Group**
Total No. of SS words	838	670
Total No. of addresses produced by teacher	408	194
Average word length of each of these addresses	9.14	27.80
Total No. of addresses produced by students	315	118
Average word length of each of these addresses	2.38	5.67

Table 1

One of the most obvious remarks to make about this set of results concerns the amounts of TT and SS expressed as percentages of the total amount of spoken words (i.e. TT + SS). The TT for the Beginner's Group came to 81.6 % and SS amounted to only 18.3 %. For the Advanced Group, the TT amounted to 88.9 % and SS to 11.0 %. These percentages show that the teacher spoke more to the students who came from the Advanced Group and as a consequence reduced the opportunities for these students to speak. As far as addresses are concerned the teacher made fewer of them to the Advanced Group, but the ones she did make were significantly longer.

Using the TT for the Beginners' Group as a "norm" these results show that the teacher modified her TT for the Advanced group by increasing the percentage of TT,

reducing the number of addresses and increasing the average word length of her addresses.

Vocabulary

The results of Table 2 below show that for both groups the token/type ratios for Individual TT were the same indicating that the teacher did **not** modify the overall complexity when she spoke to individual students of either group. The lexical content of Group TT for both groups of students was simplified but the degree of simplification was less for the Advanced Group than it was for the Beginners' Group. Thus although the teacher did modify the vocabulary content of her input, interestingly the deciding factor seemed not entirely to be the linguistic level of the student, but whether she was addressing them as an individual (in which case there was little or no adjustment between the different levels) or as a group.

	Beginners' Group	**Advanced Group**
Total no. of words in individual TT	1325	2130
Total no. of words in Group TT	2405	3264
Token/type ratio for individual TT	4.81	4.81
Token/Type ratio for Group TT	7.13	7.13

Table 2

Polysyllabic Words

These types of words were analyzed in the following ways:

1) in the whole of TT

	Beginner's Group	**Advanced Group**
Occurrences of 3 syllable words	62	258
Occurrences of 4 syllable words	16	60
Occurrences of 5 syllable words	1	12

Table 3

The results of Table 3 above show that TT was modified in terms of polysyllabic words, with the TT used for the Advanced group showing a considerable increase of such words over the use of similar words for the Beginners' group.

2) in Individual T

	Beginner's Group	**Advanced Group**
different 3 syll. words	12	53
different 4 syll. words	2	16
different 5 syll. words	0	1

Table 4

3) in Group TT

	Beginners' Group	**Advanced Group**
different 3 syll. words	22	63
different 4 syll. words	4	22
different 5 syll. words	1	9

Table 5

One of the most interesting things to note comes from comparing the results of Tables 4 and 5. For the Advanced group, the proportion of 3 to 4 syllable words was the same whether the teacher was talking to a group or to an individual. This was not the case in the TT of the Beginners' group. Here the teacher used far more 3 syllable words in her Group TT than in her Individual TT. These results may indicate that the degree of modification in terms of syllable length between Individual and Group TT may be less for the Advanced group than it was for the Beginners' group. This accords with the results found for token/type ratios above (see Table 2) where the difference in token/type ratios was greater for the Beginner's group than the Advanced group.

Addresses

	Beginners' Group	Advanced Group
Total no. of addresses to individual TT	278	148
Total no. of addresses in Group TT	130	46
Average word length of individual TT addresses	4.76	14.39

Average word length of Group TT addresses	18.50	70.95

Table 6

These results show that for both groups there were more addresses in Individual TT than there were in Group TT. In addition, there was an increase in the average word length for the addresses of Group TT compared to the average word lengths of addresses in Individual TT. For the Advanced Group, the average word length of addresses in Individual TT was 3.02 times that of similar addresses for the Beginners' Group and for Group TT the average word length of addresses for the Advanced group was 3.83 times that of similar addresses to the Beginners' Group. But did the teacher, through her TT, show any preference for talking to individual students or to groups of students ? Any such preference could be exhibited in two ways, namely:

> 1) in the total number of words for each type of address as expressed as a percentage of the total number of TT words
> 2) the total number of each type of address expressed as a percentage of the total number of addresses

Both these are represented in Table 7 below.

