

Facilitating co-authoring: Reflections of content and language lecturers

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Abstract

During a content and language project at a University of Technology (UoT) in Cape Town, South Africa, pairs of language and content lecturers, whose broad definition of integration was 'the provision of linguistic access to content knowledge', co-authored ten integrated textbooks. Their intention was to assist first year learners with their academic work. I previously reported on a study during which I identified – and pondered reasons for three types of content and language integration that were evident in these textbooks (Wright 2004). Now, in this article, I draw on findings from subsequent interviews with two pairs of the co-authors who focus on factors that impacted on their attempts to integrate content and language in the textbooks.

The article concludes that, in preparation for collaborative partnerships between content and language specialists, attention should be paid to factors that have the potential to affect collaborative efforts to integrate content and language, namely access to the disciplinary discourse, roles and responsibilities, and the manner in which conflict is managed.

BACKGROUND

A project at a University of Technology (UoT) in Cape Town, South Africa, involved ten pairs of lecturers, each pair comprising one language and one content lecturer. The project goal was to facilitate learners' linguistic access to the knowledge base of each content lecturer's discipline. This goal was strongly influenced by Crandall's (1994, 256) contention that '[s]tudents cannot develop academic knowledge and skills without access to the language in which that knowledge is embedded, discussed, constructed or evaluated. Nor can they acquire language skills in a context devoid of content'. Empowering learners in this way was considered important and necessary for these reasons: (a) the majority of learners were/are from disadvantaged socio-economic and educational backgrounds; (b) these learners are often under prepared for higher education; and (c) English, the medium of instruction, is often their second, third or (sometimes) fourth language. The project goal was also in line with the language policy of the institution at the time.¹

The project members regarded the co-authoring of ten integrated textbooks as an important outcome for the project. The materials in these books were to reflect the integration of content and language aspects such that the language and pedagogic

aspects would encourage learners to engage with the core concepts of the discipline (as appropriate at entry level).

Few lecturers in the project – whether content or language – had previous experience in academic writing and publication. The project leader, plus two education consultants (one external and one internal) guided and supported group members as they developed common understandings of aspects such as language and learning, curriculum development, materials development, educational theory, and the mutual relevance of language and content. Co-authors scheduled mutually convenient meeting times; and the full group gathered for a monthly two-hour workshop.

As a Communication lecturer, I collaborated with two science lecturers in the Faculty of Science. We introduced our curricula to each other and identified areas where, in various ways, we could collaborate to facilitate the learners' access to the content by highlighting the linguistic aspects of that content. We then began to co-design teaching and learning materials.

My experiences of collaborating and co-authoring with these colleagues were quite different: Colleague A had little or no formal language or pedagogic background; Colleague B, by contrast, had some background in both, in addition to her disciplinary knowledge. Possibly because of this, Colleague A and I struggled to work together productively in some respects. I needed her help to be able to work with the highly technical language and concepts in the material and became frustrated when progress was slow. When it seemed that conflict was imminent, I withdrew and wrote the book largely alone.² Colleague B and I collaborated more easily, probably because she was confident and competent to integrate many of the language competencies with the concepts of her discipline. My role was more that of a consultant, as I reviewed draft sections and made suggestions. Consequently, she authored most of that book.

At the completion of the project, several integrated books for ten disciplines were published. However, I was not satisfied that 'my' book represented true integration of language aspects with the content of the discipline and wished to analyse it and then compare it with the other published books. Even though I had seen draft sections of most of the other co-authors' books over the years of the project, I had not carefully examined the completed books. In an earlier paper (Wright 2004), I reported on a study during which I examined and identified three types of integration evident in the textbooks and pondered possible reasons for these distinctions. Six of the ten textbooks (including 'my' book) exemplified a type that I titled, 'Language with content exemplars' because the books were clearly based on a communication curriculum, rather than on a content discipline. Content was introductory and technically simple. Chapter subheadings (e.g. 'The writing process'), suggested that these books were probably written primarily by language authors.

