

Second language teachers as second language classroom researchers

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This article takes the case for the importance of teacher involvement in research as theoretically proven. It does so whilst acknowledging that it will be quite some time before we can claim that empirical data points to a link between teachers' contribution to research and improvement in the UK's majority cultural group's capacity to speak languages other than English. It attempts to propose and define classroom-based research as an integrated part of the teaching process, one which should not, if the conceptual leap can be made successfully, result in an increased workload for the practitioner. After some advice on how to go about reading articles in international second language acquisition journals, the author proposes some simple techniques for carrying out research in the four language skills, in vocabulary learning and in other aspects of language acquisition.

INTRODUCTION

In this article I have adopted the term "second language" to encompass both foreign language and second language learning. There are very deliberate reasons for this. Firstly, my reading of the research literature is that there is an increasing tendency not to make this distinction. This is probably due to the fact that there are so many different learning contexts now, involving the learning of a language other than the first language, that to make the traditional distinction based on where the language is being learnt (i.e. if the target language is the majority language of the host country or not) is increasingly irrelevant. Secondly, I believe it is important not to discount useful findings from either research field, to be creative rather than parochial in our search for research-based solutions to language teaching problems. Thirdly, I would argue that the term "foreign" has a pejorative connotation and has little place in an increasingly globalized language learning environment. With that in mind, it would be better, for all of us working in the UK context, if we dropped it altogether.

WHY WE NEED TEACHER INVOLVEMENT IN RESEARCH

The tensions inherent in teacher involvement in research with specific reference to government initiatives in England are thoroughly discussed in

Pachler (this issue). My very brief incursion into this discussion is fuelled by personal conviction and from an essentially positive experience of working closely with colleagues in secondary schools.

I am basing my claim that the case for teacher involvement in research is theoretically proven on the following three brief propositions:

1. We have a very low L2 research capacity in the UK, especially in the primary and secondary phases, compared to that of North America and, increasingly, Asia. Put simply, we just do not know enough about our young language learners in terms of their psycholinguistic interaction with the language they are learning because very few people have taken it upon themselves to find out (see Wingate, this issue). If we involve teachers, we can increase that capacity.
2. Research which has teacher involvement is more likely to have *ecological validity*. Interpretations of findings in (particularly) quantitative studies can be hugely enhanced through the insider knowledge provided by the person who knows the learners best.
3. Research-informed practice stops government agencies imposing practice-related policies on L2 classrooms, policies which have little or no basis in the research evidence and which are usually generated by an élite group's desire to impose uniformity on a complex system for the purposes of professional control.

FACTORS INHIBITING TEACHER INVOLVEMENT IN RESEARCH

Internationally published L2 research of high quality is relatively inaccessible for L2 teachers. This is the result of an unfortunate professional tension between the researcher and teacher communities, this in turn resulting from a set of professional pressures which pull the two groups in different

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directions. In my study of teacher attitudes to research (reported in Macaro, 2003: Chapter 1), most teachers were keen for research to provide solutions to their teaching and learning problems but cited “not knowing where to look”, “too technical” and “findings too detailed” as reasons why they could not easily access L2 research evidence.

A second factor inhibiting teacher involvement is a perception that they lack the skills or the experience to carry it out. This is, in some measure, compounded by the international literature which presents research processes and research findings in the inaccessible way described above.

A third factor inhibiting teacher involvement is lack of time. This was cited by many of the respondents in the Macaro (2003) survey.

It is the purpose of this article to try to find ways of facilitating teacher research. In order to do so I will try to provide brief guidelines in order to map routes through the complexity of existing L2 research studies. I will try to propose some alternative methods of researching L2 classrooms and I will try to address the issue of time by integrating the research into the teaching and by working on the principle that if you are going to add something to the workload, then something else has to be subtracted.

ACCESSING AND EVALUATING L2 RESEARCH

We need to know a little of what is out there already before embarking on investigating our own learners. It's not merely a question of “not re-inventing the wheel”. I firmly believe, on the contrary, that replicating previous research in order to confirm or counter findings is a very valuable activity. Nevertheless, having a grasp of how previous researchers have conceptualised or operationalised constructs such as aptitude, proficiency, motivation and (dare I say it!) grammar, provides us with a useful framework within which to refine our research questions. Space allows me only to provide guidelines for reading articles in journals, not chapters in books or whole books.

