Changing Values: what use are theories of language learning and teaching?

Authors
Dr. Malcolm MacDonald, Center for English Language Teaching (CELT), Airthrey Castle, University of Stirling, Stirling FK9 4LA, UK (phone: +44 1786 467933; fax: +44 1786 466131; email: mmm1@stir.ac.uk).
Dr. Richard Badger, Center for English Language Teaching (CELT), Airthrey Castle, University of Stirling, Stirling FK9 4LA, UK (phone: +44 1786 467933; fax: +44 1786 466131; email: rgb3@stir.ac.uk).
Goodith White, School of Education, University of Leeds LS2 9JT (Tel: + 44 113 233462; email: a.g.white@education.leeds.ac.uk).

Abstract
This paper is a response to the common perception by student teachers that the research and theory courses on their program are overtheoretical and unrelated to classroom practice. While there is some support for a categorical distinction between theory and practice in language education, it is suggested that the beliefs, assumptions and knowledge of teachers are in fact inextricably bound up with what goes on in the classroom. We investigate two groups of student teachers studying at undergraduate and postgraduate level to become Teachers of English to Speakers of other Languages. We examine the extent to which a research and theory course which both groups took in Second Language Acquisition influenced key beliefs which students held relating to language learning during their period of study.

Keywords: Teacher Beliefs; Teacher Education; Second Language Acquisition; TESOL; ELT.
Introduction

The contribution of Second Language Acquisition (SLA) research to English language teaching and to teacher education remains problematic (Ellis, 1997; Lightbown, 1985). While one of the intentions of SLA research is to improve language pedagogy (Ellis, 1997, p.69), and most SLA researchers have at some time been language teachers (Tarone et al, 1976, p.19), teacher education programs in general and SLA courses on teacher education programs in particular are often said to be either excessively theoretical (Brown, 1983, p.53; Brumfit, 1983, p.59; Lightbown, 1985, p.183) or not 'relevant' to what goes on in the classroom (Eykin in Markee, 1997:80). Markee goes so far as to say that "most potential consumers of SLA research are frequently repelled by its disregard for real world issues"(1997, p.88).

Some of this criticism might be perceptual; but some of it could be grounded in the nature of SLA research itself. In a recent review of fifty examples of SLA research, it emerged that only fifteen were actually carried out in authentic language classrooms (Nunan, 1991, p.5). So it is not surprising that Stephen Krashen has concluded that theory is “rejected by most language teachers” (Krashen, 1983, p.255).

Theory and practice

This division between theory and practice has been echoed by many of the undergraduates and postgraduates studying with the authors on B.A. and M.Sc. programs in Teaching English to Speakers of Other Languages (TESOL). Our student teachers pride themselves on their pragmatism, just wanting to 'get on with the job' of learning the day-to-day practicalities of how to teach in the classroom. In keeping with a majority of similar programs (Ellis, 1997, p.70), our program contains a course in SLA. We find that our student teachers' pragmatism conflicts with the theory and research aspects of SLA. Here are examples of the sort of feedback we have been receiving over the years both orally and from the students' written evaluation forms on our courses in SLA:

This course was much more theoretical than I am used to.

This course gave me information overload - I was not sure how it fitted into the classroom.
There is an imbalance between theory and practice.

Too many theories.

However, there is a paradox here. While many student teachers appear to reject theory; at the same time many of them expect from a course "instant panaceas, rigid rules of thumb, clear statements of practice, and absolute generalisations (Brumfit, 1983, p.60)" or "definitions, rules, absolutes"(Brown, 1983, p.54). Where else can this come but from theory? Krashen states: "Given a brief workshop or inservice, the most practical, most valuable information we can provide is a coherent view of how language is acquired, a theory of second language acquisition" (1983, p.281). Perhaps it is not that we are giving our student teachers too much theory; but rather that we are not addressing the right issues (Wright, 1992, p.189), or exploring them in the right way.