Three books fell in a category that I titled 'Content with "natural" language³ exemplars'. Of these, two were partially integrated, and one was fully integrated. Core concepts of the content provided the organising logic of chapters, with language

aspects integrated to support these. However, it was noticeable that some language aspects were included without an explanation of their relevance to the discipline. For example, a kind of generic workplace communication was discussed, without reference to a specific, relevant workplace context.

One book fell into the third category that I termed ‘Content with (largely) “unnatural” language inserts’. The content and language aspects were well written and were balanced fairly equally, but their interrelationship was not made explicit to the reader (Wright 2004). From this study, I concluded that language authors (with their educational and language background) understand the grammatical and rhetorical functions of language in generic contexts (e.g. the business letter, the report). However, they usually do not have the content lecturers’ situated knowledge of how these genres function in the workplace (although the content lecturers’ knowledge may be tacit). Without prior knowledge of the disciplinary discourse, language lecturers are likely to struggle to access the meaning of this discourse and use it successfully themselves, particularly if it is highly technical. My article concluded that achieving integration is complex and requires caution and sensitivity, as crossing subject boundaries is somewhat like crossing territorial ones.

The current article is a sequel to that initial study. Here, I focus on the reflections of two pairs of co-authors on their experiences of writing their textbooks. My aim was to understand how the different types of integrated materials had evolved and the factors that had eventuated in their final form. I begin by describing my methodology and then discuss emergent themes in relation to relevant literature. I conclude by considering the implication of these findings for future content and language collaborations.

METHODOLOGY

Babbie and Mouton (2004, 80) observe that exploratory studies are suited when the research is intended to ‘. . . satisfy the researcher’s curiosity and desire for better understanding’. Such studies may involve in-depth interviews to assist in gaining insight and understanding. To explore the co-authors’ notions of the extent of content and language integration in their books and the factors that had affected their co-authoring, I conducted such an exploratory study. I selected two pairs of authors. One of these pairs had co-authored a textbook of the most prevalent type, namely ‘Language with Content exemplars’; the other pair had co-authored a partially integrated example of the type, ‘Content with “natural” language exemplars’ (Wright 2004). I interviewed all authors individually using semi-structured interviews (see Appendix A). Questions asked were identical, but the terms ‘content’ and ‘language’ were exchanged. Interviews were audio-recorded, then transcribed. Each interview transcript was read several times, and ‘t-units’ identified (Geisler 2004, 31). These were coded and analysed to clarify the co-authors’ perceptions of the textbooks and factors affecting the process of co-authoring. Analysis of interview transcripts indicated various recurrent themes, which will now be discussed. To protect the

identity of the participants, I have referred to all participants as 'she' and omitted the names of their disciplines.

FINDINGS AND DISCUSSION

Authors expressed some positive reflections on the textbooks: they were professional-looking; and publishing a book is a 'feather in one's cap'. However, there was also disappointment, because the books were not fully integrated. For example, an author observed: 'It's [integration]⁴ not explicit enough . . . This book looks too much like a Communication book . . . I would try to change that to reflect more the integration.' She added: 'I think I'd bring in more (subject)⁵ content, because there's too little . . .' Her partner similarly commented: 'It's one of the problems that I have with this book' [i.e., it looks like a Communication textbook].

When asked to discuss factors that affected their co-authoring of the books, the authors cited the following three issues: access to the discourse; roles and responsibilities; and managing conflict.

Access to the discourse

Wenger (1998) argues that one must be a social participant of a community to learn its discourse. The majority of content and language lecturers had not had prior access to their partner's discourse community, therefore they were unfamiliar with its discourse.⁶

During the interviews, language lecturers cited the inaccessibility of their content partner's discourse as an obstacle to integration of the disciplines. A language lecturer said that the foreignness of her partner's discourse meant that they had to choose introductory material instead of the material that the content lecturer alone would have chosen. As she explained, ' . . . we were just starting, we weren't sure how to do this and so we took what was easy for us to work with'. Her content partner commented: 'There's a whole lot of discipline-specific stuff that's not covered here . . . more technical stuff'.

