Research and Development in an ICL Project: A Methodology for Understanding Meaning Making in Economics

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Abstract: This article focuses on the methodology for an academic literacies research project in an Integrated Content and Language (ICL) collaboration in economics and the ways in which the findings from the research contributed to further development and expansion of the ICL endeavour. The research was conducted independently rather than collaboratively and the paper reflects on the reasons for this. Experience from the project suggests the research methodologies and epistemologies in the two collaborating fields of economics and academic literacies lack congruence and points to the complexities of conducting collaborative research when research paradigms are so different.

Introduction

ICL (Integrating Content and Language) known in Europe as Content and Language Integrated Learning (CLIL) is understood in a number of quite diverse ways. For instance Dalton-Puffer (2007) and Lorenzo (2007) define it as the teaching of content through the medium of a second or a foreign language whereas Jacobs (2005) sees it as the embedding of academic literacy in disciplines of study rather than decontextualised, generic academic literacy teaching. At the University of Cape Town (UCT), where approximately 54 languages are spoken and 65% of students claim English as the home language, Jacobs' definition of ICL would be more applicable.

Dalton-Puffer (in press) argues that applied linguistics research has an important role to play in creating a conceptual framework for CLIL so that the model can be applied in different contexts, yet she notes that this type of research has only really got under way very recently. Academic literacies research, on the other hand, has developed into a significant field of study over the past twenty years (Lillis and Scott, 2007). But, until recently, (see Jacobs, 2005; Lillis and Scott, 2007; Lillis, 2008) there has been little attention paid to the methodological principles underlying this research.

The real focus of this paper is a reflection on the methodology used in a research project which aimed at researching an ICL context. Many researchers and practitioners have recognised the need for research both in ICL contexts and in ICL collaborations so that results from the research can be fed back into the cycle of development of ICL (Dalton-Puffer, 2007; Baynham, 2010). The research project described in this paper used ethnography as the methodology to investigate the ways in which the academic curriculum and student voices intersect in first year economics assignments in economics courses in an Academic Development Programme (ADP)[1]. In many ways this research project gets

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to the heart of what Baynham refers to as 'the role of language in knowledge construction' as it enabled the researcher to get closer insights into the ways in which students were making meaning.

In this case, the research (Paxton, 2004; 2006; 2007) was conducted independently rather than collaboratively but the findings have contributed to the ICL project because they have raised awareness amongst economics lecturers and tutors of the role of language in knowledge construction as well as the possibilities for misinterpreting student meanings when one is not familiar with the students' backgrounds.

The paper will begin by briefly describing the ICL project in economics at UCT which uses different strategies and interventions to cater to the language and academic literacy needs of a diversity of students, including both first and additional language speakers of English. The epistemologies and research methodologies of both economics and academic literacies are described as a way of illustrating that their lack of congruence has led to the use of different methodological lenses for researching the collaborative teaching project. This is followed by a brief description of the research project, some of its findings and the ways in which this research has contributed to the ICL project. The paper concludes by posing some challenges for the project and for ICL researchers more generally.

Integration of Content and Language in Economics

Drawing on Snow, Met, and Genesee's (1989) conceptualisation of a framework for the integration of language and content as well as the New Literacy Studies notions of literacy as social practice (Gee, 1990; Street, 1984), we began working with lecturers in the economics department at the University of Cape Town to redesign the curriculum to cater to the academic literacy needs of all students while at the same time addressing the language and learning needs of second language students. With time and experience, we have realised that a variety of interventions are needed to cater to the diversity of students at UCT, and these have been reshaped and modified as the context has changed over a period of 14 years. We restructured the curriculum in the extended microeconomics course to include three economics essays, each closely linked to the content of the curriculum. Each year, the tasks are designed and planned by the economics and the language staff in collaboration. At the design stage, as would be expected, economics staff tend to focus on the content issues and language staff on the accessibility of the task and the language. Essays are marked by both language and economics staff and to enable this process, a system of mutual training for shared assessment has been developed. Before the essays are marked, economics staff run workshops for language staff to introduce them to conceptual issues in the essays while the language staff train the economics lecturers and tutors in essay assessment including design of assessment schedules and the giving of feedback. Finally, essays are moderated by the language staff. An extra two hour language and communications tutorial is offered by language tutors to all students identified as being at risk because English is not their first language and/or they come from poorer and more rural schools. The academic literacy needs of the other students in the class are addressed in a series of regular economics lectures. These were initially team taught by economics and language staff and covered academic reading, task analysis, coherence and cohesion and acknowledgement of sources. More recently, two different courses with different course codes have been developed — one, a single semester microeconomics course where the academic literacy is taught by the economics lecturer himself, the other, an extended two semester course with language tutorials adjunct to the economics classes.