Most good quality articles have a clear structure which is adhered to as part of “the research tradition”. The structure goes something like this:

1. Abstract
2. Introduction
3. Background
4. Method
5. Analysis of results part 1
6. Analysis of results part 2
7. Discussion
8. Conclusion and implications
9. Limitations and further research needed
10. References
11. Appendices

Taking notes under each of headings 2-8 will help you to understand the study and use it in future. If you are really short of time, just take notes under the following headings: Topic (to be found in the

Abstract and the *Introduction*), *Method* and *Discussion* and *Conclusion/implications*.

The *Abstract* should tell you most things you want to know about the article in order to ascertain whether you are actually prepared to spend your Sunday afternoon reading it. Is the article *theoretical*? That is, there is no new investigation being reported but, rather, the author is presenting his/her position on a theme based on his/her reading of the relevant literature. This kind of article might even be a *review* of all the most recent studies on a theme. Or is the article *empirical*? That is, it reports on a study carried out among language learners or teachers. The abstract should also tell you where the research was carried out, with whom, an idea of the research methods used and a brief summary of the findings and perhaps even some implications for teaching. The abstract therefore tends to be very dense and nominalized (i.e. very noun based) and sometimes difficult to understand. But it's worth the effort, so attempt to put some of the language into your own words – perhaps by turning some of the nouns into verbs.

Understanding the abstract should help you with understanding the *Introduction* and the *Background*. The introduction should tell you why the author is interested in the particular theme – perhaps because he/she has noticed a need for research on that theme and/or because of the implications for teaching and learning. The background should tell you what has gone on before. This usually includes a “gripe”! This and this has been researched but “there is a remarkable lack” of research on the very aspect of the theme that is going to change the language-learning universe! The background usually includes a literature review, where previous studies are evaluated. Here there are two things to look out for:

- 1) Is the review a fairly straight-flowing stream or is it a meandering river? In other words, are the studies being reviewed constantly confirming one another or are they being juxtaposed in order to show that the findings conflict? This should help you with understanding what comes after the review.
- 2) Literature reviews are very dense because the author tries to compress the findings of a whole study into a few lines or a paragraph. Spend a bit of time ensuring that you have unpacked these dense little packages and understood the findings of earlier studies.

At the end of the literature review the author usually states what the research questions are. These are very important and should be crystal clear.

The *Method* section tells you who was involved, how many people were being investigated, and how they were investigated. This is the bit that makes it relevant to your classroom context. Are they the same types of learners (or, indeed, teachers)? If they are not, is it still worth making the links with your own learners? Be generous here! Sometimes the links aren't obvious but they *can* be made.

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Ultimately, all learners have roughly the same brains. So to disregard a study merely because it is in a different educational context or age phase is to suggest that social factors are always more dominant as variables than the way the brain deals with the language being learnt. With regard to the “how” of the research you don’t need to go into detail unless you are particularly interested in research methods. I’m not suggesting that valid and reliable research methods are not important but that you may not want to get too involved with these when you are first starting off on your reading programme. Just try to extract the general picture of what was done. Often the method section will tell you how the data was analysed. If you are looking to save on time, you can skip this bit as the integrity of the analysis should have been checked by the article’s “peer referees”.

The *Analysis* is often carried out in two parts. An initial analysis of the “raw” data and then a second analysis of how one set of data interacts with another. This is usually the hardest part for the inexperienced researcher, especially if there is a lot of statistical data and tables are not always easy to read. You can, of course, skip this part but a little knowledge of some basic statistics may help you get a bit more satisfaction out of reading the article. Here are a few tips:

Significance - This is the statistician’s ultimate measuring stick! It means that the statistical test that has been performed either accepts or rejects the hypothesis (the hunch) that the researcher had before the test. Significance is usually presented as less than .05 (<.05). This means that there is very little likelihood that the results obtained from the statistical test were due to “chance”. Sometimes significance is set at <.01 (i.e. less than .01) in which case there is even less likelihood that the results were due to “chance”. It’s all to do with the mathematics which relates the size of the sample with the difference between groups in the sample. Anyway, look for “significance” in the studies that you read. So, for example, if the result of a statistical test measuring the differences between two groups was given at .08, it would mean that the differences could *not* be “generalized” to other similar groups not measured in the test.

