‘I have linguistic aims and linguistic content’: ESL and science teachers planning together

Abstract

This paper explores how the professional relationship between an ESL and a science teacher is constructed when planning a unit of work on genetics for a Year 10 science class. I will argue that the way the role relationships are realised in the conversation reflects to a large extent the status of the subjects within the school and makes the negotiation of subject knowledge problematic.

Introduction

For students who are learning English as a second language in an Australian school, English is both a target and a medium of education. In the secondary school context, the reality is that many of the ESL and NESB students spend the majority of their school time in mainstream subject classes, where they are not only learning the dominant language as a new language, but are expected to learn the relevant subject discipline in and through English as well. In Victoria, over the last decade, mainstreaming ESL has been seen as a way of assisting the ESL and NESB students to access the mainstream curriculum. While there are a variety of ways that mainstreaming has been implemented in secondary schools, one of the main ways has been the ESL and mainstream teachers working together in classrooms. The knowledge that we have about the nature of this relationship is anecdotal rather than based on documented study or researched understandings (Freeman and Johnson 1998). While focusing on organisational aspects of collaborative work is important, it nonetheless offers a simplistic view of the nature of this type of work (Arkoudis 1994). Moreover, no empirical research has investigated how the professional relationship is constructed between the ESL and mainstream teacher and what this reveals about the nature of this professional relationship.

This paper will focus on the ways in which an ESL and science teacher construct their professional relationship and negotiate their subject knowledge when planning a unit of work together.
Subject departments as discourse communities

Recent research (Siskin 1994a; Siskin 1994b; Siskin and Little 1995; Corrie 1995; Goodson 1995; Grossman and Stodolsky 1995; Gutiérrez 1998) reveals that subject departments play a critical role in teacher identity and the social organisation of teachers' working lives in secondary schools. Yet in secondary schools the division amongst staff is very much along subject discipline lines where subcultures are formed (Siskin 1991). Departments, Siskin found, function as distinctive — and often primary — social worlds, each with their own critical micro-political aspects. Siskin (1994a) suggests that the best place to find a socially cohesive community in a secondary school is within a department. The reason for this, she concludes, is that this is where teachers have concrete things to tell one another and where they can provide concrete instructional help. Teachers in departments turn to each other for assistance; these interactions between people create ‘social worlds’ with distinctive and shared perspectives. In these social worlds, Siskin found, teachers limit conversations about their school to their department, referring to it as ‘we’. She concludes that membership of a department means being part of a collective community.

However, most of the groundbreaking work of Siskin is centred around the academic subjects in the secondary school. While science is an academic subject, the status of ESL as a subject is questionable. In Victorian secondary schools, ESL is clearly not a traditional academic subject in the same sense as science. Indeed, in many secondary schools in Victoria, ESL does not exist as a separate discipline area, but as part of the English department. Siskin’s work, concentrating as it does mainly on academic subjects, does not problematise the cross-departmental comparisons among academic and other subject areas (Gutiérrez 1998). In certain Victorian secondary school contexts, comparing science and ESL departments would be equivalent to comparing oranges and apples. If it is true that teachers identify most with their academic subject disciplines, how does the institutional setting impact upon conversations between science and ESL professionals?

In order to investigate such a question, I conducted a study of a lesson planning conversation between two secondary school teachers. Jelford Secondary College, where the teachers taught, is a large post-primary school in the inner metropolitan area of Melbourne. It has a large ESL faculty and a long tradition of ESL teaching in the school. The student population at the time of the study was 734. The total number of students of a language background other than English was 95 per cent. Approximately 27 per cent of all students from language backgrounds other than English were targeted by the college’s ESL program. All teachers in the college have a number of ESL students in their classes.

The teachers involved in the study were Victoria, the ESL teacher, and Alex, the science teacher. They are both experienced teachers who have worked together for many years. Victoria has 12 years’ experience of teaching,
while Alex has 20 years’ experience. Victoria was initially an English teacher and gained her TESOL qualifications after teaching for five years. She is the coordinator of professional development in the school and has a higher status role in the college than Alex, who coordinates information technology.

