Collaborating for Content and Language Integrated Learning

Issues of Discourse: Exploring Mixed Messages in the Interests of Collaboration

Susan Van Schalkwyk, Juanita Bezuidenhout, Hugo Botha, and Gerrit I. Van Schalkwyk,
Stellenboch University, South Africa

Abstract: Participating in cross-disciplinary collaborative activities can pose a range of challenges for those involved therein. Typically disciplinary strongholds are entrenched, and collaboration is dependent on the building of relationships—relationships that can exist in tension as issues of power, identity and the trappings of academic status inhibit the establishment of truly collegial and trusting interactions (Jacobs, 2007). In this article we describe and critically reflect on an instance of interdisciplinary collaborative educational research that looked at how content learning and issues of language intersect. The contention that it is often difficult for students to discern the rules and norms that characterise a particular discipline (Gee, 1990; Jacobs, 2007) can be equally true for participants in interdisciplinary collaboration, even when these participants are peers and particularly when this collaboration is within a research endeavour. The understandings that emerge from this reflection emphasise the potential for participants in such an endeavour to, therefore, receive mixed messages and we make some recommendations as to how this can be addressed. Importantly, however, we emphasise the potential of collaborative projects to serve as ‘a social inquiry practice that promotes learning’ (Lattuca & Creamer, 2005, p. 5).

Introduction

Participating in cross-disciplinary collaborative activities can pose a range of challenges for those involved. Research that investigates such collaboration in the context of teaching and learning often highlights these challenges and many authors have sought to understand the different components that are at play therein (Catell, 2010; Jacobs, 2005, 2009; Lattuca, 2002; O’Sullivan, Stoddard, & Kalishman, 2010). Typically disciplinary strongholds are entrenched, and collaboration is dependent on the building of relationships—relationships that can exist in tension as issues of power, identity and the trappings of academic status inhibit the establishment of truly collegial and trusting interactions (Jacobs, 2007).

These complexities can be exacerbated when participants enter a potentially collaborative space as unequal partners. Such inequality can stem from different perspectives and has been shown to be particularly true in contexts where disciplinary specialists and so-called academic development (AD) practitioners, specifically language and academic literacy experts, seek to join forces (Jacobs, 2005). Nevertheless, the growing awareness of the value of integrating language and content learning and other interdisciplinary interactions, as well as the advocacy of early adopters of such collaboration in the teaching and learning
context, offers a point of entry for many who are seeking to provide students with a more holistic learning experience. In this article, further texture is added to the already complex landscape described above. We describe and critically reflect on an instance of interdisciplinary collaborative educational research that looked at how content learning and issues of language intersect, specifically during an assessment event. In this context, interdisciplinary is simply defined as activities occurring between different disciplines with such activities covering a wide range of potential interactions (Lattuca & Creamer, 2005). While the finer nuances implicit in complimentary terms such a ‘multidisciplinary’ and 'transdisciplinary' are not to be ignored, and are discussed elsewhere in this volume, they are not explored in this article.

Baynham (2010) argues that when conducting research that explores the integration of content and language (or in this case, “discourse”), an interdisciplinary team ought to be an obvious choice. The value of this becomes evident when one accepts that “[l]anguage lecturers are better able to ‘see’ the Discourses that shape the disciplinary genres … they don't get caught up in the meaning” (Jacobs, 2007, p. 77). Our collaboration was undertaken between a representative of the particular discipline—Health Sciences—who is a professor from the Faculty of Health Sciences with an interest in teaching and learning—and an AD practitioner with a specific interest in academic literacy. The research team also included two senior undergraduate MB, ChB students who, while having adopted some of the disciplinary practices of their chosen profession, could be regarded as still engaging on the periphery of this community (Wenger, 2000).

The Case

Teaching staff at medical schools will often entreat their students to “speak like a professional” and thus adopt a discourse appropriate to their chosen profession. Entry into this discourse can, however, present difficulties for students, as the rules and norms governing it are seldom made explicit (Jacobs, 2009; McKenna, 2003; Van Schalkwyk, 2007). While the work of teachers typically seeks to, albeit subconsciously, socialise students "into discursive systems” (Jacobs, 2009, p. 243), such socialisation is seldom taught. Often there exists a tacit expectation in higher education curricula that university students will unconsciously adopt the way with words that defines their chosen discipline as they progress in their studies. The extent to which this adoption of the discourse actually occurs is, however, debated in the literature and a more nuanced understanding of how such acquisition is manifest, is encouraged. Gee (1990), when theorising his understanding of "Discourse", suggests that it embraces much more than simply speaking, reading and writing, but also includes ways of being and doing within a particular group or community—thus being academically literate.