Dichotomies in Teacher Thinking

It has been suggested that the social and textual practices of teachers and researchers actually constitute two different forms of discourse - that the discourse of educational research is either alien to (Wright, 1992, p.188) or generically different from that of the classroom teacher (Clarke, 1994, p.16; Ellis, 1997, pp.71-2; Kerlinger, 1977, p.6). An important goal, then, of teacher education should be to establish links between professional discourse and local discourse, both at the level of language and practice (Freeman & Richards, 1993). In order to explore this, we will here consider what constitutes the less clearly defined 'local' (Geertz, 1983) or 'personal' knowledge (Clandinin & Connelly, 1987; Polanyi, 1958; Winch, 1958) of classroom practice which our student teachers contrast with educational research.

Considerable research has been carried out in mapping the cognitive and interpretative frameworks which teachers bring to their professional activities (Freeman, 1994, 1996; Freeman & Richards, 1993; Johnson 1996; Richards & Nunan, 1990; Woods, 1996). Conventionally, these descriptions differentiate areas of teachers' cognitive and interpretative frames. Abelson, working in the field of cognitive
science, suggests seven features - "nonconsensuality, existence beliefs, alternative worlds, evaluative components, episodic materials, unboundedness, variable credences" (1979, p.360) - that distinguish a belief system from a knowledge system. Within the knowledge system of language education, Johnson (1996) distinguishes between conceptual knowledge [episteme - or 'abstract wisdom'] and perceptual knowledge [phronesis -or 'practical wisdom']. She argues for the focus in teacher education to be on perceptual knowledge because the vicissitudes of the classroom often militate against the application of a general rule. This distinction between theoretical and practical knowledge is more conventionally framed in the distinction between declarative and procedural knowledge (Woods, 1996, pp.190-195). Declarative knowledge is knowledge about teaching - knowledge of subject areas and the 'theory' of education; procedural knowledge is knowledge of how to teach - knowledge of instructional routines to be used in the classroom. Lightbown picks this up when she distinguishes (1985) between 'teacher education' (i.e. conceptual/declarative knowledge) and 'teacher training' (i.e. perceptual/procedural knowledge). Richards and Nunan (1990) also distinguish between teacher education and teacher training. They define teacher education as "characterized by approaches that involve teachers in developing theories of teaching, understanding the nature of teacher decision making, and strategies for critical self-awareness and self-evaluation" and teacher training as "characterized by approaches that view teacher preparation as familiarizing student teachers with techniques and skills to apply in the classroom"(in Ellis, 1994, p.187). Taking a slightly different perspective, Richards (1996, p.284) relates what is essentially perceptual/procedural knowledge (knowledge relating to curriculum, subject matter and lesson presentation) back to the realm of beliefs - knowledge "which relates to the teacher's personal and subjective philosophy of teaching and the teacher's view of what constitutes good teaching". He describes a number of 'maxims' which constitute not so much the 'rules' of specific teaching techniques, but rather the set of “beliefs, principles and values” (294) underlying more generalised classroom practice.

From the research above, it is Lightbown who is specifically concerned with the contribution of SLA to
teacher training. Unsurprisingly, she places SLA research in the realm of conceptual/declarative knowledge, but suggests - rather "humbly" (Ellis, 1994, p.175) - that it relates to perceptual/procedural knowledge, in as much as it enables teachers to "have much more realistic expectations about what can be accomplished" (1985, p.183-4). In this way, it is suggested that there are connections between these different areas of teacher cognition. Lightbown is suggesting an - albeit weak - relationship between conceptual/declarative knowledge and perceptual/procedural knowledge; and Richards is suggesting a relationship between perceptual/procedural knowledge and teacher beliefs, principles and attitudes. What has not yet been explored is the notion that a relationship might exist between conceptual/declarative knowledge, in which SLA is conventionally seen as playing a role, and the beliefs, principles and attitudes of teachers and student teachers. The central question of this paper, then, is to investigate whether the provision of a course in SLA within the context of a TESOL program might have an effect on the beliefs, principles and attitudes of student teachers.

An integrated approach

In our discussion so far, we have examined approaches which divide aspects of teacher cognition into separate categories. A more recent strand of research, however, challenges the categorical distinctions outlined above. Woods (1996) suggests that these dichotomies do not accurately reflect the relationship between the beliefs, assumptions and knowledge of teachers and their practices in the classroom.

"In order to take appropriate action, people need to understand; and to understand they need knowledge about the world and specifically about the situation they are in"(Woods, 1996, p.59).