What prevented some of the pairs of lecturers from helping each other access their respective discourses? Personally, I question whether lecturers realised that their particular discourse – which was normal to them – was often utterly foreign to their partners. Bernstein (1999, 162) points out that integration across fields is very difficult, because of what he terms 'specialised languages', 'specialised modes of interrogation' and 'criteria for the construction and circulation of texts'. These aspects are not easily translatable. Also, once one has acquired a new discourse, much of this knowledge becomes implicit (Geisler 1994) and is thus difficult for experts to share. It is widely accepted (e.g., Polanyi 1983 and Eraut 1994) that few experts can explain what they do, how they do it, or why, even if they are able to demonstrate what they do. Yet some, like Wenger, McDermot and Snyder (2002, 9), argue that tacit knowledge can be made explicit and that it is important that this occurs, as the tacit aspects of our knowledge are the most valuable, representing as they do an 'embodied

expertise', a depthful, complex understanding of the structure and dynamics of an issue or system. To achieve this, they suggest sharing through interactive informal processes like storytelling, conversation, coaching and apprenticeship, all of which simulate practices of communities.

The issue of access to disciplinary discourse raises an important issue: in a co-authoring partnership, who is best placed to assist learners acquire the disciplinary discourse? Bhatia (2004; 2007) comments that experts use language tactically. Doing so requires language competency, not only in the sense of language proficiency, but in the sense of understanding the contextual and rhetorical aspects of various disciplinary genres and knowing how to negotiate these to achieve goals, even in unfamiliar contexts. Achieving such subtle mastery is clearly a great challenge to any learner (more so when the medium of instruction is not the learner's home language and that learner is under prepared for higher education). If the learner were a language lecturer, how would she cope? Even with adequate language proficiency, being outside that discourse community with its situated professional genres and rhetorical conventions means that language lecturers would probably struggle to assist learners to achieve this mastery. However, a content lecturer, who has only tacit awareness of this knowledge, might not be in a much better position. Jacobs (2004) argues that language lecturers are like many learners in that they, too, are often ignorant of the content lecturer's disciplinary discourse; but, unlike learners, they share a comparable status with content lecturers, making it possible for them to assist their content colleagues to 'unlock' the tacit knowledge of their discourse through questioning and discussion.

Previously (Wright 2004), I conjectured that prior exposure to a particular disciplinary discourse (e.g., through studying) would facilitate a language lecturer's ability to integrate language with content (particularly technical content) because that lecturer would then have prior insight into the knowledge structures, theories, concepts, values and practices (i.e., the discourse) of the other discipline. During the author interviews, this conjecture was confirmed: a language lecturer stated that integration had been facilitated by her having previously studied that subject at university for a year. She stated: '... one could marry those things ... it made it easier'. By contrast, the other language author, who claimed that she had 'very little' knowledge of her partner's (mostly) highly technical discipline before the project, commented that the only reason that integration succeeded in one section of their book was because the content was not technical. She reflected: '... as far as that ["non-technical" subject area] is concerned, I think anyone can do that, because there's no maths involved ... I wouldn't be able to do it if there was maths involved. I'm no good at maths'.

Of course, a language lecturer's discourse may also be inaccessible to her content partner. As a content lecturer explained, she found it difficult to grasp the language and pedagogic aspects that were commonplace to the language lecturers: 'I remember how horrified I was at the very first integration workshop ... all these theories ... I was absolutely intimidated. I wasn't in my context.'