Frequencies - Look for the “N”. This is the number of people or objects in the sample. Then look for the “%”. This will allow the researcher to calculate the averages (the Mean) and Standard Deviations (SD) from the Mean. If the Standard Deviations are high, then it’s very difficult to picture what (for example) “an average learner” might look like.

Crosstabulations - These are usually done when you have a sample that can be divided into two nominal (to which you can give an arbitrary name) groups, for example males and females, 2nd year students and 4th year students. You then look at the effect of these variables on other nominal variables such as whether they like or

dislike the L2, whether they do or do not do their homework every night, whether they feel confident about listening or not confident. Results are usually reported via a *chi-square* and the “significance” level is given.

Correlations - These are usually done when researchers are trying to compare two sets of figures to see if there is a link (a relationship) between them. For example, you could correlate a series of lessons of different lengths with a vocabulary test given at the end of each of those lessons. Correlations are measured on a scale of .1-.9. If there was a strong link (either way, shown as plus or minus) between length of lesson and amount of vocabulary learnt the figure would be between .7 and .9, medium strength would be between .4 and .6, and weak would be between .1 and .3. If you got 0, there would be no link at all. If you got 1.0 it would mean that the length of the lesson and vocabulary acquisition *were exactly the same thing* – rather unlikely!

ANOVA (Analysis of Variance) - ANOVA is a test to see whether the averages (the Means) of two sets of scores are sufficiently different from each other for the difference not to be due to chance. ANOVA could be used to measure whether the test scores of two classes are different at the beginning of the year and compare them to the difference at the end of the year.

The *Discussion* is the point when the author stops showing off his/her statistical prowess and becomes human again. They begin to make sense of the data, looking at the relationships between different sets of data and seeing if the research questions have been answered. The *Conclusion* and *Implications* summarise the discussion and often you will begin to see how the author perceives the relevance of the findings to teaching and learning. You can, of course, skip all that has come before and go straight for the conclusion but it doesn’t really help you to understand very much. Some student teachers with assignment deadlines looming try this trick with, occasionally, disastrous results.

Appendices giving examples of materials used, or tests administered, can be very useful and it may be a good idea to glance at these while reading through the *Method* section. There have been a number of occasions when I have been “enlightened by the simplicity” of the material in an appendix after labouring for some time trying to understand what was going on in the body of the text.

CARRYING OUT YOUR OWN RESEARCH

When carrying out an investigation into the language learning of your classes you do, in a sense, have to go through most of the processes above at least in terms of thinking about them if not actually writing them down. However, it should be possible

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to think these processes through as you are driving or walking to work:

1. What generally do I want to find out?
2. Why am I interested in finding this out?
3. What do I know already about the topic?
4. What *exactly* is/are my research question(s). Spend just a little longer on getting these clear!
5. How am I going to go about carrying out the research?
6. How is the data to be analysed and who is going to do it?
7. Who will I tell about what I have discovered?

Of course, if you can carry out your classroom research in collaboration with a researcher all the better and it can be to the benefit of both parties (see for example Macaro and Mutton, 2002). Or you can deploy your keen and starry-eyed student teacher very effectively to help you. However, the examples below acknowledge that such luxuries are not always available.

TOPIC: VOCABULARY LEARNING (MEMORIZATION)

Research question: How do my learners learn vocabulary for tests?

Background: Research shows that good memorization comes from using a range of memorization strategies.

Method 1: Ask them (teacher – whole-class discussion) or devise a simple questionnaire.

Method 2: Get them in discussion groups and give each student a prompt card (i.e. different strategies for learning vocabulary on each card) and listen in on the conversations. Give whole-class feedback.

Method 3: Give vocabulary to be learnt at home on a sheet and on the same sheet get them to fill in answers to some questions about their vocabulary learning. Ask them about not only the strategies they used but also the conditions in which they learnt the vocabulary (e.g. whilst watching *Neighbours* or whilst listening to Mozart?) and how much time they spent on it. Take this sheet in before the test and staple it to their test sheet when they've finished. You can then comment/feedback on the relationship between how they went about memorizing and their test results.