Richards & Lockhart (1994) and Johnson (in Richards & Lockhart, 1994) also emphasize the interrelatedness between beliefs and knowledge, and declarative and procedural knowledge:

"...ESL teachers teach in accordance with their theoretical beliefs and differences in theoretical beliefs may result in differences in the nature of.....instruction" (Johnson in Richards & Lockhart,
"...what teachers do is a reflection of what they know and believe, and teacher knowledge and 'teacher thinking' provide the underlying framework or schema which guides the teacher's classroom actions" (Richards & Lockhart, 1994, p.29)

Woods (1996) goes on to develop a multi-dimensional cycle of planning and decision making within teaching. He describes three phases of assessment, planning and implementation which operate recursively to inform different hierarchical levels of the teaching process - going from the most local level of discrete events in the lesson plan to the most global level of whole course planning (p. 139). This is to say, a decision that a teacher takes about designing the curriculum can be informed by his/her experience of teaching a particular component of a lesson the previous semester; and a planning decision that a teacher takes in relation to the curriculum can in turn inform the future staging of that particular lesson. Woods’s analysis of interview data suggests that knowledge structures and belief systems "are not composed of independent elements, but [are] rather structured, with certain aspects implying or presupposing others" (p. 200). Woods proposes a model to signify the evolving system of beliefs, assumptions and knowledge (BAK) that recursively informs/is informed by the context of teaching:

"...the BAK was part of the perceiving and organizing of the decisions. When a decision was considered, it was considered in the context of BAK, and when it was remembered later it was also remembered in the context of BAK" (Woods, 1996, p.247).

Woods's research suggests, therefore, that classroom practice is not distinguished by a lack of theory, as implied by the commonplace polarization with the research into teaching and learning reviewed above. In fact, Woods has demonstrated that language teachers create and maintain background networks of
beliefs, assumptions and knowledge which, we would argue, constitute a valid theory of teaching and learning. These background theoretical networks are grounded in every level of routine classroom practice level in much the same way that educational theory is grounded in the systematic collection of empirical data. It would appear, therefore, that what distinguishes the discourse of classroom practice from the discourse of educational research is not an absence of theory, but the context in which the theory is constructed and the form in which it is articulated.

SLA theory and classroom practice

As part of the discourse of educational research, SLA theory has been said to have either a direct or indirect effect on the instructional routines and procedures of language teaching. Early research was sceptical. Tarone et al suggested that “hasty pedagogical applications should not be made on the basis” of the current state of SLA research (1976, p.29). One example of this was Krashen’s attempt to devise a grammatical syllabus based on the Natural Order (1983, p.258).1 Lightbown also suggests that SLA research should play a role in teacher education rather than in teacher training (1985). However, more recently, a strong claim has been made for the role SLA research has played in one of the more recent techniques of language pedagogy, task-based learning and teaching (Long & Crookes, in Freeman & Richards, 1993, p.196). Over the past twenty years SLA research (e.g. Long, 1981) has offered powerful evidence that language intake is facilitated when language learners are engaged in the negotiation of meaning, as when attempting to find an outcome of a problem-solving task. This has currently led to the widespread design and implementation of tasks in the language classroom as an approach to language teaching.

However, in the light of the recent research into teacher cognition described above (Richards &

---

1 As part of his Monitor Model, the popular language educationalist, Stephen Krashen (1985) drew on a body of research published throughout the 1970s to support the thesis that learners of English as a foreign/second language acquired its morphemes in a particular order. This could have implications for the order in which grammatical items were introduced in class. However, the evidence for this “natural order” is still hotly disputed (McLaughlin, 1987).
Lockhart, 1994; Woods, 1996), perhaps a stronger claim can be made for the *indirect* transfer of SLA research into classroom practice. Allen suggested a long time ago that:

"there is, perhaps, something wrong with the idea that the only way to 'apply' the results of research is to write a whole new textbook or a brand new curriculum sequence. Perhaps it is better to see the current applications of research as comprising an influence which indirectly and subtly changes the teacher's attitude towards what s/he is trying to do in the classroom..." (Allen in Tarone et al, 1976, p.30).