Boundary theory may also explain why pairs of lecturers from different disciplines, each with a particular discourse, might struggle to integrate their disciplines. Rifkin and Martin (1997) explain that experts demarcate their field of expertise through linguistic and activity cues (i.e., discourse), because some groups have higher status than others; and Klein (1996) too argues that stakeholders protect hegemonic knowledge practices. In education systems, disciplinary boundaries may indicate where competing notions of expertise are at play (Geisler 1994 and Norgaard 1999). The traditional disciplinary divides, which are often invisible, militate against integration of knowledge systems. These divides are not overtly discussed, and perhaps even held unconsciously, making them more challenging to cross than visible divides (Gans 1992).

To relate this to the content and language integration context, in my experience language lecturers typically have a somewhat lower status than their content colleagues. This may be owing to the (usually) entry-level position of their subject in content programmes (although many other entry-level subjects do not experience this low status). Perhaps it is because the subject, Communication, tends to be termed a 'service' or 'soft skills' subject. Such labels suggest that the subject is not to be taken too seriously, or that it is 'easy'. Content lecturers may thus anticipate little personal or professional benefit in adopting the role of a literacy specialist in their field.

A final issue related to acquiring full competency in the discourse of another discipline is that it requires much time, energy and training (Bazerman 1994). Some believe that full competency in the other discipline is neither necessary nor desirable (Start and Griesemer 1989). Nevertheless, if the required time, energy and training can be accommodated to support partners who wish to acquire reasonable competency in their partner's discourse (in the interests of better integration to support learning), a realistic time frame and a structured programme will be necessary.

To conclude, there are thus several reasons why it is difficult for specialists to access each other's discourse. While some knowledge of this discourse promotes confidence and facilitates content and language integration in co-authored texts, this knowledge is not always simple to acquire, particularly when the discourse is technical. There may also be vested interests that inhibit lecturers, whether consciously or unconsciously, from openly discussing and sharing what they know about their discourse; or they may be unable to do so, as the knowledge is tacit. It may or may not be possible to 'unlock' this tacit knowledge; and to do so may require time, energy and motivation.

Roles and responsibilities

Blau (1991) defines a role as an implicit or explicit set of behaviours, but also a social contract. Role is linked with one's position or status (along with expectations of rights and duties) and should be defined before project work begins. During interviews, co-authors acknowledged shortcomings in the books and attributed this to poor team work that, in turn, probably resulted because expectations regarding roles and responsibilities were not explicitly discussed. One author said: 'The way

we worked together is not . . . the ultimate way of doing this. Basically, I did some (A) stuff and she did the (B) stuff'. The same applied in the other partnership.

According to Wisinski (1995), team members need to discuss their roles and responsibilities as regularly as necessary; agree upon how to fulfil tasks; and respect deadlines. Sometimes these discussions and agreements did not occur, possibly because there was not enough time for team members to develop a comfortable working relationship. As Sonnewald (1996) points out, time is crucial for the development of interpersonal bonds. The interviewees explained that each author certainly held expectations regarding their respective roles, but these were rarely expressed. An author stated: 'I wasn't always sure, should I be doing this, or how much of this should I be doing'? She said that in only one instance were roles discussed, and then only 'a bit', initially. Another author noted that poor role definition resulted in an uneasy relationship between her and her partner: 'It wasn't always discussed; I thought we didn't have clear guidelines as far as that [role definition] was concerned.' She concluded: 'We should first identify our roles quite clearly'.

Kennedy (1986) notes that accomplishing tasks requires a joint approach, yet people may struggle to be members of a team, particularly independent decision-makers. An author, who was accustomed to working independently, reflected on her usual work experience: '... if I wanted to get the job done, I'd go in and do it myself'. By contrast, her partner wanted to work collaboratively. She commented: '... maybe I'm just not good at doing things on my own, all the time. I like a team . . .'

Regarding leadership, the content partners in both partnerships assumed that the language partner would lead. This seems to be related to the content lecturer's lack of confidence and limited insight into language aspects and the subject, Communication. As one of the content authors stated, '... because of my lack of knowledge of the Communication part, I started off thinking. I'll simply . . . be driven by the Communication person . . .' She added: '... somebody [i.e., the person] writing must be a Communications person'. Indeed, the other content author said that she had only agreed to join the project on the basis that her partner was a language expert: '... the thing that gave me confidence . . . there's going to be a person with knowledge about Communication . . . I won't be on my own'. She acknowledged that this expectation was '... something that created a problem for the partnership'.

