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Comparing language teaching and other-skill teaching: Has the language teacher anything to learn?

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Abstract

The paper describes a research project which observes the teaching practices of trainers working in three non-linguistic skill ('other-skill') areas – music (classical singing), table tennis, and flight simulation. The aim is to compare these practices with those of the language teacher and to consider whether the latter has anything to learn from them. The theoretical justification of the research is briefly outlined and the argument put forward that applied linguistics has for a long time largely ignored the practices of other-skill teachers. How the research was undertaken is briefly described. The major part of the paper outlines the project's main findings. Like language teachers, the other-skill trainers show themselves aware of the information-processing needs of their learners. Two models for the teaching of performance-related skills are identified and discussed in relation to language teaching. It is also noted that the other-skill teachers provide considerable performance-based feedback to learners and that the skill training observed is overwhelmingly needs-driven. Finally, the way in which other-skill teachers correct performance 'mistakes' (as opposed to 'errors') is discussed. 2006 Elsevier Ltd. All rights reserved.

Keywords: Skill teaching; Language performance; Task-based teaching; Needs analysis; Error correction

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K. Johnson, S. Jackson / System 34 (2006) 532–546 0346-251X/\$ - see front matter 2006 Elsevier Ltd. All rights reserved. doi:10.1016/j.system.2006.08.002 Introduction .1

This paper reports on a 1-year research project entitled 'Exploring the procedures used in non-linguistic skill teaching and assessing their relevance for language teaching'; we refer to the project as START (<u>Skills Training And its Relevance to Teaching</u>). The aim of START, which is supported by the Arts and Humanities Research Council (a UK research funding organization) is to look at some of the procedures and practices followed by teachers of subjects other than languages, to compare them with language teaching procedures and practices, and to consider whether language teachers have anything to learn from other-skill (OS hereafter) teaching.

Background and rationale for START .2

In the past, foreign language (FL) teachers have tended to take their inspiration from linguistics and from the study of first and second language acquisition. This is a sensible strategy, and one that has been used throughout history. But in the past 50 years there has been a particular reason for seeking inspiration in this direction. It lies in the views of Chomsky and the notion that the language acquisition device (LAD) which L1 learners possess works specifically for language and nothing else (Piatelli-Palmarini, 1980) Because the LAD is separate from cognitive acquisition device (CAD), language acquisition is seen as a process different from the acquisition of other cognitive areas. Though Chomsky's main concern is with L1 rather than L2 acquisition, his ideas have been highly influential in SLA and have by this path come into language teaching as a powerful creative force. This is seen in the work of Krashen (1985), Prabhu (1987) and others concerned with the development of 'naturalistic' methods, based to varying extents on parallels with L1 acquisition. The power and influence of these ideas cannot be denied, but an unfortunate side-effect has been a tendency for language teachers to ignore the ideas and practices of teachers of other subjects.

This position is, however, now changing. Recent 'cognitive' approaches to language learning (Skehan, 1998; for example; see also McLaughlin, 1987) are based on concepts developed in relation to other skills. Prime examples are the notions of declarative and procedural knowledge, automization, and restructuring. All except the last of these are used, for example, in the learning model found in Neves and Anderson (1981) developed initially for the learning of geometry. Anderson (1981) uses the general learning mechanisms described there to provide an account of first language acquisition, as does Johnson (1996) for FL learning and teaching. Use of the same concepts suggests that the processes themselves share common elements, hence that learning geometry and learning a language are comparable. Thus by the middle of the 1990s, one begins to find applied linguists like Skehan prepared to admit that 'there is an aspect of speaking which makes it an example of skilled behaviour, like driving a car, or...like playing a musical instrument' (Skehan, 1998, p. 18).