The economics lecturer for the single semester course is one of those 'unusual people' (referred to by Baynham 2010) who combines both knowledge about language and knowledge about the

discipline in one person and there are now a couple of these people in the economics department. This has been achieved through an approach which recognises that both economics and language staff have a lot to learn from each other and that embedding academic literacy in the economics curriculum requires a real partnership and a sharing of expertise. This has meant that, in some cases, we have studied further: economics staff have done the language and literacy modules in the Masters in Higher Education Studies and language staff have studied economics. Once we were able to speak the same language we could collaborate beyond team teaching and work on redesigning the curriculum and the assessment tools. We have conceptualised and developed ways to integrate academic literacy into all aspects of the curriculum through the design of reading and writing tasks and the assessment of reading and writing. This collaborative approach has over the years also impacted on content as language staff have promoted more critical thinking with regard to economic principles, therefore essay topics have shifted to focus on the social effects of economics principles such as GDP, monopoly power, etc. What seems key to the success of these collaborations is time and a genuine interest in the role of language and literacy in learning.

However, in the fourteen years of collaboration described above, language and economics staff have used different methodological lenses to investigate this collaborative teaching project (Paxton, 2003; 2004; 2006; 2007; Smith & Edwards, 2007; Smith, 2009). The findings of research conducted by the economists on the one hand and language specialists on the other have been disseminated and shared in very productive ways both in our collaborative work and in the Commerce Education Group, a bi-weekly seminar group in the Commerce Faculty. What we have learned from each other and the ways in which this has fed back into our pedagogy will be illustrated in this paper. In the section that follows I will provide some background to the epistemologies and methodologies of the two fields as a way of shedding some light on these separate research directions.

Research Methodologies in Economics

Economics straddles the boundaries of the hard vs. soft and pure vs. applied dimensions of academic disciplines (Becher & Trowler, 2001). Since World War 2, economics has aspired to the scientific standards of physics, because it was felt that objectivity and mathematical precision would give greater scope and credibility to the discipline. It has thus become more strongly theory-orientated and mathematically sophisticated and thus 'harder'. Becher and Trowler (2001) describe economics as a convergent or 'tightly knit' discipline because there is clear consensus about method of judgement, a common basic training and a sharing of the same fundamental principles. Because of this convergence, economists are favourably placed to advance collective interests and this has meant that they have a privileged status among academic disciplines and are often seen as an academic elite (Becher & Trowler, 2001).

When economists speak of theory and method for economic research they refer to abstract mathematical models which employ the notion of *ceteris paribus*(controlling all variables). They test their hypotheses in a simplified abstract world while the real world to which findings are applied is, in fact, far more complex. To progress up the academic ladder in a university economics department one would be expected to do research using or developing these abstract mathematical models. These models, when used as tools in educational research, are able to shed light on the impact of our educational interventions and predict student performance and success rates and this type of research by my colleagues (Smith and Edwards, 2007 and Smith, 2009) has made a useful contribution to the ICL project.

Academic Literacies Research

My interest, however, has always been in gaining a clearer, deeper, more detailed understanding of the ways in which a diversity of students construct meaning in economics. Understanding how students build on prior knowledge and "interim literacies" (Paxton, 2007) to make sense of new concepts in economics seems crucial if we are to refine our pedagogies and allow students greater epistemological access to academic discourses. Therefore, in my research I turned to academic literacies methodologies such as ethnography and discourse analysis as the tools for undertaking this exploration.

In their 2007 article, Lillis and Scott have attempted to define the field of academic literacies research identifying literacy as social practice as the specific epistemology of academic literacies and transformation as the ideology. In this research the emphasis has shifted from texts towards understanding the context and the practices surrounding the writing of the text thus narrowing the text-context gap which has been such a concern in linguistic ethnography (Blommaert, 2005; Rampton, 2007). The notion of academic writing as a social practice acknowledges the socio-culturally embedded nature of literacy practices (Street, 1984) as well as the power discrepancies in any literacy related activity.

Lillis and Scott (2007) describe the ideological stance in academic literacies research as an explicitly transformative one which is concerned with not only identifying academic conventions but locating them in relation to contested traditions of knowledge making. A transformative approach is interested in the ways in which such conventions impact on meaning making both for students and for professionals and in discovering alternative ways of meaning making by considering the resources that students bring as legitimate meaning making tools (Clark & Ivanic, 1997; Canagarajah, 2002; Paxton, 2006; Paxton, 2007).