	Beginners' Group	**Advanced Group**
TT words directed at individual strudents	35.5%	39.45%
TT words directed at groups of students	64.4%	60.5%
Individual addresses	68.1%	76.2%
Groups addresses	31.8%	23.7%

Table 7

The results here are conflicting in that the teacher showed a preference for speaking to **groups** of students of both levels (if determined by the percentage of words directed at them) but her preference for speaking to **individual** students from both the beginners' and advanced groups was made apparent (if determined by the increased percentage of individual addresses compared to her group addresses).
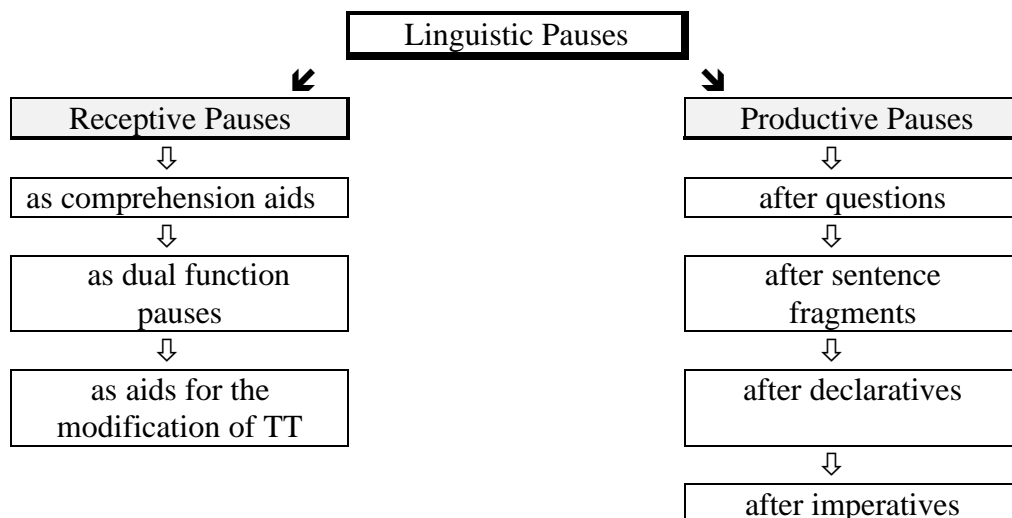
Pauses

The analysis of the corpus suggests that pauses can be placed into one of two different categories according to their function. Firstly, there are pauses which occur as a result of teachers organising and/or using their teaching materials and resources or when students use the teaching materials or need to reposition themselves in the classroom. Because of their function, these may be termed Organizational pauses and as such pauses are chiefly concerned with the non-verbal behaviour of both teachers and students, they did not form part of this analysis.

Secondly there are pauses whose prime function is either to aid student comprehension or to allow for modifications by teachers to their TT and as such they may be termed Linguistic Pauses. Such linguistic pauses can usefully be subcategorised into **receptive** pauses or **production** pauses. Receptive pauses function mainly to assist the reception of the target language - acting as comprehension aids or as aids for the modification of TT or as both. Productive pauses function to assist learners in the prodution of the TL and are most commonly found after the teacher has asked a question or has used a sentence fragment similar to the example which follows (drawn from the corpus of this study)
e.g.
T : "Gonzalo, can you tell us about the first one? "If you smell gas........"

Such productive pauses can be analyzed according to whether they occur after declaratives or imperatives as well as after sentence fragments or questions. The following diagram serves to summarise the classification of linguistic pauses described above.