This position suggests that the FL teacher might look to other subject teachers for inspiration. START selected three skill domains to consider in detail – music (classical

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singing), sport (table tennis) and flight simulation. There were two main reasons why these three domains were selected. First, it was felt likely to be fruitful to look at skills where a highly proceduralized form of knowledge is required. The distinction between declarative knowledge (knowledge about) and procedural knowledge (knowledge how to) is by now familiar in the study of language learning and teaching (O'Malley and Chamot, 1990; Ellis, 1985). The difference between the two is recognized and also that it is both important and difficult to convert declarative into procedural knowledge - by the process known as proceduralization (Bygate, 1996; Johnson, 1996). In some earlier methodologies it was assumed that if learners were provided with declarative knowledge, they would automatically be able to deploy it procedurally in communicative situations. It might be argued that one of the main insights of communicative language teaching has been to realize that the process of proceduralization requires great attention, and one of the main benefits of that movement has been to provide rich 'activation techniques' for achieving this (in books like Johnson and Morrow, 1981; Geddes and Sturtridge, 1979, for example). But, it may also be argued, language teachers are relatively new to the business of converting declarative into procedural. and are likely to learn from other skills like musical performance and sports, where highly proceduralized knowledge is required. Hence START's choice of the classical singing and table tennis domains.

A second consideration guiding selection of domains relates to the notion of combinatorial skill. Skill psychologists (Peterson, 1975; for example) argue that while some skills can easily be divided into separable elements, others involve the combinatorial skill of being able to perform various sub-skills simultaneously. The example which Welford (1968) gives of such a 'closely coordinated activity' is the 'simulated flying of an aircraft [which requires the] proper coordination of action and subordination of individual actions to the requirements of the whole' (p. 291). It has been argued (Halliday, 1970; Johnson, 1996) that language is a skill with a high combinatorial component, with the production of acceptable utterances requiring simultaneous selection from among options along various parameters, including the grammatical, the lexical, the phonetic, appropriacy to speaker purpose, to context, to role relationships between interactants. One meaning of the term 'fluency' refers to this ability effortlessly to combine sub-skills together in real time. Though communicative methodology, and task-based teaching following it, has paid attention to the teaching of fluency (Brumfit, 1984; Skehan, 1996), this is again an area which is relatively unexplored and where inspiration might be gained from OS teachers. It is for this reason that flight simulation was selected as an area for study.

Description of START .3

Three case studies of teachers were undertaken, one in each of the identified domains. Details of the trainers who generously provided us with data, of the classes and the learners are given inFig. 1.

For each trainer, three training sessions were observed, videotaped and transcribed. The three visits, taking place over a period of about 2 weeks, were structured as follows:

² Grammar translation is the obvious example, where knowledge about the language is provided in abundance, but with relatively little attempt to practise it in use (apart from in translation). Although the case of audiolingualism is more complex, it can be noted that audiolingual textbooks often omit the 'free practice' stage, assuming that if 'presentation' and 'practice' are provided, 'production' will look after itself.

A singing teacher (opera and classical song, referred to hereafter as T1) from the Royal Northern College of Music. Some students were postgraduates, others undergraduates. The classes (lasting one hour) were all performance-related, and seen as preparation for events such as auditions for specific opera roles (or, in the case of younger students, for performance-related examinations). One observed class dealt with an individual learner; in the others, two or three students were singled out for instruction in front of a group.

A table tennis trainer (T2 hereafter) from the University of Central Lancashire. The students were intermediate adults, taught together in pairs during 45 minute sessions.

A flight pilot trainer (T3) from Alteon Training UK Ltd (Boeing). The learners were First Officers training to be Captains. The central section of each session took place in a 737 full motion flight simulator. There were briefing and debriefing sessions before and after, in a small classroom with a whiteboard and mock flight controls. Briefing and

debriefing were one hour each, with four hours in the simulator (each trainee being

pilotin-charge for two hours). Training sessions were therefore six hours in total.

Fig. 1. Details of participating trainers, learners and classes.

Visit one: A lesson was videotaped.

Visit two: A second lesson was videotaped, followed by a stimulated recall session in which the trainer watched the videotape of their lesson and commented on it. This stimulated recall took place within an hour of the lesson itself.