Perhaps because of their language expertise, language lecturers may be assumed to be the obvious authors in a partnership. However, this suggests that (a) materials are only developed by language lecturers; (b) language lecturers necessarily have more experience of materials development than content lecturers; and that (c) content lecturers do not write.

In conclusion, project preparation should include the definition of roles and responsibilities to avoid later misunderstandings and frustration.

Managing conflict

Not preparing for conflict is apparently not unusual. According to Drinka (1994, 92), in the initial stages of a project, '[c]onflict is neither discussed, nor addressed.

Typically this is a stage where accommodation is overused, as members size one another up and hesitate to assume strong positioning in the team'. Initially, project members were overtly enthusiastic, even though there was uncertainty about what was to come. However, naïve as it might seem in hindsight, neither the project leaders nor the authors articulated the possibility of conflict arising between partners during the project. Personally, I would not have mentioned it lest it seemed negative.

That co-authors would have had differences of opinion about aspects of the co-authoring process is not surprising. Certainly, in my experience, a different perspective from one's own can often be illuminating and open avenues of creativity and opportunity. However, an unwillingness to negotiate and compromise when there are differences can have negative consequences. The partners had significant differences in preferred work style and vision that seemed to influence their progress and created interpersonal tension. In none of the interviews was the possibility of compromise mentioned. One author admitted, 'I'm not a very structured person. I prefer not to work like that because I can't think like that . . . all kinds of directions at the same time . . . If I get a brainwave, I want to sit down and do it . . . I'm not into this straitjacket thing . . .' By contrast, her partner needed structure and found it difficult to move ahead without it. They did not, apparently, negotiate this, so did not reach a compromise and generally worked separately.

Another author considered that it was owing to the absence of a common vision that collaboration with her partner had failed: 'I'm not sure if it's who you work with, their philosophies and their outlook on what they're doing and what they have to do'. She added that, without a common focus and synergy, '[i]t will be like running up a desert dune . . . you'll just be in one spot all the time, making very little progress'. Another author expressed this difference in vision as follows: 'I was thinking long term and my partner was thinking short term'. She added: 'I visualised the book . . . to a great extent as a comic . . . with a dialogue and story line'. By contrast, her partner envisaged a functional, introductory textbook for the discipline.

When conflict arose, authors were unsure how to deal with it productively. An author reflected on her customary response to conflict with her partner: 'If there is a problem, I don't speak until there's an explosion'. She stated that she did not draw on the project facilitator to mediate the conflict: 'I should have made more use of her and I didn't . . . If I had done that, maybe I would have been able to negotiate, maybe this book would be better than it is, but I didn't do that'.

Wisinski (1995) suggests that logic, not emotion, should be used to negotiate and maintain balanced team relationships; and Weiss (1997) stresses the importance of fostering mutual respect in team members so that disagreement is not detrimental to teamwork. However, maintaining this balance under duress and without prior preparation is often challenging. Drinka (1994) identifies withdrawal as a fairly common option to avoid conflict (as in my case). Its disadvantage is that, while it temporarily reduces discomfort, it fails to remove the causes of conflict. Three of the four co-authors admitted choosing this option. One of the lecturers explained her rationale: ultimately she felt that the book had become more important than the

partnership and so she felt withdrawal was her best option: ‘It was quite difficult with the partnership itself . . . in the end, I felt . . . maybe I should be out . . . this book is more important than the partnership’. Following this, her partner became discouraged, believing that she alone was left accountable for the production of the book. She complained: ‘. . . it was supposed to be a joint thing . . . but in the end, I felt that I had to answer . . . and that wasn’t how I’d envisaged it’. Another author likewise became discouraged and demotivated: ‘I also felt, to be honest, if my partner was losing interest, why should I kill myself’?