Linguistic Pauses	
↙	↘
Receptive Pauses	Productive Pauses
⇓	⇓
as comprehension aids	after questions
⇓	⇓
as dual function pauses	after sentence fragments
⇓	⇓
as aids for the modification of TT	after declaratives
	⇓
	after imperatives

Total number of Receptive Pauses

	Beginners' Group	**Advanced Group**
Total number in TT	21	39
Number in Individual TT	7	13
Number in Group TT	14	26
as comprehenson aids	13	27
as aids for TT modifications	2	4
as dual-function pauses	6	8

Table 8

The results of Table 8 appear to suggest that the teacher included many more receptive pauses in her TT for the Advanced group than she did for the Beginners' group. Even if the total number of TT words into which these pauses were inserted is taken into consideration then a similar conclusion is reached. Thus, rather surprisingly, the teacher may have felt a greater need to assist the comprehension of the students from the Advanced group when one would have thought that more assistance would have been given to the students of the Beginners' group in this respect. Equally, however, a pause is a silence. It may have been that the teacher merely felt uncomfortable with too many silences in the beginner's group whereas found longer silences more acceptable with the advanced group.

Total number of Productive Pauses

	Beginners' Group	Advanced Group
Total number in TT	44	39
No. in individual TT	32	19
No. in Group TT	12	20
occurrences after well-formed questions	8	20
occurrences after sentence fragments	25	14
occurrences after declaratives	10	4
occurrences after imperatives	1	1

Table 9

Perhaps the most interesting aspect of these results is the fact that for the Advanced group the teacher inserted exactly the same number of productive pauses as receptive pauses. Additionally, when productive pauses, like the receptive pauses above, are analyzed to take into account the total number of TT words, it appears that the teacher increased the average number of words between the occurrences of productive pauses for the Advanced group.

	Average no. of words between each productive pause
Beginners' Group	84.7
Advanced Group	138.3

This would seem to suggest that the teacher did not feel the need to prompt the students in the Advanced group as much as she did those in the Beginners' group.

The teacher may choose to pause at different points in the lesson - as previously described she may pause after a question, a sentence fragment, a declarative or an imperative. When each type of productive pause is analyzed as a percentage of the total number of such pauses then the teacher's preference for using each type of productive pause can be found.

The results of table 10 below show that for the Beginners' group the teacher's greatest preference was to use productive pauses after sentence fragments whereas for

the Advanced group she preferred to use productive pauses after well-formed questions. However, for both groups, she only used such pauses after imperatives very infrequently.

	Beginners' Group	Advanced Group
occurences after well-formed questions	18.1%	51.23%
occurrences after sentence fragments	56.8%	35.8%
occurrences after declaratives	22.7%	10.2%
occurrences after imperatives	2.2%	2.5%

Table 10

Measuring the Rate of Speech of TT

As mentioned above (see **Rate of Speech)** there is a debate about which is the better unit for measuring the rate of speech, words per minute (w.p.m.) or syllables per minute (s.p.m.). For this reason both measurements appear in Table 13.

	Beginners' Group	**Advanced Group**
In Individual TT		
a) range of w.p.m.	145.2 - 192.9	113.8 - 234.0
b) range in s.p.m.	158.8 - 220.5	151.0 - 319.0
c) av. no. of w.p.m.*	151.2	174.8
d) av. no. of s.p.m.*	168.0	225.0
In Group TT:		
a) range of w.p.m.	118.8 - 174.2	146.6 - 180.6
b) range in s.p.m.	133.1 - 226.8	176.6 - 232.9
c) av. no. w.p.m.*	141.0	162.1
d) av. no. of s.p.m.*	170.1	215.2

Table 11

  * *Based on the majority of samples whose rates of speech were calculated as being similar to each other.*

The results of this table provide clear evidence that the teacher modified her rate of speech (measured using both w.p.m. and s.p.m.) with the quicker speech rate being reserved for the students of the Advanced group. These results also show that for both groups the teacher spoke more quickly to individual students than she did to groups of students.