Visit three: A third lesson was videotaped, followed by an interview.

Initially four pedagogic aspects were identified for study, shown in Fig. 2.

Despite having identified these possible areas of interest, we realized that since START was a short exploratory project, we were unlikely to be able to do full justice to all these areas. We also realized that the data might reveal interesting insights outside these areas. Data were therefore coded (with Atlas.ti software) using the procedures associated with 'grounded theory' (Strauss, 1987), and we were fully prepared to follow up avenues suggested by the coding, irrespective of whether they fell within the four pedagogic aspects.

The observed lessons were one part of the overall training the learners had received, and were in essence the performance-related component. It is important to state that we were particularly seeking parallels between the teaching we observed and those parts of the

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Content organisation Do the skills teachers follow any kind of 'syllabus', and if so, in what

terms is it stated?

Schedules of activities Are there any overall strategies for the sequencing of activities followed? How are *part* and *whole* practice distributed through the teaching?

Presentational/practice techniques What techniques do the skills teachers use? Do these

techniques have any equivalents in the language teaching classroom?

Error correction practices how do skills teachers correct learner malformations?

Fig. 2. The pedagogic areas selected for study.

language teaching programme associated with the development of oral fluency ('performance') skills, through free activities such as role play, simulation and communicative games. This includes issues concerned with how such performance-based teaching relates to other parts of the programme.

Performance-related issues have not been ignored in the applied linguistics literature,

particularly in relation to language testing. The measurement of FL performance is an area that has received some attention, particularly since the inception of communicative approaches to language testing (Jones, 1979; Morrow, 1977). McNamara (1996) provides a comprehensive account of this area and the theoretical issues it raises. In both teaching and testing, considerations of performance have been most related to LSP (teaching languages for specific purposes), and it may be that insights emerging from the START study may have most relevance in that field.

Findings .4

This section sets out findings from the study, outlining some of the similarities between language and OS teaching as well as considering areas where language teachers may have something to learn from teachers of other skills. There are five sub-sections. The first shows how OS teachers have an awareness of the information-processing problems their students face. Two paradigms for performance-related practice are then considered, both of which have counterparts in language teaching. Consideration of these paradigms reveals a large amount of teacher comment on student performance, and this is discussed next. Section 4.3 deals with the needs-driven nature of the OS teaching and finally the issue of how teachers handled performance mistakes is addressed.

Discussions of FL performance in 'real operating conditions' commonly take place within an information-processing perspective. A central notion in information processing is that of channel capacity. The concept comes from information theory (Shannon and Weaver, 1949) and was first used in relation to the capacity of an information channel, but has come to be used for the capacity of human beings to undertake tasks. In the accounts of skill learning developed in Neves and Anderson (1981) and Anderson (1983), learners have a fixed amount of channel capacity for conscious processing. When new behaviours are first encountered their performance consumes much channel capacity. The process of proceduralization, or automization (Schneider and Shiffrin, 1977), is important because as sub-skills become automatic, channel capacity is made available to concentrate on higher-level skills which require that capacity. To pursue the car driving example mentioned earlier: when one first learns to change gear, it takes a major part of channel capacity to perform; automization of the sub-skill is necessary to ensure that the learner has channel capacity available to concentrate on skills like anticipating the movement of nearby traffic and pedestrians. Some of the literature on task-based teaching is centred round such notions (Johnson, 1996; Skehan, 1998, p. 59 calls them 'accelerating models') See also discussions on task complexity in Skehan (1994) and Bygate (1994), where a concern is to develop schedules of tasks which on the one hand avoid swamping channel capacity with over-complex operations, while at the same time gradually increasing task complexity to move learners towards more automatic performance of sub-skills. It is instructive to note that the trainers in START, particularly T3 (the flight instructor) and T2 (the table tennis trainer), appear to view training issues in similar terms. Thus in his interview, T3 notes that Pupils' arousal increases with time as they get into the task, they can accept more information as time goes on. At another point he says: When you have a really good student, you can pile the pressure on by adding another problem for them to deal with. And again: The risk of course is overloading and that's the last thing you want to do is overload them because they'll stop learning. These are very much the terms in which some applied linguists conceptualize FL performance.