To summarise, the extent to which content and language may be successfully integrated by collaborating co-authors seems to be directly influenced by factors that are not necessarily anticipated. Planning to address these in advance may help co-authors achieve their goals. One of the most critical of these is encountering the disparate discourses of one’s partner’s discipline. By the very nature of the collaboration (i.e., between experts from often very different disciplines), co-authors should anticipate that prior understanding of each other’s discourse is likely to be challenging and they will need to communicate sensitively and help their partner to grasp the essentials of their discourse. This process may take time, motivation and patience on both sides.

In terms of achieving a workable, enduring partnership from the outset, both parties need to agree explicitly – and then monitor regularly – their agreed roles and shared responsibilities such that there are, preferably, no hidden false assumptions that may arise later and disrupt the progress of their work. If disagreements arise – as they inevitably will – agreement should be reached beforehand on how compromise will be achieved (e.g., through a third party or project mediator), as unresolved conflict (or conflict avoidance through the withdrawal of a partner) can lead to the failure of the project to achieve goals.

CONCLUSION

If the envisaged goals of co-authoring are to be realised (viz, the full provision of linguistic access to content knowledge to help learners succeed in their academic studies), then the issues discussed in this article indicate that the pitfalls experienced by the co-authors during the project could be avoided or reduced through prior planning and preparation. Developing clear notions of roles and responsibilities, planning for immersion (as far as possible) in one’s partner’s discourse, and understanding how possible conflict will be managed are all aspects that should be anticipated, discussed and agreed upon in advance.

Despite the pitfalls and challenges involved in the project, during the interviews the co-authors agreed that they still supported interdisciplinary collaboration and co-authoring. They also believed that, were they to collaborate again, they would do better and they would be able to take integration further. As an author said, ‘But it [integration] can be even more than that [what it had been in the project] . . . I think that there is a lot of potential, it can have so many dimensions that I haven’t explored’. One of the content authors, who had originally stated that she would not

be able to go ahead without her language partner, later stated that her grasp of her partner's discourse had improved and along with it her confidence in using that discourse: 'I think I could do it 80 percent on my own now . . . that's how I feel; . . . my sense of the importance of it . . . has changed my perception completely'.

NOTES

- 1 The 2003 language policy specified English as the medium of instruction. An adequate grasp of English was regarded as important for learners' future upward mobility, because English is the accepted leading language of commerce and industry in South Africa. The policy advised that all learners, but especially those at first year level, should receive support to cope with the academic demands of their studies. Multilingualism (e.g., the development of multilingual glossaries of new core concepts in the discipline) was also advocated as a means of helping learners from diverse language backgrounds access the disciplinary knowledge base.
- 2 An interesting development occurred after the end of the project. Colleague A, who had withdrawn from the co-authoring process during the project, subsequently authored her own book for the second level of her subject. At her request, I perused draft chapters and suggested the inclusion of language and literacy aspects that would encourage learners to engage with the concepts in the chapters. I believe that this second book now more closely matches my notion of a textbook that integrates the discourse of the subject with language in ways that are pedagogically sound. As it was not written for entry level, it has the benefit of reinforcing many of the literacy aspects introduced in the entry level book, and these are based on content that has been selected and organized by the content specialist. Since then, I have also authored two other books in collaboration with content lecturers. In the first case, I chose to write the book, as I was teaching in that particular department; but the field was very technical and, once again, I was the sole author, although content lecturers kindly commented on the materials as they developed. In the case of the second book, a content lecturer who was eager to develop materials for her subject, approached me to write a book for one of their subjects. She provided me with relevant material. As the field was less technical in nature, I was able to understand the material fairly easily and, in consultation with my content colleague, was therefore able to integrate language and literacy aspects more easily with the discourse of the discipline. Although this colleague commented on what I had produced and made a few suggestions, I was once again the sole author.
- 3 'Natural' language would be the disciplinary discourse, including its genres and rhetorical forms, even if such language might be considered 'unnatural' from a common sense perspective. Natural here also refers to the natural and explicit way in which the content and language aspects of a text are interwoven and interrelated.
- 4 Square brackets indicate where I have provided an explanation of what the interviewee was referring to, where the quotation is abstracted from its full context of discussion.
- 5 Rounded brackets indicate where the name of the subject or discipline is being protected for ethical reasons.
- 6 To understand my use of the term 'discourse', I refer to Gee (1990) who notes that literacy practices always have a social context, such as is the case in a disciplinary culture in higher education. In this article, I generally use the term 'language' quite broadly to distinguish language from content; but, in my discussion of accessibility of discourse,