Method 4: Sit with an individual student and ask them to tell you “on-line” how they are memorizing the new vocabulary items. Provide instant feedback if a pattern of poor strategy use is apparent.

Advantages attached to Method 1 are that it's quick and easy and there is no extra work for you. Disadvantages include that they are less likely to tell you the truth in front of their peers and that you won't get to hear certain individuals. Method 2 is very effective in building up the value of learning from peers and collaborative learning in general. Method 4 is very time consuming, although highly

revealing, and can only be done during student-centred activities. Method 3 is a good compromise.

In order to “subtract from your workload” just give comments on the strategy use with a quick scan of the test results rather than marking the test. They can do this later in a whole-class situation.

Research question: Just how much vocabulary can some or all of my learners learn?

Background: Research suggests that learners can learn a lot more vocabulary than they are on average given to learn.

Method: Give them ten items on a topic. Ask them to find at least a further ten related items using a dictionary. Then ask them to find as many more items as they think they might be able to learn in one (forthcoming) homework session. They bring you the final list in L2 that they are going to learn – we will call this “the aspiration list” – plus the equivalent items in L1 with their name on it. Scan through the aspiration list and return to students (if necessary at a later date) with comments such as “impressive!” and “good luck” or “is that all you're going to attempt?”. Use this perhaps as evidence of “effort” towards “effort marks”. Set their *personalized* vocabulary list as homework. On day of test collect in their vocabulary list (L2) before starting test and give out L1 version with their name on it. Carry out test and collect in. Collate “aspiration list” with test paper.

Analysis: Calculate the Mean and Range of aspiration list. Calculate the Mean and Range of test results. Carry out a correlation between aspiration list and test results. This doesn't have to be done by using a statistical package although your findings will be more reliable if you do. But you can simply “eyeball” the results. Could they have got more right if they had aspired to less? Is there a pattern? Does it relate to individuals? What types of words did they have most difficulty with: nouns, verbs, adjectives, adverbs, function words, short words, long words, words which have a poor phoneme/grapheme match?

You might be able to “subtract from your workload” by asking their maths teacher to carry out the analysis as part of a maths lesson. Alternatively, use data entry onto a computer spreadsheet as an information-gap activity in L2 by the students themselves: “how many words did you want to learn? How many did you get right?” This, of course, requires them to be honest about their results.

TOPIC: READING COMPREHENSION

Research question: Which words that they should know are the students skipping when reading a text which I have given them?

Background: Some research shows that some students do not make the effort to retrieve from memory words that they have been taught and consequently misunderstand the text by relying on too few keywords.

“This doesn't have to be done by using a statistical package... you can simply ‘eyeball’ the results”

Method: Provide students with a text of which at least 80% are words they should know. Give them a brief amount of time, sufficient to do a couple of fairly rapid scans of the text. Ask them to circle all the words that they focussed on which they thought were important in giving them the meaning of the text. You may need to model this with a different text to show them what you mean. Next get them to underline all the words they think they know in the text. They hand this in to you.

Analysis: What kinds of words are they “alighting on” in the first couple of scans? Are they useful key words which represent the main topic of the text? Which words did they *not* underline? Were these words they should know? Were they unimportant words? Is there a relationship between the words they circled and the words they should know which they skipped? Are these words vital for the understanding of the text? Are they, by chance, words which are difficult to pronounce?

Give feedback to each student on what you have found about their approach to reading this text. You can “subtract from your workload” by considering this activity as the equivalent of a marked piece of reading comprehension and grade it in your mark book.

Research question: What do students do when they come across a word they do not understand?

Background: A lot of words we do not understand can be inferred from the context but the inference has to be based on skilled use of prior knowledge not wild guessing.

Method: Use a similar text to the one above but perhaps at only 70% of known words. Ask students to circle all the words they feel are new to them. Then ask them to choose a number of words (how many depends on the level of the text and the proficiency of the learners) that they think, from the text’s *context*, look like being keywords that will give them important information about the text as a whole. You can model this by doing a “group reading comprehension” of a different text. They should mark these words in some way. Now ask them which bits of surrounding text are most likely to give the meaning of the “important unknown word” and why.