Sequences for performance-related practice .4.2

These similarities in conceptualization lead to similarities in pedagogic strategy. Two strategies for performance-related teaching are found in the data collected, and both have parallels in language teaching.

The deep-end strategy .4.2.1

Both T1 and T2 follow a whole ! part practice sequence. Fig. 3 illustrates this in one of T1's lessons.

This sequence has clear relations with the so-called 'deep-end strategy' proposed for language teaching in relation to the communicative approach (Brumfit, 1979; Johnson,

Performer (P) sings a piece from beginning to end

T1 remains silent

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Feedback from 'audience

(the group of learners watching the performance)

Fig. 3. Sequence of events in a singing tutorial focusing on two 1st year undergraduate students performing, with an 'audience' of 10 students present.

1980; see also Willis, D., 1996). In this strategy, the traditional presentation ! practice ! free production (PPP) sequence is replaced by one in which students first produce with available resources (free production), followed by teacher presentation of needed items (presentation) and controlled practice if felt necessary (practice). Several advantages have been claimed in the language-teaching literature for this sequence. One is that it helps develop 'risk-taking strategies' by requiring the learner to perform (initial free production) before relevant teaching (presentation and practice) takes place. The sequence is perform ! teach rather than teach ! perform. A second advantage, to be considered in Section 4.1 below, is that the sequence is needs-driven; what is presented and practised is determined by initial performance in free production. It is significant that this deep-end sequence has currency in relation to teaching in other domains, and the suggestion is that it may stand as a model for performance-related training for skills in general.

The pre-task ! task ! post-task sequence .4.2.2

In the flight simulation training a different model is predominant. This is briefing ! training ! debriefing. It is shown in Fig. 4, which represents a typical flight training session. If one regards flying in the simulator as the 'task', then this sequence is of pretask ! task ! post-task, and it is one which has parallels in language teaching. In his model of task-based teaching, Prabhu (1987) proposed that a lesson should be centred round a task, with preparatory and feedback activities coming before and after. The lesson structure of pre-task ! task ! post-task is also discussed in Skehan (1998) and Willis, J. (1996), and it offers an alternative to the 'deep-end' strategy for practising performance skills. Though language teaching is familiar with this sequence, it is revealing to look at what is done in the briefing (pre-task) and debriefing (post-task) stages in flight simulation. It is also instructive to note the sheer length of the pre- and post-task stages in flight training.

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³ One might argue that one important difference exists between deep-end language teaching and the version of it found here. It may be said that in the latter case the learners are performing for the teacher (and the performance is hence a 'practice performance'); in the former case, the learners are actually performing a task, not for the teacher but in order to complete it.

Briefing. Before the flight the instructor provides a highly detailed account of what .4.2.2.1 might happen in the simulator. One stated reason is the realization that simulated situations need a great deal of contextualization. As T3 puts it:

(1) T3: It's a virtual situation, you've created this virtual world so you have to set the scene very very well and you'll notice later on when I stop and start again I always took

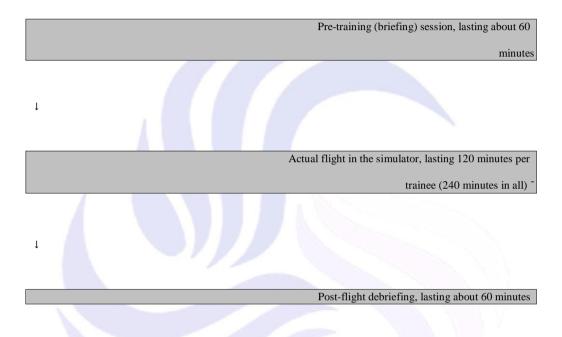


Fig. 4. The briefing ! training ! debriefing sequence in flight training.

the trouble to set the scene. Very very important... You have to tell them where they are, what's happening, what's going to happen next and what they're going to do next.