This suggests that SLA theory and research could be better used to inform the reflexive frameworks which teachers mobilize in the classroom and to enable teachers to refine their interpretative frames so that they can select from the plethora of possible teaching approaches available to them.

"When we provide theory, we give them (teachers) the underlying rationale for methodology in general. This permits adaptation for different situations, evaluations of new techniques and evaluations of theory. Without theory, there is no way to distinguish effective teaching procedures from ritual, no way to determine which aspects of a method are helpful and which are not helpful" (Krashen, 1983, p.261).

To date, there has been surprisingly little published on the relationship between SLA and teacher thinking and how to best exploit SLA in order to enhance it (Ellis, 1997, p.82). However, the comments of our students and of those practitioners critical of the role of SLA research suggest that some justification is required for the inclusion of an SLA course in a program preparing people for a career in language education. One approach to this is to examine the relationship between theoretical knowledge and teacher behavior in the classroom (e.g. Freeman & Richards, 1996). The difficulty with this is that the changes in teacher behavior may be a result either of their experience of the classroom, the theoretical input they received during their initial or some combination of these. Also the way teachers
behave in classrooms may be affected by the presence of observers or other methods of observation. We would argue that this type of research in the classroom could usefully be augmented by an investigation into the relationship between the theoretical knowledge provided on a teacher education program in TESOL and the changes that take place in the beliefs, assumptions and knowledge of the student teachers on it. This paper goes on to describe a small-scale piece of research which was carried out to investigate whether there was any change in the beliefs, assumptions and knowledge of student teachers undergoing undergraduate and postgraduate programs in TESOL in a UK university.

Procedure

The authors teach on B.A. and M.Sc. programs in Teaching English to Speakers of Other Languages (TESOL) at the Center for English Language Teaching, now part of the University of Stirling Institute of Education in Scotland, UK. Both undergraduate and postgraduate programs include a one semester course in Second Language Acquisition. The undergraduate SLA course is part of a three year B.A. degree in English Language Teaching offered specifically for non-native speakers of English. Students normally take this course in their second year along with courses in Discourse Analysis and Education. A course in micro-teaching and classroom observation is held in the second semester. The postgraduate SLA course is taken in the first semester of a one year M.Sc. program in TESOL for both non-native speakers and native speakers. In the first semester, postgraduates also take courses in language description (an introduction to functional grammar), TESOL methodology (teaching of skills), and classroom observation. A postgraduate micro-teaching course is held in the second semester of the program.

Both SLA courses are taught over twelve weeks with three contact hours per week. While the courses are taught separately, by different members of staff, and make use of different set text books, there is inevitably considerable overlap in content between the two courses. The style of teaching on both courses is relatively informal and is discussion rather than lecture based, although the postgraduate
teaching can be slightly more didactic at times. Both courses are assessed by two essays and one three hour examination, although the postgraduates write slightly longer assignments. A full description of the content of the two courses are given in Appendix I.

The students on the two SLA courses described above were the main focus of attention in this paper. Typical undergraduate student numbers are between fifteen and twenty. The postgraduate group is normally between twenty and twenty five, mostly non-native speakers with four or five native speakers in each year group. The male: female ratio of both groups is approximately 1:4. The largest number of students by far came from Greece, since they made up roughly two thirds of the undergraduate group. Details of the numbers, gender and nationalities of the students are given in Table 1. Of the two groups, only a few of the postgraduates will have done any previous courses in language learning and teaching or related topics or have had previous teaching experience. However, the non-native speakers have all studied English language to a high level and so can draw on considerable experience of the language classroom.

Table 1 about here

The Center for English Language Teaching also runs an undergraduate degree course in English as a Foreign Language for non-native speakers, which does not include components in teacher education; and the Institute of Education as a whole also runs undergraduate courses in Initial Teacher Education without any specific focus on foreign language teaching. Since these two groups did not receive any course specific to language teaching pedagogy or Second Language Acquisition, it was decided to use them as controls.