Other Possible Types of TT Modifications

Whilst the corpus was being analyzed it became obvious that there other parameters in addition to those mentioned above. These new parameters were not analyzed in depth; rather they were considered in passing. Nevertheless mention should be made of them here.

Question-Tags

Although there were examples of questions-tags in both the TT and SS in the data for the Advanced group it is not too surprising to find that question-tags were absent from the SS of the Beginner's group. As this group of students consisted of beginners, false beginners and post-beginners they may have not acquired the use of question-tags. What is surprising to find is the virtual absence of question-tags from the TT of the Beginners' group especially when, as in the following example (which is drawn from the corpus) the use of a question tag would have produced a more "natural" form of English:

> T *"Okay, I think it was me. Was it me?"*

instead of the more "natural"

> *"I think it was me, wasn't it?"*

Imperatives

Despite the smaller number of TT words of the Beginners' group there was a higher incidence of the use of Imperatives in TT than that of the TT for the Advanced group. When the teacher did use imperatives with the students from the Advanced group she was more likely to use the "polite" imperative form "Let's" than she did with the Beginners' group:

> e.g. (drawn from the corpus)
> T *"Okay, very quickly then. Let's just go through these."*

Grammaticality

However, when the teacher did use one particular imperative with the Beginners' group it resulted in the following type of ungrammaticality (drawn from the corpus):

> T *"Say again."*

"Say" is a transitive verb and as such needs a direct object. As studies of Foreigner Talk have found (see Hatch op. cit.) simplification of syntax can result in ungrammaticality - often resulting in a kind of "pidgin" language.

Summary

The comparative analysis of the corpus in respect of TT for both groups of students shows that for the more able students the teacher:

      1) increased the amount of her TT (Table 1)

      2) reduced the amount of time and opportunities for the more able
        students to speak (Table 1)

      3) used a more complex lexical content for her Group TT (Table 2)

      4) increased significantly the use of polysyllabic words in both types
        of TT
        (Tables 3, 4 and 5)

      5) inserted more receptive pauses used primarily as comprehension
        aids
        (Table 8)

      6) reduced the number of productive pauses thereby reducing the
        opportunities for the students to speak (Table 9)

      7) used quicker speech rates (Table 11)

      8) increased the use of question-tags

      9) decreased the use of imperatives

Discussion and conclusions

Teacher talk acts as input for the learner. The old adage "teachers talk too much" has perhaps acted as a barrier to evaluating the value of teacher talk as language input - what may be important is not so much the quantity of teacher talk (which may be

excessive in many cases) but how do teachers talk to different levels of learners and do they talk in the right kind of way to aid language development? As this small study showed the teacher adapted in many ways her spoken language depending on the level of the student and her pattern of interaction too varied with her using more individual addresses and shorter addresses with the beginner group.

One of the areas investigated was the issue of rate of speech. Learners in a classroom addressed as a group were generally addressed more slowly than learners spoken to as individuals. With individuals, the teacher generally paused less and used longer words. Higgens emphasises how "listeners are at the mercy of a speaker's rate of presenting information" (Higgens 1994:233) and reports that many learners identify rate of speech as a major problem in attempting to process input. In this respect, the teacher dealing with a group cannot pick up cues from all the learners so must try as best she can to accommodate to the majority of the group. However, when dealing with an individual, she may be able to respond more efficiently and effectively to the cues offered by the learner (through for example eye contact). This may explain why in this analysis the teacher's rate of speech to the group was slower with both levels. She "took no chances" as it were and played safe. Pauses used by teachers are of great help to students when processing language. Indeed if we want teachers to alter their speech rate then one of the most effective ways is to change the frequency of pauses. Teachers can be made aware of the pedagogical implications of both speech rate and pausing for their learners - a useful review is given by Griffiths 1991 who points out that whilst teachers do adjust their rate of speech and frequency of pauses at different levels, even with the same level of learner there is considerable variation. In particular, as was found with this teacher, there are differences between receptive and productive pauses. With the former, pauses where the conceptual difficulty is high would presumably be helpful for learners; and this may explain why this teacher seemed to produce more receptive pauses for her advanced learners. It may be that for the advanced group the conceptual level of the discourse was higher.