In the briefing the trainer wishes at every crucial juncture to identify what the issues will be, alerting the trainees to what various courses of action are available to be followed. It is interesting to observe how the instructor manages to do this while at the same time not revealing exactly what will happen in the simulator, in order to ensure that the situation maintains the element of the unexpected which is present under normal operating conditions:

T3: What's going to happen is that... we're going to take off on that departure, normal)2(take off, nothing strange is going to happen, and then you may get some instructions from air traffic control which will slow you down... and then the problems will start. Ok?

Language teachers setting up role play activities or communicative games do of course realize that some contextualization is necessary. But the degree to which this is provided is generally much less than in the flight training situation. It is also rare to find any substantial

540 K. Johnson, S. Jackson / System 34 (2006) 532–546 consideration of eventualities before these activities take place (through questions like What could you say if your partner said X? or If you said Y, how could your partner reply?). Interestingly, there has been recent work on the effects of pre-planning on task performance, particularly associated with Bygate (2005) and Foster and Skehan (1999). This work may throw light on how best to manage the pre-task/briefing operation.

Debriefing. The debriefing stage is an equally lengthy, extremely detailed post-mortem .4.2.2.2 of what happened – what went well, what went wrong, what would have happened if other courses of action had been followed at various points. By far the major part of feedback occurs at the debriefing stage. During the simulator session itself relatively small amounts of feedback are given, unless one of the trainees makes some catastrophic mistake likely to crash the plane (in which extreme case the simulator is paused and the trainer intervenes). The reason why feedback is largely saved till the post-task stage is the trainer's desire not to interrupt fluent performance while it is taking place. As T3 says: Don't forget, it's a virtual world moving rapidly. If you bring it to a halt, it really breaks their concentration absolutely. And later: My preference is to let things run on if at all possible. Though the trainer occasionally takes brief notes during the simulation session to remind himself of points to make in the final debriefing (which may come 120 minutes later!), in general he shows phenomenal memory skills in remembering what occurred during the simulation. As he explains during stimulated recall:

T3 I'm hanging on every word. It's really important because I have to replay that... I)3(have a videotape like this in my head... I'm filing away the pertinent points.

There are parallels in the language teaching world to some of these procedures. It is the accepted practice of many teachers not to provide feedback during performance, where 'fluency' ('free production', 'activation') work is being done. It is recognized that this will interrupt the flow of performance, and feedback is consequently given after the event. As Ur (1996, p. 246); puts it, 'there are some situations where we might prefer not to correct a learner's mistake: in fluency work for example where the learner is in mid-speech, and to correct would disturb and discourage more than help'.

But perhaps as with pre-task activities, there is something to be learned from the sheer scale of T3's post-performance work. Feedback after language tasks might look not only at what happened and was said, but also at what might have happened and might have been said at various juctures. Since role play is often done in pairs/groups, it could be argued that lengthy feedback can only be given to a small number of performers (as indeed happens in the music classes). Though feedback on one's own performance is of course the ideal, based as it is on actually revealed individual needs, it is possible for learners to learn from the performance of others, the crucial element being that the feedback is on performance-related language use. Videotaping a role play exercise being done would provide the mechanism for allowing detailed analysis, though of course not all classrooms have the resources available to make this possible. One might conjecture that a useful resource for the language teacher would be sets of videotapes or transcripts of role play performances which can be used for classroom analysis.

⁴ Only partially needs-driven because the teacher normally selects one or two learners to perform, and it is only these learners whose direct needs are being addressed. But, it can be argued, there is also value to the onlookers in that their attention is being drawn to performance-related mistakes, possibly quite similar to those they might make themselves. T1 incidentally is adept at involving the onlookers in evaluating the learner who is performing in front of them.

