Data-based teacher development

Simon Borg

This article describes how data from ELT classroom research can be exploited in teacher development activities. It begins by outlining the contribution data-based activities can make to teacher development, and presents a practical example to illustrate the principles underlying their design. A case is made for using such activities to facilitate teachers’ growth as reflective practitioners, and to promote a more productive view of the relationship between research and teacher development in ELT.

Using research data in teacher development

The term ‘data’ refers here to descriptions of ELT lessons and interviews in which teachers talk about their work. Cullen (1995) has outlined some of the benefits of using lesson transcripts in teacher development—that they protect the anonymity of teachers and students, and are portable, and easy to refer to—and the same also applies to the use of transcribed interview data. In establishing a rationale for using data-based teacher development activities, however, I want to go beyond these mainly practical concerns, and discuss the implications such activities have for three central issues in teacher development: reflective practice, teachers’ beliefs, and the scope of research on teaching.

Reflective practice

Current thinking in teacher development stresses the role which reflection plays in professional growth (see, for example, Calderhead and Gates 1993, Clift, Houston, and Pugach 1990), and as teachers we are encouraged to analyse, become aware of, and thereby improve our own instructional practices. However, emphasis on this personal, inward-looking form of inquiry, sometimes obscures the fact that focusing on other teachers’ work can also stimulate the kind of productive thinking which forms the basis of reflective practice. While effective reflection implies an ability to ask incisive questions about our own teaching, experience of asking such questions about the work of other teachers may be necessary before we can ask them about ourselves. I will argue that teacher development activities which draw upon vivid portraits of teaching and teachers to be found in research data can provide an ideal platform for the kind of other oriented inquiry which facilitates self-reflection.

Teachers’ beliefs

In recent years, educational research has emphasized the role that teachers’ beliefs, assumptions, and personal theories play in shaping classroom instruction (e.g. Burns 1992, Woods 1996). One aim of teacher development, therefore, should be to foster in teachers an
awareness of these often tacit influences on their practice. Such awareness develops more effectively when they have opportunities not only to analyse lesson transcripts—which record what other teachers do without providing any insight into the reasons for their behaviour—but also to examine other teachers’ reflective discourse (i.e. their verbalizations of the rationale behind their work). For this reason, teacher development activities based on data which documents both teachers’ classroom behaviours and the rationale behind them are particularly valuable in sensitizing participants on teacher development courses to the role that beliefs play in teaching, and in prompting them to explore how their own work is shaped by their beliefs about ELT.

Scope of research on teaching

The use of research data in teacher development activities also has implications for the scope of research on teaching, affecting both the purposes which research data serves and the range of individuals who benefit from that research. If we consider the first of these issues, it seems clear that not enough of the research conducted in ELT is put to constructive use on teacher development programmes, compared to that serving strictly ‘academic’ purposes in research papers, theses, and conference presentations. This can only be described as a waste of all the rich descriptive and interpretive information which, as I have argued above, has great potential for promoting teacher development. Researchers—especially those who are also teacher educators—need to be made aware of this potential, so that in addition to publishing academic material (often read by a small percentage of teachers, and of perceived practical relevance to an even smaller group, see Zeuli 1994), they will be willing to consider the practical contribution their data can make to teacher development. This implies, then, a broadened view of the scope of research on teaching which also includes the development of materials for teacher development, such as the kinds of data-based activities I suggest here. Their use would, in turn, extend the benefits of research on teaching to a wider range of teachers than is currently the case. And this is, I feel, an important issue: research on teaching is generally communicated through predominantly expository formats which are often not accessible to teachers (conceptually, stylistically, and sometimes even physically) and do not encourage teachers to interact with and make sense of data. Data-based teacher development activities reverse this trend by making authentic portraits of teaching and teachers widely accessible in a format which engages teachers in interactive forms of data analysis, and can thus foster in them the kind of analytical thinking about their work which underlies effective teacher development.

An example

Below I present a data-based activity used on an in-service teacher development programme at a British Council Summer School in Plymouth in 1997, which addresses the points raised above about reflective practice, teachers’ beliefs, and the scope of research on teaching. The data used in this activity was taken from a qualitative study of the grammar teaching practices of an EFL teacher working in Malta (Borg 1998).

Simon Borg
Teaching grammar
The extract below is taken from the classroom practice of a teacher of English as a foreign language during an intermediate-level lesson with adult learners from different European countries. The tasks which follow are based on this extract.