**Framework of analysis**

The study draws on two theoretical frameworks for the analysis of the ESL and science teachers’ planning conversations. These are appraisal theory (Martin 1997; White 1998) and discursive positioning theory (Davies and Harré 1990; Harré and Van Langenhove 1991). The use of the two theoretical frameworks allows the study to focus on points of negotiated difference in the conversations and to find evidence to show how the professionals position themselves in the conversation.

**Positioning theory**

Positioning theory is a theory of social behaviour that highlights the ‘fluid patterns’ of ‘dynamic and ever changing assignments of rights and duties among a group of social actors’ (Varela and Harré 1996). It applies to the study of the planning conversation in terms of mutually contested rights and obligations of speaking and acting. Within positioning theory, Harré provides a framework which allows for a focus on the capacity of the teachers to position themselves and each other in the conversation (see Harré and van Langenhove 1991). The framework allows us to explore the mutual cooperation in the positioning and the reasons why this is occurring. This mutual cooperation is revealed through the teachers’ perceptions of themselves and each other as they negotiate the science and ESL curriculum in the planning conversation. This in turn offers some insights into how the teachers work together.

**Appraisal theory**

Appraisal theory (Martin 1997; White 1998), based on the systemic functional model of language, offers a linguistic analysis that explores the interpersonal relationship between the teachers by highlighting the linguistic resources they use for adopting and managing evaluative positions. Appraisal theory divides evaluative linguistic resources into three broad categories: attitude, engagement and graduation, and involvement.

Attitude applies to the values by which the teachers pass judgments, make assessments and associate emotional responses. It is graded in terms of positive and negative evaluations and it reveals the positions the speakers are explicitly adopting.

These are outlined below with some examples.

❖ Affect — values of emotional response. There are no examples in the text produced by the teachers that is presented below but typically this category includes such words as sad, content, angry
Judgment — values by which human behaviour is socially assessed. For example, *I think I probably misinterpreted*. Here the teacher is negatively judging what is required of him.

Appreciation — values which address the aesthetic qualities of objects and entities. For example, *that's interesting*. The teacher uses positive reaction in evaluating the other teacher's comments.

The second category is concerned with managing and negotiating positions through engagement and graduation. These are outlined very briefly below.

Engagement — meanings by which the teachers manage and negotiate positions within the conversation. In the case of this study, the teachers usually use open engagement, which signals that the teacher is open to negotiation, or closed engagement, when the teacher tends to assert his or her opinion. For example, close deny: *not of the content*; open probabilise: *I thought that's what you were going to do*; close proclaim: *you wouldn't do that*. (See White 1998 for a more detailed discussion of engagement.)

Graduation — values by which the teachers either raise or lower the interpersonal impact of their utterances (for example, *very successful*), or blur or sharpen their utterances (for example, *sort of successful*).

A further category of appraisal is involvement, which has not been explored as fully as the two categories mentioned above. Involvement refers to how the teachers share their interpersonal worlds. It includes the use of vocatives, slang and technical language relating to the teachers' subject discipline knowledge and general school terms.

The appraisal resources offer insights into the way the teachers negotiate their positions and maintain the solidarity between them. Furthermore, the appraisal analysis strengthens the framework provided by positioning theory by focusing on the analysis of evaluative language, which assists the commentary on the planning conversation (Freeman 1996).

### Analysis of an episode in the conversation

This extract is taken from the planning conversation for a lesson on genetics. In this extract, Victoria attempts to explain to Alex the role of content in language teaching. Tension centres around the teachers’ respective interpretations of the place of language and content in their teaching. Although this tension is present, Alex and Victoria continue to engage in the discussion and avoid conflict, or negative positioning. This extract begins with Victoria's reference to the concept map that Alex had given to her outlining what he thought should be in the unit of work.
ESL AND SCIENCE TEACHERS PLANNING TOGETHER

Key to transcript:
Appraising lexis is underlined.
Appraisal analysis is in bold.
Overlap between speakers is indicated with ==.
Capital letters are used to show emphatic stress and/or increased volume.
Short hesitations within a turn (less than three seconds) are marked by …

163 V: Yes … I … This concept map … when Sophie told me that you were going to do a concept map, I thought (engagement: open probabalise) that what you were going to do actually (graduation: sharpen focus) was to … um to do one of, not of the unit, not (engagement: close deny) of the content (involvement: technical language) but of how you would approach it … of your methodology (graduation: repeat and involvement: technical language) and the STAGING (graduation: high grade) that you would have in teaching but um … not that it matters but that was just my understanding (graduation: low and engagement: open).