Discussion of the debriefing stage in flight simulation illustrates how important a role teacher comment on performance plays in the teaching observed. In the model just described, this feedback comes well after actual performance, though it may occur at other times – in the case of the table tennis trainer there is occasionally actual real-time commentary on a game in progress (the trainer talks to the trainees as they play). It is often the case in language teaching that actual performance is undertaken in groups or pairs, and the teacher is either unable for logistical reasons to monitor performance, or indeed may not feel this important, considering that the real value of performance is that learners 'learn by doing'. Perhaps 'learning by feedback on doing' plays an equally important role.

The need for quantities of teacher comment on performance is relevant to an issue which has come to the fore in discussions on 'naturalistic' and task-based teaching, where it is recognized that if learners are simply left to perform language tasks, though their strategic competence may develop, other areas of competence will not necessarily improve; if 'getting the message across' is presented as the main aim of an activity, the learner may have little motivation for language improvement. Post-performance teacher feedback is one way in which the teacher may intervene to provide the degree of form focus which seems necessary for language improvement to occur. See Wesche and Skehan (2002) for discussion of this issue.

Needs-driven instruction .4.4

The 'deep-end' strategy (discussed earlier) is partially needs-driven because the teacher focuses instruction around areas of need which come to light during initial holistic performance. On some occasions, the singing and table tennis teachers use a different strategy for identifying needs – by asking the learners themselves before the initial performance. There are several examples of this in the data, and here is T1 talking about it in the stimulated recall:

T1: what I always do is, I ask them what they want from the moment. I need to know)4(what they want because you could choose any aspect.

It is of course likely that in singing and sport, as in language performance, a multitude of needs will offer themselves for attention. All our teachers realize that not all needs can be dealt with at once and follow a policy of selective focus on needs. T1 and T2 in particular show considerable, at times remarkably stubborn, unwillingness to be deflected away from the identified focus of the lesson. In the example below, the learner is seeking help with an Italian vowel sound in an aria she has been singing. The teacher ignores the implicit request for help, and stays with the area which it was initially decided should be the lesson's focus (the singer's 'line' – producing a steady continuous flow of sound):

Learner: There's a vowel which is not right.)5(

T1: That's really good, this is a really good start. You want to talk about line, right?

Are there any implications for language teachers in these needs-driven procedures? Needs analysis is of course established practice in language teaching, particularly LSP (Munby, 1978), and this leads to needs-driven teaching. But needs analysis is based on what might be

⁵ Such role play materials would only be partially needs-driven, in the sense discussed in note 4.

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termed competence needs – areas of language identified as being useful to learners in terms of eventual uses. It may be argued that the procedures discussed earlier are based on performance needs – shortcomings identified through, or in relation to, actual performance. This is clearly the case when the identification is done by the teacher after initial performance, potentially also when learners themselves do the identification.

It is also true that although needs-driven language teaching is often competence-based, there are language teachers who follow the deep-end strategy, and perhaps therefore the main point to be made is one of frequency; that where performance skills are being practised, the teaching should be predominantly of the performance-driven sort discussed here.

As regards the selective focus on needs, the issue is discussed in the language teaching literature. Brumfit (1977) for example suggests selective error correction for written work, and teacher training manuals often discuss the idea (Ur, 1996; has a section entitled Should all mistakes be corrected? which concludes that sometimes they should not). If there are teachers who remain uneasy with the practice of letting some errors pass uncorrected, the procedures of our OS teachers may be reassuring.