(T: teacher; S1, S2, etc.: individual students)
The students return from the break. The teacher distributes the transcript of a text the students did some listening activities on earlier in the lesson. ‘I want you to read through the transcript’, the teacher says, ‘and if you find a new grammar structure, compare it to your own language and see if you can find a similar structure. If you can’t understand it, mark it with a question mark and talk about it with someone else.’ The students begin to work on this task. They work individually most of the time, but do occasionally discuss their problems. The teacher circulates and monitors what the students are doing.

(Fifteen minutes later) The students have completed their work on the transcripts. ‘Were your translations correct?’ the teacher asks them. Most students respond with a ‘yes’, but S4 says she has a problem with the meaning of ‘so far’. ‘Can you help her?’ the teacher asks the class. S3 explains that it means from the beginning till now. The teacher nods, and S4 seems happy with this. S3 says she has a problem using a particular structure: ‘“have been”, continuous present, is it?’ ‘The name doesn’t matter’, says the teacher, and he proceeds to write the following on the board:

Je suis ici depuis deux jours.
Ich bin hier seit zwei Tagen.
Sono qui da due giorni.
I came here two days ago.
I ________ 2 days.

The teacher asks ‘Can you complete the sentence?’ S2 says ‘I have been here for two days’. The teacher asks S2 to write this sentence on the board in Polish (her L1), which she does. The teacher asks her about the tense of the verb, and she says it’s like the past tense in English. ‘In many European languages’, the teacher explains, ‘a present tense is used where in English the present perfect is used. We can say ‘I am here for two weeks’, but it has a different meaning, it means now and in the future.’

The teacher now asks the students to speak about Malta. S3 says ‘I came here a week ago. I have been here for nine days.’

T: When did you come? How long ago? In total?
S3: I am here for two weeks.
S4: I have been here for two weeks, I am still here?
T: Yes.
S4: I am here for two weeks, has finished?
T: No.
S3 turns to S4 and explains the meaning in French. The teacher asks the students for more examples:

S4: I came here eight weeks ago. I am here for twelve weeks. I have been here for eight weeks. (The teacher claps.)

S1: I came here two weeks ago. I am here for four weeks. I have been here for two weeks. (The teacher claps again.)

The teacher asks the students to write these sentences in their books so that they have a record.

Tasks
1 Go through the extract and underline any parts of it which strike you in some way (e.g. aspects of the teacher’s work which you would not use in your own teaching). Annotate the extract with any questions or comments which the parts you underline raise (e.g. ‘Why did he do/say that?’ or ‘I think this is interesting because...’). When you have read the extract, discuss the questions/comments you’ve written in a small group.

2 Scan the extract again, and put the list of steps below into the order they occurred in the lesson (the first one is done for you). Compare your order with that of another group.
   (i) Students write examples of grammar in their books.
   (ii) Teacher leads discussion of grammar students have difficulty with.
   (iii) Students practise grammar.
   (iv) Students work on listening activities 1.
   (v) Students analyse transcript to identify grammar points they’re interested in.

   a. What positive comments can you make about structuring grammar lessons in this way?
   b. Can you think of any limitations of approaching grammar in this way, or situations where it would not be appropriate to do so?

3 Now complete the grid below by looking at the extract in more detail:

<table>
<thead>
<tr>
<th>Teacher behaviour</th>
<th>Why do you think he acted this way?</th>
<th>How do you feel about this behaviour?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Allows the students to choose which aspects of grammar in the transcript to focus on.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Compares English grammar to that of students' own languages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Tells a student that the name of the grammatical structure she was unsure of 'doesn't matter'.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Once again, discuss your responses here in a small group.

4 I asked the teacher to tell me about the three aspects of his practice we focused on in the last question. His responses are provided below. Read them and discuss the questions.

a. In relation to the way he asked students to identify grammar areas in the transcript that they found problematic, he was guided by

a conscious belief… that perhaps really students will learn, I was going to say ‘will only learn’, but let’s put it ‘will learn better’ what they themselves have identified as ‘I want to learn this’. Things they may have heard before and are not sure about, or things which intrigue them, or whatever. So, the belief there is that they should identify for themselves what they want to learn.