The study that served as the case for this article was born out of the experiences of two fifth year medical students who felt that their own growing maturity in the disciplinary discourse was not being affirmed in the assessment activities that they were required to complete. The focus of the research was on spoken communication during a set of OSCEs (Objective Structured Clinical Examinations) and sought to determine the level of appropriate disciplinary discourse adopted by senior students during these assessments. Lingard, Garwood, Schryer, and Spafford (2003, p. 604) describe the case presentation, which is the “genre” of the OSCE, as an “inter-professional form of communication.” They further argue that the case presentation provides the student with an opportunity to serve her or his apprenticeship into the discourse community (Lingard et al., 2003).

Since the OSCE presentations have this interdisciplianry potential, a set of nine OSCE presentations by final year medical students was observed and recorded. The recordings were transcribed and then assessed according to a specifically designed rubric to determine the level of discourse displayed by the students. In designing the rubric, the research team drew on similar studies in the field (Mistica, Baldwin, Cordella & Musgrave, 2008; Roberts, Wass, Jones, Sarangi & Gilbert, 2003). A panel comprising two disciplinary experts and a peer evaluator (fellow senior student) conducted the assessment of the transcriptions. The
study demonstrated a disjuncture between the assessed level of discourse and the students’ eventual results (see Botha, Van Schalkwyk, Bezuidenhout, & Van Schalkwyk, 2011, for a detailed account of the research).

Dissecting the Collaboration

It is, however, the nature of collaborative research itself, and the challenges that accompanied it that are of relevance for this article. In the discussion that follows we describe some of the key findings that emerged from our reflection on this work and show how these findings resonate with some of the current trends with regard to interdisciplinary work, including interdisciplinary research, which seeks to integrate content and language.

A Joint Endeavour

Calls for researchers to think beyond their disciplines, particularly to solve real world problems, have become commonplace. Traditionally, however, research practices have been defined by the discipline in which they occur and there is little guidance in the literature as to how interdisciplinary research ought to be fashioned. In our case, a multi-dimensional purpose characterised the collaboration. O’Sullivan, Stoddard, & Kalishman (2010) suggest that “[c]ollaborative research in medical education should be driven by the problem being investigated, by the new knowledge gained and by the interpersonal interactions that may be achieved” (p. 1175). For the student researchers, the intention was to endeavour to participate legitimately as researchers while at the same time to investigate an aspect of their learning experience that they experienced as troublesome. The two academics in the team shared this latter purpose with the students, but with the added objective of creating a meaningful learning experience for the novice researchers. Thus, while the research was undertaken for a number of different reasons, there was a sense of participating in a joint endeavour that served to maintain our focus throughout the collaboration. However, the extent to which our different disciplinary perspectives and understandings would generate mixed messages and the impact these would have on the way in which our intentions were taken forward, was to provide a challenging and important learning experience for all concerned. This is discussed in the sections that follow.

Dealing with Disciplinary Perspectives

The contention that it is often difficult for students to discern the rules and norms that characterise a particular discipline (Gee, 1990; Jacobs, 2007) can be equally true for participants in interdisciplinary collaboration, even when these participants are peers and particularly when this collaboration is within a research endeavour. Adopting disciplinary practices within the requisite paradigm identifies the researcher as a legitimate "insider" and participant in the disciplinary community of practice (Wenger, 1998). Such a community of practice is characterised by having created "resources for negotiating meaning" (Wenger, 1998, p. 83), resources which are not necessarily accessible to those outside the community. Clearly, any interdisciplinary activity can potentially challenge dominant discourses and point to a realignment of resources for negotiating new meaning (O’Sullivan, Stoddard, & Kalishman, 2010). When the collaboration is being undertaken from disciplinary perspectives that are deemed to be quite different—for example between the so-called "hard" and "soft" or pure and applied sciences, such as was the case in our collaboration—the potential for the collaboration to establish a site of conflict is predictable (Jacobs, 2007).