4.5. Feedback and performance mistakes

Johnson (1988) utilizes Corder's (1981) distinction between errors and mistakes. Errors are based on faulty or incomplete knowledge, while mistakes are caused by difficult performance conditions which lead learners to fail to 'perform their competence' (the phrase is from Ellis, 1985) If a learner produces *He go instead of He goes in the belief that the former is the correct form, this is an error. But if (as often happens) the learner knows the correct form very well but in difficult operating conditions produces the wrong form, then this is a mistake. Johnson argues that teachers often treat mistakes as if they were errors, which is likely to be ineffectual - pointing out the correct form to a learner who already knows what it is does not engage with the problem. He proposes a number of necessary conditions for the eradication of mistakes. One is 'a realization by the student that the performance he or she has given is flawed. The learner needs to know that a mistake has occurred' (1988, p. 91); often the difficult performance conditions that cause the mistake also prevent the learner from realizing it has occurred. It is argued that perhaps 'the best way of providing the necessary realization is by confronting the learner with the mismatch between flawed and model performance' (p. 93). The OS teachers show themselves well aware of the nature of performance mistakes and the fact that they are caused by difficult performance conditions. Here is T2 expressing awareness that confronting the learner with a model is what is required in this situation. He is talking about a learner who despite remedial teaching immediately falls back into deep-seated mistakes ('old habits') in performance:

T2: ...I say [to the learner] you've gone back to your old habits and I'm pointing that)6(out... if he knows what he's done, then you're winning. So again I go back in... and give him a good model.

There are a number of examples in the data of where in order to 'compare right with wrong', learners are actually asked to reproduce a mistake. In the following example T1 is dealing with breath control and asks her pupil to practise poor and good breathing to note the difference:

T1: Do you feel a fine difference?)7(

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Student: I think so.

T1: Do you want to do it wrongly? Do you want to just keep it really open, open and bare and just allow the air to gush out of the mouth a bit...?

T1 is asked about this during the interview:

Interviewer: And also, I think in the last lesson... I think it was Annabel that you kind)8(of made her sing something wrongly.

T1: Yes absolutely.

Interviewer: ... Why did you do that?

T1: I did it with John today. I made him stand as badly as he could, I made him straighten his legs, stick his bum out, tighten his leg, because oftentimes you can't [tell you're You need to feel it, you need to know 'oh that's not right, oh I... doing something wrong] see ok'

Asking learners to reproduce mistakes is a procedure that is likely to be anathema to many language teachers who feel that the production of wrong forms should be avoided at all costs.

A possible lesson of this research is that there may be a place for it, especially where one is dealing with performance-induced mistakes, as a means of enabling comparison between flawed performance and model.

An alternative way of managing this comparison would be, where resources allow, to capture performance on video or audio tape. This could then be analyzed, with the teacher

providing a model of what might have been said. Indeed, it would be a useful language teaching aid (which a publisher might provide?) to have a set of role play performances for classroom feedback analysis, accompanied by model versions providing possibilities for comparison of flawed and model. In whatever way it is achieved, it would seem beneficial to have class time devoted to dealing with performance errors.

Conclusion .5

It was recognized from the outset of the START project that observing the practices of OS teachers was unlikely to result in proposals for dramatic change in the language classroom. This proved to be the case. But sometimes the findings provide a degree of justification for already-existing language teaching procedures; at others, they are suggestive of new directions to be explored, interesting techniques to be tried out, fresh attitudes to be adopted. The main findings (and tentative proposals) discussed in this paper are:

OS and language teachers share an information-processing perspective, both .1 showing themselves aware of learners' processing needs.

Two sequences for performance-related practice – the 'deep-end' and the pretask ! task ! .2 post-task sequence are found in both areas.

⁶ This means of comparing flawed and model is in essence the technique of reformulation, discussed by Allwright (1988) among others.

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In their use of the second of these sequences, OS teachers spend considerable time .3 inbriefing and debriefing. Perhaps language teachers should do the same, exploring (in

briefing) what might happen, and (in debriefing) what happened or could have happened during performance.

OS teachers provide considerable performance-based feedback to learners, somethingwhich .4 language teachers might emulate.

OS teaching is predominantly needs-based. Though language teaching (particularlyLSP) .5 undertakes needs analysis, it is usually competence-based. It is suggested that language teaching might devote more time and attention to performance-based language needs.

OS teachers give attention to mistake correction. One method used which might beadopted .6 more by language teachers involves asking learners to deliberately make mistakes to point

up differences between model and flawed performance. Recording performance and comparing it with a model is another method language teachers might use.

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