Over two successive years, we administered a questionnaire on language learning to 55 subjects (28 post-graduates and 27 undergraduates) at the beginning and end of the semester in which the SLA
courses were taught. The same questionnaire was also administered at the beginning and end of the semester to the control group totaling 25 undergraduates drawn from a B.A. course in English as a Foreign Language and an Initial Teacher Education program which did not feature a course in SLA. The questionnaire (based on Lightbown & Spada 1995, p. xv) contained twelve statements containing key beliefs relating to English language learning. These are included in the order in which they were given to the students in Appendix II. Since the statements reflected issues which are central to SLA, the questionnaire was given out in the SLA class. Subjects had to indicate the extent to which they agreed or disagreed on a six point Likert scale where 6 meant strongly disagree and 1 meant strongly agree. The mean responses are shown on the tables that follow. At the end of the semester the subjects again completed the questionnaire and the results were analyzed using a Wilcoxon Signed Ranks Test Asymp. Sig. (2-tailed) (Kinnear & Gray, 1997, p.140).

Results

At the outset of the semester there was no significant difference (Table 2) between the key beliefs about language learning (Lightbown & Spada, 1995, p. xv) of the combined cohort of undergraduates and postgraduates (n=55) taking the SLA course and those of the control group (n=27).

Table 2 about here

Broadly speaking, the views of the combined cohort taking the SLA course differed significantly before and after the course on issues relating to learning and language, although there was no significant difference on issues relating to learner differences (Table 3). In particular there appeared to be a movement away from the behaviorist views of learning which the subjects had previously held (statements 1, 2, 6, 9, 12) and from the use of language input which is graded on a strict grammatical basis (statements 7, 8 and 10). The students also significantly lessened their convictions that language learning should be introduced early in a school program (statement 5). Although they still basically
agreed with the notion, this would suggest that they had also been influenced by approaches that credit
the cognitive resources that older learners bring to bear on language learning. However, students were
not increasingly persuaded by evidence from SLA research presented on both courses as to the benefits
of interaction between non-native speakers on the accuracy of learners’ utterances (statement 11). There was also no significant change in their beliefs regarding the relationship between intelligence (statement 3) or motivation (statement 4) and language learning.

Table 3 about here

The beliefs of the control group who had not received a course in SLA did not differ significantly at the
end of the semester from those they had held at the beginning of the semester (Table 4).

Table 4 about here

Undergraduates and postgraduates combined

If we take strong agreement to mean a rating of under two, before the course started both undergraduate
and postgraduate groups strongly agreed with just two statements (Table 3):

5. The earlier a second language is introduced in school programs, the greater the likelihood of
success in learning.

8. Teachers should teach simple language structures before complex ones.

These two notions do not quite add up to a consistent view of language teaching. Statement five
suggests a mentalist view of language acquisition as biologically dependent while statement eight is
consistent with both behaviorist and cognitivist views. If we take strong disagreement to mean a rating
of over four then the subjects did not strongly disagree with any statements before the course.

Again taking a rating of under two as indicating strong agreement, after the course the subjects strongly
agreed with one statement (which they had strongly agreed with before the course):

8. *Teachers should teach simple language structures before complex ones.*

However, the subjects now strongly disagreed with three statements:

1. *Languages are learned mainly through imitation.*

10. *Teachers should use materials that expose students only to those language structures which they have already been taught.*

12. *Students learn what they are taught.*

The strong rejection of these three statements suggests that after the course, the subjects had at least taken on board one of the few certainties afforded by SLA research: a rejection of the behaviorist model of learning. It implies that they now accord more importance to the role of the learner in language learning, which is consistent with the view that learners create their own syllabuses out of the language input they receive.

**Undergraduates and postgraduates compared**

There were only a few areas of difference between the responses of the undergraduate and postgraduate cohorts. Tables 5 and 6 compare differences between the undergraduate and postgraduate responses before and after the SLA course. We shall group these into four categories of statement.

**Table 5 about here**

*Statements which reflect a broadly behaviorist view of language learning (S1, S2, S6, S9, S12).* There was a significant difference between the undergraduate and postgraduate cohorts on only one statement, relating to the immediate correction of errors (S9), before the course (Table 5); but there was no significant difference between the two groups in this area after the course (Table 6).

**Table 6 about here**
Statements relating to the grammatical sequencing of language teaching (S7, S8, S10). There was a significant difference between the undergraduate and postgraduate beliefs relating to the idea of staged presentation and practice of grammatical rules (S7), a notion which also has some behaviorist overtones, both before the course (Table 5) and after the course (Table 6).