I draw on Gee's (1990) distinction between 'language', 'literacy' and 'discourse'. 'Language' indicates knowing how to use language correctly (the lexico-grammatical forms of a language). 'Literacy' refers to more than the common understanding of literacy (i.e., one is able to read and write). Rather, 'literacy' indicates that one has an understanding of, and is able to engage with, appropriate social and cultural literacy practices embedded in a particular context. 'Discourse' includes both 'language' and 'literacy' but is ultimately more, as it indicates that one has acquired knowledge of how to use language and literacy appropriately together with the historically and socially defined practices and underpinning values of a discourse community. Acquiring a discourse thus means acting according to unspoken 'rules' and 'norms' of such a community.

REFERENCES

- Babbie, E. and J. Mouton. 2004. *The practice of social research*. Cape Town: Oxford University Press.
- Bazerman, C. 1994. *Constructing experience*. Carbondale, Ill: Southern Illinois University Press.
- Bernstein, B. 1999. Vertical and horizontal discourse: an essay. *British Journal of Sociology of Education* 20(2): 157–173.
- Bhatia, V. K. 2004. Academic literacy in higher education. In *Integrating content and language: Meeting the challenge of a multilingual higher education*, (ed). R. Wilkinson. Conference Proceedings Maastricht University, Netherlands. Maastricht, Netherlands: Maastricht University Press.
- . 2007. Applied genre analysis and ESP. Available at: http://exchanges.state.gov/education/engteaching/pubs/BR/functionalsec4_10.htm (Accessed on 8 July 2007).
- Blau, P. M. 1991. Multigroup affiliations and complex role sets. In *Social roles and social institutions*, (eds). R. R. Blau and N. Goodman, 37–57. Boulder, CO: Westview.
- Crandall, J. 1994. Strategic integration: preparing language and content teachers for linguistically and culturally diverse classrooms. In *Strategic interaction and language acquisition: Theory, practice and research*, (ed). J. Alatis, 255–274. Washington DC: Georgetown University Press.
- Drinka, T. J. K. 1994. Interdisciplinary geriatric teams: Approaches to conflict as indicators of potential to model teamwork. *Educational Gerontology* 20(1): 87–103.
- Eraut, M. 1994. *Developing professional knowledge and competence*. London: Falmer Press.
- Gans, H. J. 1992. Preface. In *Cultivating differences. Symbolic boundaries and the making of inequality*, (eds). M. Lamont and M. Fournier. Chicago: The University of Chicago Press.
- Gee, J. P. 1990. *Social linguistics and literacy: ideology in discourse*. London: The Falmer Press.
- Geisler, C. 1994. *Academic literacy and the nature of expertise: reading, writing and knowing in academic philosophy*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- . 2004. *Analysing streams of language*. New York: Pergamon Press.
- Jacobs, C. 2004. The integration of academic literacies into the tertiary curriculum: creating discursive spaces. In *Integrating content and language: Meeting the challenge of a multilingual higher education*, (ed). R. Wilkinson, 162–177. Maastricht, Netherlands:

- Maastricht University Press. Conference Proceedings of the 2003 ICL conference at Maastricht University, The Netherlands.
- Kennedy, M. 1998. Managing conflict in work teams. Denton, Texas: Center for the Study of Work Teams, University of North Texas. Available at: <http://www.workteams.unt.edu/reports/kennedy-m.html> (Accessed on 18 November 2004).
- Klein, J. T. 1996. *Crossing boundaries: Knowledge, disciplines and interdisciplinarity*. Charlottesville: University Press of Virginia.
- Norgaard, R. 1999. Negotiating expertise in disciplinary 'Contact Zones'. *Language and Learning Across the Disciplines* 3(2): 44–63.
- Polanyi, M. 1983. *The tacit dimension*. Gloucester, Mass: Peter Smith.
- Rifkin, W. D. and B. Martin. 1997. Negotiating expert status: Who gets taken seriously. *IEEE Technology and Society Magazine* 16(1): 30–39. Special issue on technical expertise and public decisions. Spring.
- Start, S. L. and J. R. Griesemer. 1989. Institutional Ecology: Translations and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39. *Social Studies of Science* 19: 387–420.
- Sonnenwald, D. H. 1996. Communication roles that support collaboration during the design process. *Design Studies* 17(3): 277–301.
- Weiss, D. H. 1997. Four steps for managing team storms. *Getting Results for the Hands-on Manager* 42(7): 7.
- Wenger, E. 1998. *Communities of practice: learning, meanings and identity*. Cambridge: Cambridge University Press.
- Wenger, E., R. McDermott and W. M. Snyder. 2002. *Cultivating communities of practice*. Boston, Massachusetts: Harvard Business School Press.
- Wisinski, J. 1995. What to do about conflicts? *Supervisory Management* 40(3): 11.
- Wright, J. 2004. Lecturers' perceptions of content and language integration: a study of textual typologies. In *Integrating content and language: Meeting the challenge of a multilingual higher education*, (ed). R. Wilkinson, 536–546. Maastricht, Netherlands: Maastricht University Press. Conference Proceedings of 2003 ICL conference at Maastricht University, The Netherlands.

APPENDIX A: INTERVIEW QUESTIONS – LANGUAGE LECTURER

1. To the best of your knowledge, is this a stand-alone text? If not, what other textbooks are used by the students; and for what broad focus areas of their studies? Why were these areas not included in this book?
2. As a language lecturer, do you think that there are gaps in the Communication knowledge base that you would have included had the text not been an integrated one? If so, explain.
3. Who wrote which parts of the book? Explain.
4. Why was (subject) chosen as a focus area?
5. Which parts of the text did you literally 'co-author' (i.e. one wrote a draft, the other commented on, added to, amended)?
6. In the textbook, there is no stated ICL intention to the facilitator to the content subject. Can you comment?

7. If an outsider looked at the Contents page, how would they know this is a book related to the content subject?
8. Have you done any team teaching using this book?
9. Prior to the ICL project, did you have any knowledge about the content area? If so, how?
10. Do you believe that you now have sufficient knowledge about the content area to enable you to write authoritatively about it? Comment.
11. Do you believe that, in the textbook, you have made explicit links between the content and language for the student? Can you give me any example/s?
12. If you had a chance to change this book (leave out, include, do differently, improve upon), what would this be? How? Why?
13. Were there any constraints on you, which made it difficult to integrate the language with the content in the way/s that you had envisaged? Explain.
14. Were there any factors that facilitated the integration of language with content in the way/s that you had envisaged? Explain.
15. If the ICL in the textbook fell short of your expectations, what factors, circumstances, etc. do you believe would or could have made ICL more successful?
16. What insight/s have arisen from your writing of and use of the textbook?
17. Did your teaching practice change as a result of participating in the ICL project?
18. If so, do you think the textbook reflects this change in your understanding?
19. In your opinion, has your understanding of content and language integration changed over time? Explain.
20. In general, do you think that, if a student (or any person outside the project) read your textbook, they would have a deeper understanding of the way/s in which language is used in the discipline (at an appropriate entry level, naturally)?