164 A: Yes … well … what I think I probably (engagement: open probabalise with graduation: repeat) misinterpreted (judgment: capacity –) because … you know the word concept matter (involvement: technical language) comes into the vocabulary (involvement: technical language) just (graduation: low grade) meaning terms associated == with links and connectors.

165 V: == Oh yeah I …

166 A: == I think I probably misinterpreted (engagement: open probabalise with graduation: repeat) that. But I think MAYBE (engagement: open probabalise with graduation: repeat has the effect of low graduation) also what I hoped (affect: desire +) for was that if these were the concepts (involvement: technical language) that we would be able to TOGETHER (graduation: high grade) write in what the staging should be (engagement: open interactional) (mm hm) and what activities around … like rather than (engagement: close deny) putting links of just (graduation: low) simple verbs (appreciation: composition and involvement: technical language) on our rows we could (involvement and engagement: open probabalise) put activities in the classroom on our rows (involvement and graduation: repeat) and we’d (engagement: open probabalise) see how we’d go (graduation: repeat). NOW (graduation: high) we (involvement) probably don’t (engagement: open probabalise and close proclaim) have a lot (graduation: high grade) of time to do that right now but THAT’S (graduation: high grade) the sort of thing (graduation: focus soften) that maybe we should try to do (involvement with engagement: open probabalise). You know …
what ... what sorts of activities? (engagement: open) Unless ... you know ... in the confines of this discussion, language activities.

167 V: Mmm (engagement: close deny) ... just before we do that can I just say that (engagement: close proclaim) ... ahh ... that’s interesting (appreciation: reaction +) in itself because you’re concept mapping the content whereas I’m ... whereas I would concept map the staging and that’s a reflection on, I guess (engagement: open probabilise), of the fact that [pause — 3 secs] being your subject the content is apparent whereas in mine ... um ... ESL isn’t a content (engagement: close deny) in the same sort of sense (graduation: focus soften) and so it's more of the staging and the teaching and the learning process things that I would probably (engagement: open probabilise) ... in MY (graduation: high) planning go about um ... and I think (engagement: open probabilise) that’s a problem sometimes with ESL teachers talking to subject teachers (mm) because we don’t (engagement: close extra vocalised and close deny) have um ... a sense of content in quite the same way (graduation: focus soften) like we’re a bit indiscriminate (judgment: tenacity– and graduation: focus soften) in a way, like to me almost it doesn’t matter (engagement: close deny with graduation: low grade) what the content, (mm) I mean it does matter (engagement: close proclaim). I don’t mean that (engagement: close deny) but I mean (graduation: repeat) the ... the content is a vehicle whereas for you the content is obviously more primary. Is that right? (engagement: open question)

168 A: Well [pause — 3 secs] I find (engagement: close proclaim) that a little bit (graduation: low grade) difficult (appreciation: valuation) to accept in that ... you know ... I have a difficulty (engagement: close proclaim) with the word CONTENT (graduation: high grade) in what you’re saying because REALLY (graduation: focus sharpen and high grade) content is something you must (graduation: focus sharpen) have an idea about (engagement: close proclaim) otherwise you wouldn’t (engagement: close proclaim) really (graduation: focus soften) be able to structure anything ... I don’t think (engagement: close proclaim). Now you have to (engagement: close proclaim) sort of (graduation: focus soften) ask yourself what you’re trying to teach.

169 V: Yes ... I have linguistic aims and linguistic content (engagement: close proclaim/involvement: technical language) you know == but

170 A: == They sound really (graduation: high grade) vapid (appreciation: valuation –) but I know they’re not (engagement: close counter-expect).