Statements relating to learner variations (S3, S4, S5). There was a significant difference between the undergraduate and postgraduate beliefs relating to the relationship between IQ and language learning (S3) both before the course (Table 5) and after the course (Table 6). Thus it would appear that the SLA course did not minimize the difference between undergraduate and postgraduate beliefs relating to this area.

Statement relating to learner-learner interaction (S11). There was no significant difference between either the degree or the range of undergraduate and postgraduate beliefs before and after the courses.

Discussion
The relatively small numbers of students involved in the study limit the generalisability of the results. Furthermore, the results may have been skewed by the disproportionate ratio of females to males and the particular configuration of different nationalities which we had in our cohort, for example the preponderance of Greek learners.

Changes in student beliefs, assumptions and knowledge
We would suggest that, within the context of the other courses on our B.A. and M.Sc. programs, our course on SLA research and theory - as one area of conceptual/declarative knowledge - did have an impact on some of the beliefs, assumptions and knowledge of our student teachers. While the control group, who did not take an SLA course, did not register any significant changes in their attitudes
towards language learning, our students, who did take the course, did register significant changes in their attitudes towards certain issues in language learning. Thus it would seem that, despite the explicit aversion expressed by our students towards the theoretical approach of the course, the course did have some measurable effect. Our students appeared to have started out with common sense beliefs about language learning which were perhaps closest to a behaviorist model of language learning. It is possible that these reflected didactic classroom practices that they had experienced during their periods of language learning in their home cultures. This could be as true of some of our more mature British postgraduates as those from Greece and East Asian countries. The kind of beliefs that our students seemed to be moving towards would seem to fit in either with a broadly Krashenite view (Krashen, 1983; Krashen & Terrell, 1995) which sees language learning as a largely unconscious process, or with a broadly cognitive perspective which emphasizes the potential for conscious language learning.

*Cohort overall.* Differences in significance levels of the changes in the beliefs of the cohort taken as a whole might reflect differences in the degrees of certainty with which different areas of knowledge within the emerging paradigm of SLA research are viewed. Research such as Chomsky’s (1959) critique of behaviorism and Dulay and Burt’s (1972) account of language learning processes, which militate strongly against behaviorist notions of language learning and downplay the influence of the L1 on the L2, have by now - despite the latter’s limited database (Kachru in Liu, 1998, p.4) - become an unproblematic part of the SLA canon and a central plank of many foundation courses at undergraduate and Master’s level, including our own. It may also be the case that the debate over behaviorism - however wellworn in Anglo-American pedagogy - relates most strongly to many of our own students’ re-evaluations of their experience of teaching and learning languages. However, the SLA research into learner characteristics, such as the relationship between language learning and motivation (Gardner, 1985) and intelligence (Genesee, 1976) has tended to be less conclusive and has also been carried out relatively more recently. This may explain the fact that the SLA cohort as a whole did not register significant degrees of change in their beliefs regarding these areas. Our combined cohort also remained
largely unpersuaded about the positive impact of interaction between non-native speakers on language learning despite aspects of this being supported by extensive current research into Task-Based Learning (Long and Crookes, 1985). This is particularly ironic, since it is precisely in this area of SLA research that the strength of the interface between theory and practice has been noted (Markee, 1997). One can only speculate that our students' lack of conviction might have been affected by two factors: again, the comparative recency of the research in this area (Markee, 1997, p.84); and the fact that cultural influences were still proving more powerful for them than empirical research. It is perhaps unsurprising that a one semester course did not entirely persuade our students of an alternative view of language learning, since - for perfectly valid reasons - many of them were probably only still emerging from a lengthy period of being positioned as passive learners.

*Undergraduate vs. postgraduates.* There are two areas of interest in which the undergraduate and postgraduate cohorts differed both before and after the course: error correction and the relationship between language teaching and language learning.