How do you feel about this? In your own work, do you provide students with opportunities to learn the grammar they want to learn?

b. In relation to the way he asked students to compare grammatical structures in English to those in their own language:

I like to see patterns myself and in my own language learning, if I can see a rule, often if I see something which is similar to my own language, I just found it easier to take on board… I’ve seen it so often, when students are made aware, that, for example, conditionals exist in their language in almost exactly the same way as they do in English, often that’s just been an eye-opener for them as well. So asking them to perceive, to look at patterns and relate them to their own language, I’ve often found that very useful. And I think that the major objection to that kind of approach was always that students need to be able to think in the foreign language, and I actually don’t think this stops them from doing that.

Where did the teacher get this ‘theory’ about comparing English grammar to that of the students? What about your own theories about the use of students’ L1 in teaching grammar. Are you able to make these explicit, and to justify them?

c. In relation to his comment that ‘the name doesn’t matter’, when a student asked about the label for a grammatical structure:

I find that if they are willing and wanting to talk about language… I’m happy to go along with that, and to use any terminology which is helpful, when it’s helpful. I think what was happening there was that I felt that they might have been more confused or somehow threatened by the
labels, and I just wanted to get to the crux of the language point, without using terminology which would in some way threaten or frighten them.

The teacher's comments here reveal an important influence on his decisions about how to teach grammar. Can you identify this influence? Do these comments have any implications for the way you currently think about grammar teaching?

5 On the basis of this series of tasks, write down one or two aspects of your own approach to grammar teaching that you feel you need to think more carefully about, and for each write a short comment about why you feel the need to do so.

6 How useful did you find this series of tasks in helping you to think about grammar teaching? Comment briefly on those aspects of the tasks which you found most/least effective.

I will now refer to this sample activity to illustrate some design principles for data-based teacher development activities. Then I will evaluate the same activity on the basis of feedback from teachers on a teacher development course and from my own observations as facilitator of the activity.

**Designing activities**

The effectiveness of data-based teacher development activities will depend on the quality of the data and the tasks through which the data is exploited. As I have noted, data should portray what teachers do in ELT classrooms, as well as how they talk about the rationale for their work. Substantively, the data must also be directly relevant to the objectives of the teacher development work (the range of issues in ELT which can be addressed through such activities is very broad), and be conducive to the development of tasks through which salient issues in the data can be addressed. As far as the design of these tasks is concerned, the following principles are reflected in the activity presented above:

1 *Allow teachers space to respond personally to the data.* Providing teachers with opportunities for personal responses to classroom data (as in Task 1) not only ensures that at some point teachers are able to focus on issues in the data they feel are relevant, but also provides facilitators with feedback on how thought-provoking teachers actually find the data. Personal responses allow teachers to draw upon their knowledge and experience in reacting to the data, and can also provide insight into their beliefs about the aspect of ELT under study. This is important, given that making these beliefs explicit is one of the main aims of data-based teacher development activities.

2 *Move from a description of teaching to an analysis of rationale.* Before teachers can examine the rationale behind specific teaching behaviours, they need to understand what these behaviours are. The tasks are therefore sequenced in such a way that the focus is initially on the description of classroom practice, and gradually moves towards an analysis of the teacher’s comments on specific aspects of this practice.
3 Encourage teachers to approach the data with an open mind. The
tasks encourage teachers to consider the practice in the lesson extract
from multiple perspectives: their own reactions, those of the other
participants on the teacher development course, and those of the teacher
whose practice is portrayed. In addition, teachers are asked to comment
on both positive and negative aspects of the data (see Task 2). Effective
reflection calls for open-minded inquiry of this type, so tasks should
courage teachers to consider how far they might use ideas and options
in ELT which are new to them, or which they may have dismissed
previously without adequate consideration.

4 Move from other-oriented reflection to self-reflection. The tasks
move from an analysis of another teacher’s work to more self-oriented
inquiry. The assumption here is that self-reflection is facilitated by the
experience of critically inquiring into the work of others. Thus, if
participants on teacher development courses are encouraged to ask
questions about other teachers’ work, and to examine the responses,
they will be better equipped to inquire in the same way into their own
practice.

5 Engage teachers in a process of inductive data analysis. The
potential of the activities for promoting teacher development can only
be fulfilled when teachers assume the role of data analysts, and when
salient issues emerge inductively through their analysis of the data. The
extent to which the analysis is structured will depend on the teacher’s
current levels of knowledge and experience; however, irrespective of the
participants, tasks must provide opportunities for the application of the
analytical skills which are central to teachers’ growth as reflective
practitioners.