Teachers then can adjust their input in terms of processing level for the learner - they can also, of course, adjust the input in terms of linguistic information. Here the issue of whether the teacher should use shorter words and less of them is problematic. As we saw here the teacher did indeed tend to do this but whether this in reality makes

for more comprehensible input is debateable. Parker and Chaudron (1987) for example showed that simplifications of linguistic input was less likely to aid comprehension than discourse modifications - such as allowing learners to ask for repetitions. Equally the comprehensibility of vocabulary may be more determined by whether it is presented in an appropriate context and is relevant to the learner than its simplicity in terms of length or common use. Gass and Selinker give the example of the two sentences:

"Although he studies hard, he doesn't do well in school"

versus

"The chair sat down on the dog."

The second they suggest is actually more difficult to understand because there "is no discourse context". Gass & Selinker 1994:206. Thus the evidence that simplification of vocabulary aids comprehension is rather mixed - although most teachers intuitively feel it does. This instinctive feeling of teachers should perhaps not be rejected out of hand - it suggests that a closer look is needed at whether certain types of vocabulary simplification are more helpful than others.

This research project was very much a pilot study. Nevertheless, the results of the comparative analysis support the hypothesis that teachers do modify their speech according to the linguistic ability of their students. Because of the support for this hypothesis, it is hoped that other more extended and comprehensive analyses make be undertaken into how teachers modify their speech to the linguistic ability of their students as the results of these may have benefits for the pedagogy of second language teaching and learning.

References

Chaudron C. (1988) *Second Language Classrooms : Research on Teaching and Learning*. C.U.P. Cambridge

Crookes G.(1990) "The utterance and other base units for second language discourse analysis" in *Applied Linguistics* 11 : 2 1990

Doughty, C. & T. Pica.(1986) "Information gap" tasks : do they facilitate second language acquisition ?" *TEOSL Quarterly* 20 : 305-25

Ellis, R (1994) *The Study of Second Language Acquisition.* Oxford University Press

Gass, S. & L. Selinker (1994) *Second Language Acquisition : An Introductory Course.* New Jersey : Lawrence Erlbaum.

Gass, S. & E. Varonis (1985) "Variation in native speaker speech modifiation to non-native speakers." *Studies in Second Language Acquisition* 7 : 37-57

Griffiths, R.T. (1991) "Pausological research in an L2 context : a rationale & review of selected studies." *Applied Linguistics,* 12 (4). 346-36

Hatch, E. (1983) *Psycholinguistics: A Second Language Perspective.* Rowley, Mass.: Newbury House.

Higgens, Janet M.D. (1994) Raising Teachers "Awareness of the real-time characteristics of their classroom speech." In "*Exploring Second Language Teacher Development.*" Eds. Li, Mahoney & Richards. City Polytechnic of Hong Kong

Krashen S. (1982) *Principles and Practice in Second Language Acquisition.* Pergamon Press Oxford

Long, M. (1983) "Native speaker/non-native speaker conversation and the negotiation of comprehensible input." *Applied Linguistics* 4 : 126-41

Parker, K. & Chaudron, C. (1987) The effects of linguistic simplifications and elaborate modifications on L2 comprehension. *University of Hawaii Working Papers in English as a Second Language.* 6, 107-133.

Sinclair, J. & M. Coulthard (1975) *Towards an Analysis of Discourse.* London: Oxford University Press

Tauroza S. & D. Allison (1990) "Speech rates in British English" in *Applied Linguistics* 11 : 1

Varonis E. & S. Gass. (1985) "Non-native/non-native conversations : a model for negotiation of meaning". *Language Learning* 41 : 205-33