First, it is paradoxical that the undergraduate cohort agreed more than the postgraduate cohort with immediate classroom error correction at the beginning of the course but their degree of change was greater by the end of the course. Many of the undergraduates and postgraduates had come from teaching cultures where there is a low tolerance of error in the classroom. However, our undergraduates had been studying in an ethos of communicative language teaching for one year prior to the study, whereas most of our postgraduates had come directly to the program from their home countries. This may account for the fact that the undergraduate beliefs changed more by end of the course; but it does not account for the fact that they agreed more strongly with the idea of immediate error correction at the beginning of the course. Furthermore, the converse is the case with regard to parental error correction, where the postgraduates became much more assured of a non-behaviorist position by the end of the course.
Secondly, after the course the undergraduate cohort changed their beliefs regarding students learning what they were taught less significantly than the cohort as a whole. Moreover, they agreed significantly more than the postgraduates with the idea of staged presentation and practice of grammatical rules both before and after the course. In these respects, our SLA course would seem to have had little impression on them. However, these two positions would seem to have a certain consistency in suggesting that the undergraduates viewed language learning as more teacher-directed than the postgraduate cohort. This may be due to the fact that the undergraduate program was by its very nature more teacher-directed than the postgraduate program. It is possible that the undergraduates were responding here not so much to what they were taught but the way in which they were taught.

Theory into practice

It would hardly be adequate if all that happened on a TESOL program was a change in beliefs and assumptions. Central to Woods's (1996) conceptualization of BAK is the idea that changes in teachers' belief systems can also lead to changes in their perceptual/procedural systems, which in turn produces outcomes in terms of classroom practice. Although it clearly is a limitation of our study that we have no data from classroom practice relating to the changes in beliefs and attitudes that appeared to take place, we would argue on the basis of Woods's (1996) research that SLA theory actually does play a part in the development of the everyday classroom routines of prospective teachers.

However, from their comments, both orally and on their course evaluation forms, it would appear that our students were either unaware of, or undervalued, the changes that were taking place. Three factors might contribute towards this. We have already commented upon the differences between the discourse of educational research and classroom practice. Markee (1997, p.84) notes how inefficient SLA research is in particular when it comes to communicating with its clients, teachers. Secondly, our SLA course is not unusual in being clearly distinguished from other courses on classroom pedagogy on the B.A. and M.Sc. programs. As is the case else where, our students are also products of an educational system
which sustains the classification of knowledge into clearly bounded units (Bernstein, 1975). Both the framing of the teacher education curriculum and the corresponding socialization of students, militates against the ultimate re-integration of theories of language learning with their pedagogic application by their users. Finally, given that the teacher education curriculum is conventionally classified into research and theory courses on the one hand, and practical teaching courses on the other, it will tend to be the theory that becomes devalued in the current pragmatic intellectual climate where there is a "desire for immediate application of research to general education" (Kerlinger in Lightbown, 1985, p.180).

We would like to conclude by pointing up some possible ways forwards for the reframing of SLA research on teacher education programs so that student teachers might become more aware of the changes that are taking place in their beliefs, assumptions and knowledge and recognize their inseparability from pedagogic practice. Underlying this is the notion that the way SLA is taught, and in particular its contextualisation within a teacher education program, is at least as important as the content of the course. With regard to the exclusivity of educational research, Freeman (1996) argues that there is a need for a change in the genre of research to enable the teacher's voice to be heard. He goes on to say (1996, p.10) that narrative accounts of classroom experience which reveal the identity of the teller should be accorded the same validity as more objective research reports. The use of narratives could enable student teachers to identify more powerfully with their reading and might serve to compensate for some of the deficiencies in communication apparent in the conventional SLA literature (Markee, 1997, p.84). Student teachers could also be encouraged within the seminar to generate both oral and written narratives of their own experiences as language teachers or learners. If the voice of the language teacher is only partially heard within the discourse of language education, it is surely the voice of the language learner which is truly absent. In this way, student teachers might "develop their own systematic ways of communicating their own experientially derived understandings of what will challenge our preconceptions, suggest falsifications of some of our hypotheses, and enable teaching itself to develop more openly" (Brumfit, 1983, p.71).
Teacher education could also establish stronger links between the divergent discourses of educational research and classroom practice by educating prospective teachers in classroom-based forms of research and embedding teacher education in the classroom. Rather than students being positioned as the passive recipients of research and theory, they could be positioned as potential users. This would also help prepare them for more active future engagement in research as teachers (Stenhouse, 1975, p.192; Markee, 1997, p.89; Wright, 1992, p.204). This research could be contextualised within case-based methods (Richert, Shulman in Johnson, 1996, p.767) and portfolio assessment (Johnson, 1996, p.769).