Analysis is the same as in the previous activity: What are the patterns about word inference which are building up? Are the inferences sensible, based on good use of prior knowledge? Feedback could be to individuals or to the whole class.

Research question: Are students using a dictionary appropriately?

Background: Some students overuse the dictionary to the point that they make no real progress with understanding the text.

Method 1: Observe them during a reading task. Which students are constantly flicking through

a dictionary? You could even do this observation systematically by recording every 30 seconds how many students were consulting the dictionary and whether this varied during the course of the reading activity.

Method 2: Get them to give you an indication, in writing, of just how many words they looked up in the dictionary, whether they felt this helped them, whether they got frustrated at any time and so forth. It’s even better if they are prepared to write down the actual L2 words they looked up and the L1 words which they decided provided them with the right meaning.

Again, there is no reason why feedback on this process of attempting a task should not be a sufficient demonstration of your evaluation of the student’s progress.

TOPIC: LISTENING COMPREHENSION

Listening comprehension is notoriously difficult to research for the obvious reason that students can’t report what they are hearing and understanding whilst they are doing those very things. Nevertheless, there are some things that can be done to investigate their processes.

Research question: At what point during listening to a taped recording or a video-recording did students become most anxious or frustrated?

Background: Research suggests listening is one of the most anxiety-inducing skills. Anxiety can either be present before the text starts or build up as the complexity of the text becomes apparent to the listener and/or the listener cannot hold so much information in working memory (sometimes called short-term memory).

Method 1: Observe their faces and actions as they listen and take notes.

Method 2: Ask them to provide you with written answers to a series of “affective” questions immediately after a listening session (questions about anger, anxiety, frustration, attitude to the foreign language). Or do this as a pre-feedback activity with the whole class.

Method 3: Combined with the above two methods, walk around behind the students and observe the relationship between the ongoing recorded text and the writing that they are doing. A colleague to help you work the machine while you do this might be helpful.

Research questions: To what extent are listeners effectively using context and chunking of information in order to avoid focussing their attention on individual words, thus “losing the plot”. To what extent are they, nevertheless, identifying key words in a text “on-line” and holding these in their working memories and looking for confirmation that these are indeed key words?

Background: Research suggests that this intelligent use of “top-down and bottom-up” strategies is effective in listening.

“Listening comprehension is notoriously difficult to research... Nevertheless, there are some things that can be done to investigate [the] processes”



Method: Select a small group of students, perhaps three, whom you consider to be effective, average, and ineffective listeners. Get them to do their listening in a language lab (or multiple listening station) so that you can “listen in” on how they go about understanding a text. Ask them to simply write down as many “important ideas” as there are in the text. Some modelling of this by you, with a different text, might be helpful. Now, have the transcription of the text they are listening to in front of you. Take notes of where they are stopping and constantly rewinding and where they seem to be listening to whole chunks of language without rewinding. Take in what they have written and compare your annotated transcription with their “ideas contained in the text”.

Feedback to the whole class about problems faced in listening.

“Discuss with the students why you provide recasts to their oral errors. It might seem obvious to you but not necessarily to them”

Research question: To what extent are the prosodic features of the L2 (intonation and stress patterns) inhibiting their comprehension?

Background: Particularly where the L1 and L2 have different stress patterns (e.g. English and French), listeners have problems identifying key information in what they hear.

Method: Divide the class into two groups (equal proficiency level groups as much as possible) and play the text to half the class in its original state (i.e. with native speaker intonation) and to the other class with “doctored” intonation – that is, recorded by you at the same speed but with more L1-like stress patterns.

Analysis: Compare the number of idea units that each group is able to come up with.

TOPIC: SPEAKING (IN TEACHER – WHOLE-CLASS INTERACTION)

Research question: To what extent do students sound out answers before they pronounce them; to what extent do students sound out answers before *they offer* to answer them; to what extent do students sound out answers whilst they are listening to others answering questions?

Background: Sounding out probably produces more accurate answers but may lead to a reduction in spontaneity and fluency. The correct balance probably depends on the nature of the response task (i.e. how complex and challenging is the required answer?).

Method 1: Observe which students are moving their lips and compare the occurrence of this relative to your ratcheting up of the complexity of the interaction, this in turn compared with the amount of processing time you give them to provide an answer.