171 V: (laughs) It doesn’t matter (engagement: close proclaim) whether ... you know ... that the ... that the content (involvement: technical
language) that I'm dealing with, you know, whatever topic in science or is in science or is in history (involvement: technical language) or is in whatever ... um ... I'm still (graduation: high grade) enabled to teach (mm) the same linguistic structures and features and FUNCTIONS (involvement: technical language and graduation: high grade) and um you know ... it's very easy (graduation: high grade and appreciation: composition +) to adapt == to different

A: == But don't you start out if you do a lesson, don't you start out (graduation: repeat) by saying OKAY (graduation: high grade) today is, you don't say it's adverbs, you don't say today it's conjunctions (involvement: technical language). == It's quite random (graduation: high, judgment: capacity –) which is covered? (engagement: open question)

V: == No no no (graduation: high repeat, engagement: close deny). It's not random (engagement: close deny) at all (graduation: high grade) um ... but (engagement: open probabilise) ... probably (engagement: open probabilise, graduation: repeat) [pause 3 secs] you know ... I'd think (engagement: close proclaim) ... you know ... of what are the particular language functions (involvement: technical language) so not ... so not (graduation: high repeat) the structure so it's not adverbs (involvement: technical language) and stuff like that (graduation: low grade). You wouldn't do that (engagement: close proclaim), BUT (graduation: high grade) that you want (affect: desire +) students to be able to describe or to explain or to um ... justify (involvement: technical language) or do you know THAT (graduation: high grade) would be ... that would probably be ... you know probably (engagement: open probabilise, with graduation: repeat) come from more a functional (involvement: technical language) we'd (engagement: close extra vocalised) call it, in our terms we call it ... in ESL terms we'd call it a more functional sort of approach (judgment: capacity + with high graduation proceeding it and low graduation following it) and that we (engagement: close extra vocalised) would be looking at different umm text types (involvement: technical language) that they would need to use, to understand ... to both understand and to produce, (mm) to be able to do that um ...

Discussion

The analysis of the appraisal lexical resources used by Victoria reveals that predominantly she uses low graduation and open engagement which signals that she is deferring to Alex as the more powerful in this relationship. This is demonstrated in turn 167 when she first contradicts herself and then defers to Alex's opinion:
like to me almost it doesn't matter (engagement: close deny with graduation: low grade) what the content, (mm) I mean it does matter (engagement: close proclaim). I don't mean that (engagement: close deny) but I mean (graduation: repeat) the ... the content is a vehicle whereas for you the content is obviously more primary. Is that right? (engagement: open question).

It is only after he uses humour to make a negative evaluation of what she has said that Victoria is forceful in voicing her opinions. This leads Alex, in turn 172, to inquire more about how Victoria plans her ESL teaching.

It is at this point that Alex demonstrates a willingness to understand Victoria’s views on teaching ESL. His intention is to listen and to understand. Where the tension lies is in Victoria’s inability to explain what she means by ‘linguistic aims’ and ‘linguistic content’. For Alex this comment is confusing. He has difficulty conceptualising a lesson without any content, especially as content is pivotal to his teaching. Victoria situates her justification for how she plans lessons in concepts that are not shared by Alex, and therefore he finds it hard to understand her perspective. What do ‘linguistic aims’ and ‘linguistic content’ mean? Victoria does not make it clear. Prawat (1998) highlights that knowledge should be situated in the activities and the situation in which they are produced. Victoria uses concepts to express her pedagogy. By locating it within the broad concepts of linguistic aims and content, rather than offering concrete examples from within the topic of genetics that they are discussing, communication between them is hindered.

Furthermore, the low graduation of Victoria’s lexis throughout this extract contrasts with Alex’s frequent use of high graduation to assert his subject knowledge. He appears more certain than she does in expressing his subject knowledge. In this extract, Alex clearly is the more powerful and Victoria’s linguistic choices reflect this. It might be argued that this is the linguistic realisation of the gender expectations of our culture, namely ‘that women are conversationally “supportive” while men just sit back and perform’ (Eggins 1994). I would argue that while gender is a factor, it is not the sole influence in the way the teachers construct their professional relationship. Victoria’s self positioning as less powerful reflects in part the relative status of the two subject disciplines in the school, and the nature of the working and planning that ESL teachers do with mainstream teachers.