The methodology inherent in this model of literacy is that of ethnography which focuses on text production and practice; researchers not only observe practices surrounding the production of texts, but they also elicit students' perspectives on these texts and practices, using a method which has been described as "talk around the text" (Lillis, 2001).

Ethnography as an empirical methodology concerned with collecting and analysing data from real world contexts, therefore contrasts sharply with economic modelling which uses artificially created experimental situations to understand real world phenomena. Contexts are only important to economists in so far as they can be used for isolating variables from their contexts in order to construct economic models.

Relationship Between Text and Context

Blommaert argues that context is not something we can just add to text, context is text; we need to understand the contexts in which sense making practices develop because "the way in which language fits into context is what *creates meaning* and what makes it (mis)understandable to others" (2005, p. 39-40).

Misplacing utterances in contexts leads to breakdown in communication. Communication is a two-way process — it is produced by the speaker/writer but still has to be granted by someone else. Blommaert (2005) describes this as "uptake" and he says a speaker/writer can only have "voice" if he has the capacity to cause an uptake of what he has communicated. He emphasises that communication is dependent on the resources that people have for communicating. In order to have "voice", people have to use the resources at their disposal and use them in clearly defined contexts.

If the resources do not match the context, then people do not make sense. Therefore, he sees uptake as a very social process which is dependent on context and is embedded in power and inequality.

Blommaert (2005) is particularly concerned that under conditions of globalisation texts do not move easily from one context to another and he illustrates the way third world texts transported to first world contexts are often misinterpreted. He calls for first world theorists to scrutinize materials from the peripheries of the world system because this close scrutiny forces us to abandon notions of sharedness and to re- examine our own interpretive repertoires and practices. Blommaert's concerns apply to South Africa which has often been described as having characteristics of both first and third world economies. Increased mobility, widening access to tertiary education and the need for social justice and national redress in post-apartheid South Africa has meant that students from very different contexts are entering the old historically white universities. Yet the profile of academic staff at these institutions has not changed very much which often means that staff are not able to contextualise what students are saying and students' written texts may be misinterpreted.

Ethnographic Study of Student Writing in Economics

Blommaert's (2005) notion of "uptake" will be illustrated by reconsidering some of my own data from the academic literacies research project. This was an ethnographic study of eight student writers from diverse backgrounds over a period of three years while they were in the process of acquiring the new academic discourse of economics (Paxton, 2003, 2006, 2007). The study used an academic literacies approach i.e. sustained involvement in the contexts of production and multiple data sources as a methodology for understanding social practices to understand the intersection of student voice with the academic curriculum. Data sources included students' written assignments, classroom observation, students' life histories and dialogue with both the students and the lecturers. The dialogue took place after a detailed linguistic and intertextual[2] analysis of the written assignments had been conducted and it gave the students an opportunity to interpret their own writing.

Illustrations From the Data

In the original study the use of ethnographic methods and intertextual analysis, allowed me to probe writers' developing meanings and to understand more about acquisition processes and knowledge making practices. My findings showed that in the students' first university assignments they were building on a number of prior discourses from their home and school contexts in order to construct new knowledge in what was for them, the alien environment of the university. Thus academic literacies methodology assisted me in getting closer to the contexts in which the texts were produced.

A reconsideration of the data, particularly the interviews with economics staff and the analysis of tutor feedback on the student essays illustrates the difficulties that economics staff had with these texts. In Blommaert's (2005) words, meaning was "produced" by the writer but was not "granted" by their teachers because the teachers failed to contextualise the texts in the ways that the students desired. In a number of cases the reason for this breakdown in communication was a problem of resources: students did not have proficiency in English because they came from rural communities where English was an additional or foreign language; they were more comfortable with the spoken language than the written and they were unfamiliar with this new academic style of writing.

In my data there were many indications of "contextual mismatches" between students and teaching staff. For example, tutors and lecturers were puzzled by the frequent use of question-and-answer-sequences in the writing of two students from rural villages. Tutor feedback comments indicate that

question-and-answer sequences are "inappropriate". However, the research methodology enabled me to shed some light on this because in their interviews students explained that they had learned this older literary form, when studying Xhosa and Zulu praise poetry at school. Their school teachers had encouraged them to transfer this discourse style, known in Xhosa as *imbuzo buciko*, to their own writing and they had tried it out in their first economics essay. The difficulty was that in these early essays, students did not yet have the resources to use the form proficiently (Paxton, 2006; 2007).