Method 2: Ask them what they do via questionnaire or group discussion.

Method 3: Ask them to note down on paper every time they answer a question in their heads which was aimed at other people.

Provide feedback, particularly on Method 3.

Research question: How do learners react to teacher oral correction (*recasts*)? Does this stop them volunteering oral information in future?

Background: Unfortunately this is one of the “sadly lacking” areas of research. Recasts have been intensively researched for their frequency of occurrence and their effect on acquisition, but rarely have the learners been asked what *they* feel about the use of recasts.

Method 1: Ask the whole group what they feel via a brief questionnaire at the end of a sequence: Do they recall being corrected? How did they feel about it? On what did this depend – the teacher’s voice, on whether their friends were listening? What should the teacher correct?

Method 2: Video yourself during a teacher-whole class interaction session. Play back the recording and ask the learners (either individually or as a whole class) to comment on the way that you correct them. This stimulus-led approach can bring out many more ideas from the learners. Keep the video for the noticing activity (see below).

Discuss with the students why you provide recasts to their oral errors. It might seem obvious to you but not necessarily to them.

TOPIC: SPEAKING (IN LEARNER-CENTRED SITUATIONS)

Research question: To what extent do learners use communication strategies to compensate for lack of linguistic knowledge (or inability to quickly retrieve an appropriate word)?

Background: Good language learners overcome their speaking difficulties through communication strategies, thus encouraging people to want to speak to them.

Method 1: Observe students in pair work activities which require formulation of language (i.e. not using pre-set phrases). To what extent do they use such techniques as: circumlocution; fillers to buy time; comprehension checks (“do you understand?”); word coinage etc. Record these findings and feed back to the whole class in terms of how effective the strategies were in keeping the interaction going.

Method 2: Video-record pairs of students and ask their permission to play back to the whole class thereby allowing peers to comment on these strategies. Make notes of the kinds of strategies used before the playback and whether the strategies increased in a similar session later on, after the “strategy training”.

Research question: To what extent can learners be trained to use intonation and stress in order to convey meaning more effectively (another type of communication strategy)?

Method: Video-record a number of pairs in oral exchanges where there is likely to be a negotiation of meaning going on. Note down any instances of lack of comprehension by the interlocutor because of the incorrect stress-patterns being deployed. Feedback this

information to the whole class. Carry out a training activity such as the one in Macaro (2001– see Appendix). Ask the learners to comment on how much more meaning was conveyed as a result of employing these intonation and stress techniques. Every time they engage in paired or group oral exchanges remind them about intonation and stress and reward them when they use it. At the end of the “training period” video the same pairs of students (without reminding them) as before the treatment and compare both the number of times they deployed the strategies and whether this led to successful communication of meaning. Also questionnaire all the students as to whether they found this type of training useful.

Research question: To what extent does written support (short written phrases or even scripted dialogue) help or hinder the development of pronunciation skills and communication skills?

This question is particularly important with a non-transparent orthography like that of French.

Method: Divide the class into two groups (group A and group B) and within each group organise some pairs. Provide the pairs with an oral activity such as a dialogue, role-play, simulation or jigsaw. Provide group A with L2 written support phrases and audio-record their performance (or record at least a selection of pairs). Then take away the support phrases from group A and record the activity again. With group B do the exact opposite: first no support and then give the supporting L2 phrases.

Analysis: What is the interaction between better pronunciation and reduced accuracy of content and syntax? In other words, to what extent is group A producing mis-pronunciation as a result of the support phrases but increasing content and syntax? To what extent is group B “forgetting” the mistakes resulting from exposure to the written word in round 1 but reducing the content of their utterances because of lack of support?

TOPIC: WRITING

Research question: To what extent do students use a dictionary in a writing task and where do the problems occur?

Method: Provide students with a writing task and ask them to write down on a separate sheet all the words that they have looked up in a dictionary, under two headings: 1) words they didn’t know and used the dictionary to find out; 2) words they knew but just wanted to check for spelling, for gender, etc. They should hand in this sheet with the written task. Calculate the number of “correct hits” and “incorrect hits” resulting from dictionary use. Pool all the incorrect hits in a whole-class discussion. Together, divide the incorrect hits according to category as to what went wrong (e.g. “looked up the wrong definition”).