6 Encourage teachers to define objectives for continuing inquiry. Given
the personal nature of teacher development, tasks should encourage
teachers to formulate a statement of which specific issues in their
teaching they want to explore as a result of the activity (see Task 5). In
itself, of course, this is no guarantee that continued inquiry into these
issues will occur, but it provides teachers with a written record of teacher
development objectives they have set for themselves, and which may
also provide facilitators with ideas for further teacher development
work.

It should be clear from these design principles, as well as from the
sample activity above, that data-based teacher development activities as
I discuss them here should take a participant-centred, interactive, and
inquiry-oriented approach to teacher development. It is within the
context of a teacher development programme based on these values that
the potential of such activities for stimulating professional growth is
most likely to be realized.

Evaluation

Here I make some brief evaluative comments about the sample activity,
based on feedback provided by teachers as well as on my own
observations. Twenty-four out of a multinational group of 32 participants
returned their feedback sheets (see Task 6 in the sample activity). Teachers indicated that they found the activities useful in helping them to think about different aspects of grammar teaching—the specific issues mentioned were ways of structuring lessons, the roles of teachers and learners, the use of terminology, and contrastive work. Given that 18 countries were represented on the course, these positive responses suggest that data-based teacher development activities can be effectively used with teachers from a wide range of ELT contexts. Teachers also commented favourably on the fact that the activities were based on authentic data ('real observations from real life lessons', to cite one teacher), that they allowed participants to discuss their beliefs about grammar teaching with each other, and that the tasks were logically organized. One comment, which I quote below, supported my belief in the potential of data-based teacher development activities for enabling teachers to go beyond their instinctive initial reactions to novel practices and evaluate them in an open-minded manner:

As I went through the extract for the first time, parts of it seemed surprising, and even odd. As we were proceeding with the task, however, I could see the teacher's good points, and at the same time there was enough space and time allowed for us to critically explain our own viewpoints in a discussion.

As this comment indicates, providing teachers with adequate time for analysing and discussing the data is clearly important (I used the sample activity in a 90 minute workshop).

Only three teachers commented on ways in which they felt the activities could have been improved. Two of them asked for more background information about the students. Although these teachers did not make any other specific requests, I assume they would have welcomed more details about the ages and nationalities of the students, class sizes, and perhaps about the kinds of institution they were studying in. Another commented that he or she would have been happier if we had made it clear whether the practice illustrated in the data was 'good' or 'bad', something which I had deliberately avoided doing, in the interests of an open-minded analysis. To these comments I can add that there was some overlap between Tasks 1, 3, and 4, since when they first read the extract the teachers quickly locked on to the same issues which were the focus of later tasks (e.g. in Task 1, most teachers underlined the teacher's comment that 'the name doesn't matter'; this statement was also the focus of Tasks 3c and 4c). This overlap could be avoided if the questions generated by Task 1 were written up on the board but not discussed until the end of the tasks, by which time a number of these initial questions would have already been tackled. Another oversight on my part was not numbering the lines of the data extracts, which would have made it easier to refer to them during the activities.

In evaluating the procedures I have described here, I should also acknowledge that they depend on the availability of lesson extracts and teacher commentaries. However, given the current climate of qualitative

Simon Borg
inquiry and classroom research in education, ELT teacher educators may have such data available from their own research, in which case designing activities is facilitated by teacher educators' familiarity with the data; or they may be able to obtain data from colleagues or teachers involved in research in ELT, which means they will need to invest more time in reviewing the data before designing activities. In making data about teaching more widely available for the purposes of teacher development, the possibility of developing banks of data within ELT institutions, and of data-sharing initiatives among such institutions, would also seem to be worth exploring. Of course, all data should be used ethically, i.e. with the consent of teachers and students, and in such a way that the anonymity of these individuals is respected.

**Conclusion**

My experience of designing, implementing, and evaluating data-based activities suggests that they can make a useful contribution to teacher development. By allowing teachers to function as data analysts in the study of other teachers'—and ultimately of their own—behaviours and beliefs, such activities can promote a more holistic form of self-reflection than those based solely on the behavioural analysis of teaching. In addition, these activities make authentic data about teaching accessible to all teachers, strengthening the often tenuous links between research and teacher development, and creating in teachers an awareness of the contribution which research in their own classrooms can make to their professional growth.

Received February 1998

**References**


**The author**

Simon Borg is assistant lecturer in English at the University of Malta. He has also worked as an EFL teacher educator in the UK and New Zealand. He is currently completing a PhD into the personal theories of EFL teachers, with specific reference to the teaching of grammar. His main interests are process-oriented teacher education and grammar teaching.