The first example of such dissonance was evidenced during the initial phase of the collaboration when the research proposal, which the three Health Sciences co-researchers termed a research “protocol,” had to be compiled and submitted. Interpreting the requirements and expectations of the Faculty of Health Sciences’ ethics committee required drawing on the experience of the discipline specialist in the team. Despite this consultation, however, a tussle between generating qualitative data on the one hand and the desire to analyse and report on this data in a quantitative fashion on the other, forced a methodological compromise among
the team. This compromise is reflected in the fact that although the study was largely qualitative, the manner in which values were attached to the different levels within the rubric to provide a score that could be compared, points more to a quantitative approach—one that provided the AD practitioner with some discomfort. It is interesting to note that in a similar study undertaken in a Health Sciences context which also sought to analyse the discourse adopted by students during the OSCE assessments, the researchers concerned described their study as "a discovery project" in which they applied "methods to a field and task that is not ordinarily associated with such approaches" (Mistica et al., 2008, p. 577). This was true for our study as well.

The document which was finally submitted for ethical review was quite strongly positioned in an educational research paradigm. It was, however, initially returned by the review board with a request to provide further clarification regarding certain aspects of the submission. For example, the sample size (initially 15 students), and the mixed methods methodology were identified as points of concern. Lattuca and Creamer (2005) argue that often a barrier to successful collaborative projects resides not in the academic departments who might be supportive of a project that is in the overall interests of that department, but in review boards and similar gate-keepers. As alluded to earlier, however, the concerns of the ethics review board were, albeit to a lesser extent, shared by some of the team members. The lack of complete synergy among us required us to live with some measure of uncertainty and ambivalence at various points in the project. It transpired that understanding one another's research domain would emerge as a critical success factor in the collaborative endeavour and required that we "synthesize (our) methods" (O'Sullivan, Stoddard, & Kalishman, 2010, p. 1178).

A further example of how the disciplinary "way of doing" presented an obstacle during the collaboration emerged when we attempted to submit an article on the research for publication. This exposed both the students and the AD practitioner, herself a relatively experienced educational researcher, to the unfamiliar conventions of publishing in the field of medical education. In their article entitled "The Joy of Writing a Paper," Sterk and Rabe (2008, p. 227) provide guidelines on how to enjoy scientific writing. These guidelines, written from a health sciences paradigm could prove jarring for the educational researcher. Consider, for example, their entreaty to "provide an explicit hypothesis ..." because listing research questions would be "second best." The AD practitioner described the experience of attempting to straddle two disciplines as complex and found it difficult "to write upon the shifting sands of self, partners, ideas, and disciplines" (Bazerman, 1991, p. 212). She expressed an acute culpability when an initial submission to a high impact medical education journal garnered harsh critique. She found some of the reviewers' critique to be obscure and difficult to comprehend stating that it forced her to engage more consciously with medical education literature before resubmitting the work. O'Sullivan, Stoddard, and Kalishman (2010, p. 1182) have argued that collaborative endeavours should seek to do more than simply answer the research question, "but also to develop new knowledge, a task that requires more perspectives than those available through single-discipline approaches"—elsewhere they also suggest that such researchers move on to "publish using a new language developed to translate across disciplines" (O'Sullivan, Stoddard, & Kalishman, 2010, p. 1178). In our experience, finding this "new language" was difficult and time-consuming. It also required considerable effort to move from one's comfort zone into a shared zone of development.

For the students, their experiences and their learning was cast quite differently with their reflections positioning them as emergent researchers. Whilst they described the collaboration as being "incredibly valuable," it was evident that they had become attuned to the divergence in thinking between the different disciplines and that this was potentially unsettling. Still under apprenticeship to the medical discipline, they seemed unaware of the extent to which they had already adopted its preferred research approach and were moving towards legitimate participation in that community of practice (Wenger, 2000). They seemed to grapple with the "fuzziness" of social science research, as they remained determined to obtain quantitative data to support their "hypothesis." It therefore became incumbent on the different members of the team to
“educate one another in their unique professional and research vocabularies” (O’Sullivan, Stoddard, & Kalishman, 2010, p. 1183).

**Interpersonal Interactions**

In her work on collaborative partnerships between content and academic literacy specialist, Jacobs (2007) suggests that there are four key factors that influence the nature of these interactions: the "collaborative interactions" which would see the disciplinary expert providing insight on the "tacit knowledge of Discourse within their disciplines"; the "nature of the relationships" between team members; the "power dynamics" which are "influenced by notions of expertise" and which further have an impact on the way in which "roles and responsibilities" are negotiated and assigned (p. 66). The way in which these different factors emerged in our study offer additional perspectives on how collaborative activities that seek to integrate content and language can occur.