The methodology revealed the centrality of identity and identification in academic writing and highlighted the gaps and mismatches between the lecturers' expectations and what the students brought with them. Students tended to use evidence from their own familiar contexts to support claims made in the economic essays. For instance in an essay analysing South African Breweries (SAB) as a monopoly power, one student digressed to recite lines from the brewery's television advertisements as evidence for the way SAB uses advertising to maintain its monopoly power. Lecturers were concerned that students were not understanding the need for economic analysis and economic method, instead they were using "a very personal approach…relying on own knowledge, interpretations and opinions…". But as the research revealed, this student's use of the advertisement did in fact demonstrate that she had understood the economic approach of supporting claims with evidence. Her English and academic language resources were limited and when she recited the adverts and ditties, she drew on different, possibly "immature" discourses but they were ones that she could identify with and they assisted her in the theorising process. Given time and good feedback, she would probably learn to use her illustrations more proficiently.

As indicated, these findings have been shared in our collaborative work with economics lecturers and tutors as well as in seminars and presentations. The research has sensitised lecturers and tutors to the notion of interim literacies and made them aware that in a context of increasing cultural and linguistic diversity, students draw on a range of past discourses and that these past discourses may serve as building blocks in assisting them in learning and acquiring the new discourse of economics. Through reference to the research in marking workshops, economics lecturers and tutors have learned to be more discerning in their reading of student writing and to understand that, although initially students' voices may fail to communicate fully, they do learn over a period of time and with appropriate assistance to make their meanings clearer. This has meant that deficit views of student writing which prevailed in the department have gradually shifted.

The research has also contributed to curriculum design in the ICL project. For instance, essay topics were redesigned when the research revealed that the contexts were too foreign for many students to be able to relate to them.[3] In addition, the pedagogic discourse of the classroom has changed as lecturers have learned to link complex economic concepts to real world examples that will have relevance to a diversity of South African students. Finally, the joint production of an economics textbook catering to the needs of South African students from diverse backgrounds has led to further team building between economics lecturers and language specialists.

The research has thus enabled and strengthened the collaborative work of this ICL project in the Commerce Academic Development Programme and, since 2008 when the ADP was restructured as the Commerce Education Development Unit (EDU)[4], the ICL project has begun to have an impact on other colleagues in the department, so that I have been asked to assist in the redesign of curriculum and pedagogic approaches in mainstream courses across the three years of the undergraduate degree in economics.

Conclusion

These brief examples from the case study illustrate the way the ethnographic strategy of sustained engagement in participants' writing or learning worlds and the collection and analysis of a range of types of data contributed to the ICL project in economics. The methodology allowed a deeper understanding of the role of language in knowledge construction and, as I have indicated, the findings have been used in training of lecturers and tutors and developing pedagogy and curriculum in the project.

However, as I have pointed out, economics and language specialists working in the project have done independent research using very different methodologies but sharing their findings. I have argued that this is possibly because the epistemologies and methodologies of these two fields have very little congruence, particularly because context is not important to economists who isolate variables from real world contexts in order to construct theoretical models. As far as I know, there has only been one attempt by economists and language specialists to collaborate in research at my university and this was something of a compromise. In an attempt to understand how the writing of a mini research project in a third year economics course had impacted on learning, the economics lecturer and I conducted a survey amongst the students. While the results were quite interesting they did not yield the insights that might have emerged from an ethnographic study.

Perhaps this is an indication that there is just not enough commitment or motivation to do collaborative research. While recognising and acknowledging the value of the findings of academic literacies research project described above, economists are unlikely to adopt an ethnographic approach in any major research study because it is not valued in their discipline and would be unlikely to lead to career advancement. However, this would not rule out using a combination of methodologies, i.e. both ethnography and abstract modelling to shed light on a particular question. This presents possibilities for research collaboration which need further exploration. It could also provide a challenge for the wider ICL community which has tended to lean quite heavily on ethnographic methodologies and might benefit from greater methodological flexibility.

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Notes

[1] These programmes were designed for students entering university from disadvantaged schools during the apartheid era.

[2] The term "intertextual" is used very broadly to refer to all ways in which a specific text relates to other texts and voices.

[3] For instance the essay on economic systems was changed from economics systems in Russia to economics systems in South Africa.

[4] The brief of the Commerce Education Development Unit is to broaden its focus from the selected group of students in the Academic Development Programme to the development of teaching and learning in the whole Commerce Faculty.

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