The compartmentalization of educational knowledge within the curriculum of teacher education programs in TESOL could also be addressed, although this would be a major undertaking for any program. Rather than having discrete specialisms running ‘horizontally’ in parallel through the program, it might be possible to experiment with the idea of exploring ‘vertical’ topics in an integrated way. One unit would be devoted to ‘errors’, another to ‘strategies’ and so on. Each unit would provide a focus through which aspects of classroom practice could be explored from the most theoretical to the most practical level. For example, a module on errors would address psycholinguistic reasons for errors (often dealt with separately on an SLA course), linguistic descriptions of errors (often dealt with separately in a language description course) and techniques of handling errors (often dealt with separately on a methodology course).

**Conclusion**

In this paper we have observed that, despite student teachers' avowed aversion to SLA theory and research, certain changes in key beliefs in their own attitudes and beliefs towards language learning did take place during programs which included an SLA course. Taking on board Woods's (1996) argument that teachers' beliefs and attitudes are inextricably linked with classroom practice, we would argue that the theory and research component of these programs does have an effect on the evolving classroom
routines of our students. However, it has to be conceded that neither the discourse of educational research in which SLA is grounded nor the way in which SLA courses are framed within the curriculum of teacher education programs in TESOL make it any easier for the prospective teacher to come to terms with this often arcane body of knowledge. However, if some of the changes which have been suggested were to be implemented - of necessity over some considerable period of time - we might see SLA research and theory begin to become "more explicitly grounded in the real world" (Markee, 1997, p.88); and in so doing, be placed "back into its originating context"(Buchmann, 1984, p.434). Further research needs to be carried out to correlate changes in the beliefs, assumptions and knowledge of student teachers in TESOL with observable data of changes in their classroom routines in the context of micro-teaching or teaching practice.

Acknowledgements
We would like to thank our B.A. ELT and M.Sc. TESOL cohorts (1997 and 1998) for their good humor and persistence; also Patsy Lightbown for permission to use the questionnaire.

References


**Appendix I: content of undergraduate and postgraduate SLA courses**

**Undergraduate course**

Learning a first language (behaviorism, mentalism, interactionism)

Learner Language (contrastive analysis, error analysis, natural order)

Social Aspects of Interlanguage (acculturation and social identity)

Discourse Aspects of Interlanguage (input, output and interaction)

Psycholinguistic Aspects of Interlanguage (transfer, consciousness, communication strategies)

Linguistic Aspects of Interlanguage (Chomsky, TG and CPH)

Individual differences in L2 Acquisition (aptitude, motivation, the affective filter and learning strategies)

Interaction in Language Learning (groupwork and feedback)

Instruction and L2 Acquisition (form focused instruction and the natural approach)
Postgraduate course
First Language Acquisition (behaviorism, mentalism, interactionism)
Error Analysis and Language Transfer (psycholinguistic causes of errors; influence of L1 on L2)
Interlanguage (idiosyncratic dialects, approximate systems, interlanguage)
Monitor Model (Krashen’s approach to language learning)
Learner Differences (age, motivation, field dependence/independence)
Input in Language Learning (caretaker talk, teacher talk, foreigner talk)
Interaction in Language Learning (groupwork and feedback)
Learner Strategies (metacognitive and cognitive strategies, strategy training)
Teaching and Language Learning (form-focused instruction)

Appendix II: questionnaire statements
Languages are learned mainly through imitation.
Parents usually correct young children when they make grammatical errors.
People with high IQs are good language learners.
The most important factor in second language acquisition success is motivation.
The earlier a second language is introduced in school programs, the greater the likelihood of success in learning.
Most of the mistakes which second language learners make are due to interference from their first language.
Teachers should present grammatical rules one at a time, and learners should practice examples of each one before going on to another.
Teachers should teach simple language structures before complex ones.
Learners’ errors should be corrected as soon as they are made in order to prevent the formation of bad habits.
Teachers should use materials that expose students only to those language structures which they have already been taught.
When learners are allowed to interact freely (for example in group or pair activities), they learn each others’ mistakes.
Students learn what they are taught.