In order to “subtract from your workload” make this

the only point of feedback to each individual for this first draft of the writing task.

Research question: What is the proportion of *generated sentences* (more or less word-for-word translation) that beginner and lower-intermediate students are incorporating into a piece of writing and what is the proportion of set phrases (or formulaic expressions)?

Background: Research suggests that the more *generated sentences* written, the better the content but the lower the accuracy and vice-versa.

Method: Get your students to brainstorm on to paper all the phrases they know for a given topic. They really must do this as quickly as possible to avoid mental translation – they need to retrieve whole phrases or chunks. You may need to practise this with them. Get them to hand in this sheet with the first draft of the writing that they produce.

Analysis: Analyse the proportions as per the research question. Using some kind of systematic measure of content and accuracy, what is the effect of generating more sentences as opposed to relying on set phrases? Does this vary per student? How does it relate to their individual proficiency in other language skills?

Research question: Do learners take into account teacher feedback if the teacher:

- provides the correct model in response to mistakes?
- simply identifies in the margins the number of mistakes made on each line of writing?
- underlines a limited selection of errors according to a systematic plan (e.g. January, focus on adjectival agreement; February, focus on past tense verb endings)?

Background: Research strongly suggests that providing the correct model does *not* lead to learner uptake.

Method: Divide the class into three groups. On a rotational basis every three months (that is, over nine months in all) provide different forms of feedback on errors to each group. In the case of b) and c) above leave space at some time in the lesson for the students to ask you about the errors identified by your annotations. Compare the re-occurrence of learner error according to the three different types of feedback. Provide a pre-treatment (at the beginning of the nine months) and a post-treatment questionnaire for the students asking how they feel about the different forms of feedback and how effective, in their opinion, it is. Compare this to your own analysis of their actual progression with the elimination of error.

TOPIC: NOTICING AND ACQUIRING NEW LANGUAGE

Research question: Which new language items (particularly syntax) do students notice when they are introduced via inductive methods such as oral interaction?

“To what extent does written support... help or hinder the development of pronunciation skills and communication skills?”



“Do the students notice only the simpler rules or do they notice quite complex patterns... ?”

Method: Provide learners with the opportunity to recall any changes to their mental models of the rules of the target language at the end of the lesson. Do this systematically over a period of, say, six lessons. Provide them with some sort of test on those language items.

Analysis: Are there common patterns of noticing for the whole class or is there huge variation? Do the students notice only the simpler rules or do they notice quite complex patterns (regardless of whether what they have noticed is correct)?

Research question: Do learners notice and recall corrected language items (oral recasts).

Method: As above, provide opportunities to state (preferably in written form): 1) if they spotted the recast; 2) whether they remembered what it was that you recast; 3) if they spotted recasts aimed at other people; 4) if they remembered what the recast was that was aimed at other people.

TOPIC: GENERAL ATTITUDES; STRATEGIES AND MOTIVATION

Research question for beginners: What attitudes towards the target language and target culture do the learners have who have never encountered the language in formal learning contexts before? How does this change over the course of a year of learning?

Background: Research suggests that attitudes amongst young adolescents begin to decline after about a year of language instruction.

Method: Questionnaire at the beginning of the year and one at the end. A number of these are available (for example, Dörnyei, 2001), but there's no substitute for adapting them to your own context.

Research question: Do poor encoding skills and/or phonological awareness lead to poor vocabulary and syntax retention, which in turn leads to demotivation?

Method : After 6 weeks of language learning try to identify nine of your beginner students (via vocabulary recall tests and simple gapped tests), three of whom appear to be performing well, three averagely well and three not so well. Carry out interviews with them in which you give them:

- an oral repetition task (can they repeat an L2 phrase after a two-second gap?)
- a phonological encoding task (can they read a *new* word which rhymes or has features in common with a word they have definitely learnt?).

Analysis: See if the performance in the vocabulary and gapped tests matches the performance in tasks a) and b).

Research question: What general strategies do students use to organise and review their learning?

Method 1: Adapt a questionnaire from existing ones (e.g. Oxford, 1990) or if appropriate use the whole questionnaire itself, as this has been evaluated for reliability.