Victoria is in a vulnerable position because the planning conversation is centred around the science and not the ESL curriculum. The content of science is the driving force in this discussion. In an earlier extract from the data both teachers positioned this conversation firmly within the science domain. Science, as a subject discipline, has a longer history within the school and is valued more than ESL as an academic subject. Moreover, ESL, unlike other academic subject disciplines, attempts to overarch all curriculum areas and assist mainstream teachers in catering for the needs of ESL students. Difficulties emerge because ESL teachers are entering specific discourse communities where pedagogy and subject knowledge are viewed differently
And ESL teachers, in their pre-service training, are ill prepared for cross-disciplinary collaboration.

In this conversation, Victoria lacks what Harré and van Langenhove (1999b) refer to as the moral capacity to discuss science. It is not within her duties and obligations in the school, but rather within Alex's, because teachers in secondary schools identify with their subject discipline (Siskin 1994a). Therefore Alex asserts his opinion through the use of high graduation and closed engagement because science is his area. In contrast, Victoria uses low graduation and open engagement to manage and negotiate her self-positioning as supportive of the conversation. At no point within this extract or the rest of the conversation does Victoria assert her opinion about the role of language in the science curriculum. While Victoria has more status than Alex within the school, when it comes to planning together she constantly defers to him. This occurs because of the status relationship between ESL and science, and the difficult task that Victoria has in recontextualising her subject knowledge in planning the topic of genetics.

In this extract Victoria attempts to explain her methodology, but appears uncertain about what she is saying. In fact, she sounds confused. In an interview after the conversation, she commented on the difficulty she experienced in articulating her subject knowledge to Alex. The uncertainty she reveals during the conversation is explained by the fact that she is unsure about how Alex will respond to her comments. Moreover, she is unclear about what aspects of her subject knowledge she should share with Alex. What does ESL methodology mean in collaborative planning? Is it teaching strategies? Is it focusing on linguistic development? This lack of clarity results in Alex and science dominating a conversation that was aimed at balancing the science and language curriculum.

Harré refers to ‘personas’ as ‘the selves that are publicly presented in the episodes of interpersonal interaction in the everyday world’ (Harré and van Langenhove 1999a: 7). Alex is more dominant than Victoria and the appraisal lexical analysis reveals this. Yet, the cooperation of the personas in this conversation depends on the social cooperation of both teachers. Victoria’s supportive persona enters the ‘social space’ (Harré and van Langenhove 1999a: 8) only in so far as it is recognised, responded to and confirmed in the utterances and actions of Alex. That is, Alex’s interaction with Victoria supports her self-positioning. The same is true of the way Victoria’s utterances and actions confirm Alex’s persona in this conversation. They are mutually constructing their professional relationship. So, even though Victoria has more status than Alex in terms of their positions in the school, when it comes to planning together, Victoria positions herself and is positioned by Alex as less powerful. This positioning is realised in their utterances, and reflects, in part, the status of the subject disciplines and the teachers’ own perceptions and experiences of working together. This results in the science curriculum being the main focus of the planning conversation and the ESL curriculum being reduced to a few strategies that assist in teaching the scientific concepts.
Conclusion

Science within the school and the Victorian Department of Education is acknowledged as a key curriculum area. It has its own set of outcomes and is viewed as an academic subject within the curriculum. ESL does not have a clear identity as a mainstream subject and is often marginalised within the school. In ESL and mainstream teacher collaboration, the ESL curriculum is often reduced to a focus on a few teaching strategies while the mainstream subject material gains prominence in any collaborative work (Arkoudis 1994). This raises some key questions. Is ESL a content area with its own set of linguistic knowledge and content? How can it be seen as a viable methodology to support the teaching of the content of the mainstream subject? How do we as a profession conceptualise the role of the ESL curriculum within cross-disciplinary work?

If the ESL profession believes that part of an ESL teacher’s work involves planning and teaching with mainstream teachers, then we need to explore what we mean by this and develop frameworks that will guide ESL teachers’ work in this area. This study is a small step towards acknowledging the complex nature of the professional relationship between a mainstream and ESL teacher. It highlights a key pedagogic issue, that is, the need to conceptualise the relative roles of the ESL teacher and the ESL curriculum in this collaborative work.

References

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