Method 2: Ask students to keep a structured diary about their strategies outside the classroom: how they revise language, prepare themselves for a language task, deal with moments of anxiety, anger, frustration etc.

Given the lack of space, the above suggestions are only a handful of ideas, grossly simplified, about the kinds of research activities that teachers can carry out with their own learners.

TURNING RESEARCH-BASED TEACHING INTO PUBLISHED RESEARCH

There is absolutely no reason why you should not be satisfied with keeping the research within the confines of the activities above. And of course there is no suggestion that you should be attempting more than a small selection of any one of these studies at any one time.

However, if you do wish to turn your research efforts into some sort of published article you will need to take into account the following factors, and here the assistance of a more experienced researcher is invaluable.

Systematicity: The data collection has to be systematic and well documented. It's no good compromising on a data collection schedule or collecting the data in a haphazard fashion because you are running out of time.

Validity: The way that you go about collecting the data has to correspond to the research question. Hence, consider: can my questions actually be answered by the students? Is the way I am asking them and getting the students to answer them, appropriate for the research questions I am asking? One way of ensuring validity is to *triangulate* your data collection methods. This means using two or more of the methods described above to answer the same research question(s).

Reliability: Ask yourself, if anyone else were administering, analysing or summarising the data I am in the process of collecting or have collected, would it result in the same results and conclusions? One way to achieve this is to persuade someone else to analyse a sample of the data and see if you came up with the same results.

Generalisability: What claims am I making about my results? Does it apply only to the class I have researched or can I expect to find the same results in a different class, a different school or college, a different country?

Getting your research published can be a very daunting process and often, it has to be said, results in disappointment. There are a lot of second

language researchers out there! On the other hand, there is a multitude of L2 journals in which you can publish and it's a good idea to get some advice from an experienced researcher on which ones to go for first. Joint articles with more experienced researchers, in any case, are a good idea. It's not just a question of them profiting from all your hard work but rather of them bringing their complementary expertise to the conceptualisation of the study, the data collection, the analysis and the write-up. Ultimately you should see it as symbiosis rather than theft!

CONCLUSIONS

In this article I have tried to demonstrate that classroom-based research can be integrated into the teaching and learning process. In a nutshell, we need to stop thinking about what the students produce and look, rather, at the processes they go through. In this way we are constantly researching their language learning. In fact, we should be considering the teaching of a learner as a kind of longitudinal research project. If we can do this objectively and systematically so much the better.

I have also tried to de-mystify research techniques and to show that they do not always have to represent an extra work load for the teacher. There are always creative ways of substituting the research activity for some aspect of your work as a teacher.

Teachers need not be intimidated by research,

nor should they be excluded from the research process by those that claim the infallibility of the neutral outsider. They should be working alongside researchers, sometimes setting the research agenda and sometimes following it. I sense at this moment a climate in the UK where teachers, in response to the current crisis in second language learning, are turning, not to quick-fix solutions based on attractive materials, or so-called motivating activities or pedagogical dogma, but are instead looking to research to come up with the goods and provide at least *some* answers, even if those answers are complex and the solutions long term. Knowing why you are doing something because research has provided evidence to support it is good. Having built on that research evidence with your own investigations is even better. *Bonne chance et bonne recherche à tous!*

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“we should be considering the teaching of a learner as a kind of longitudinal research project”

Appendix

Student 1: hungry	Student 1 asks student 2 if s/he is hungry.
Student 2: again	Student 2 replies that yes, as always, s/he is.
Student 1: empty fridge	Student 1 says: well that's tough, look the fridge is empty .
Student 2: fish and chips	Student 2 says: look, I've got enough money to buy us both fish and chips

Student 1: hungry	Student 1 tells student 2 that s/he's feeling hungry.
Student 2: again	Student 2 is exasperated because this happens all the time.
Student 1: empty fridge	Student 1 asks if the fridge is empty.
Student 2: fish and chips	Student 2 opens the fridge and pulls out a plate of horrible cold fish and chips.

To develop effective use of intonation and mime, you might provide two different pairs of students with the above dialogue (English L2) with no punctuation. Ask each group to use only the words in the left-hand box and use the tone of their voice, mime and exclamations to put across the different meanings provided in the right hand box. The rest of the class have to guess from their efforts what the message was.

Adapted from Macaro (2001)