In a study that explored different interdisciplinary collaborations among university and college academics, Lattuca (2002) found that many of the respondents in her study spoke of how their disciplines "imposed limitations on their research or teaching" (p. 725). For our study, however, the disciplinary specialist team member demonstrated a particularly appreciative stance in her reflection on the collaborative process. She described the AD practitioner as a fellow "content expert," someone from a "different field where interpretation and emphasis of certain things are different." She understood that in the context of the shared endeavour, words had different meanings under certain circumstances, and she had need of "translation." She spoke of the value of the collaboration and described how it brought together "different backgrounds and different perspectives [providing] fresh eyes that see things from another angle" (see also Jacobs, 2007). She also described the entire research process as liberating and her sense was that her fellow academic collaborator was prepared to "challenge dogmas … without being aware of them and did not "live by the constraints" she felt were imposed on her by her own discipline. Finally, the disciplinary collaborator spoke of the research experience as one that provided opportunities to learn "new techniques." Jacobs (2005) reported similar findings when describing collaborative encounters between language and content experts. She spoke, for example, of "the learnings that crystallized through the processes of engagement in the transdisciplinary community" (p. 481). A reciprocal opening up of the medical discourse by the disciplinary specialist and further explanation as to the specific dogmas that dominated her field was, however, less evident. It could be surmised that this was because the focus on medical education provided common ground within which the team members could engage and therefore somewhat negated the need for further explication around disciplinary specific issues.

Allocating roles and responsibilities is an important feature of collaborative endeavours and one that, according to Jacobs (2007) in often influenced by individuals' perceptions as to other team members' expertise. Upon reflection, we recognised the subtle influences of the power dynamics that emerge from these perceptions. While the students conducted the empirical work observing and recording the OSCE’s, the disciplinary specialist oversaw and participated in the assessment of the transcribed texts (our data). The responsibility for writing the literature review and over-writing the research report was allocated to the AD practitioner. Thus, although everyone contributed conceptually during all phases of the study, each of us seemed to migrate towards roles that could be regarded as relevant to our dominant identities of student, professor and AD practitioner.

**A Legitimate Agenda?**

On the basis of these reflections one can begin to respond to the question as to how an agenda for legitimate language and content or interdisciplinary partnerships can be fostered. Some of the work in the field of content and language integration (ICL), particularly in a South African context, has emerged from the mandate given to higher education globally for widening access and participation in higher education
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(Baynham & Prinsloo, 2001). This, however, has less relevance for the case being described here which has issues of disciplinary discourse and its place in the teaching and learning experience as its focus. The eventual products of the collaboration, specifically the research findings which were disseminated during a conference presentation and in a subsequent article (Van Schalkwyk et al., 2011), generated discussion and debate within the academic environment and challenged some of the prevailing conceptions with respect to the role of discourse and its assessment during the OSCE. Lattuca and Creamer (2005), however, have argued that the learning that occurs by virtue of (interdisciplinary) collaborative processes is often underestimated and call for a shift from what they term an "instrumental focus" (p. 3). They go even further to define collaboration as "a social inquiry practice that promotes learning" (Lattuca & Creamer, 2005, p. 5). Our learning as a result of this collaboration was of significant benefit to each of us as individuals. While for the students it was more about entry into the academic research community in general, for the disciplinary expert and AD specialist it provided insight into one another's domain heightening awareness not only of the different discourses that prevail, but also the extent to which they are dominant and entrenched. Our experience could be characterised as iterative as we developed new understandings through a recurring, process of engagement, developing a sense of community and interaction (Jacobs, 2007).

In retrospect, the collaboration, and thus the study itself, could have been enhanced on a number of levels. Stokols, Hall, Taylor, and Moser (2008) discuss certain key success factors for effective interdisciplinary collaborations. These include aspects such as the size of team, the leadership within the team and the geographical location of the different team members. Our small team, the implicit hierarchical structure between academic and student, and our close physical proximity all served our purpose well. However, we perhaps allocated too little time to the setting of clear goals and parameters, which Stokols, Hall, Taylor, and Moser (2008) also highlight as fundamental. We did not sufficiently explore our own understandings and perspectives with regard to the study and its process in advance which, for example, resulted in negative responses, both from the ethics review board and during the peer review process. Those seeking to embark on similar collaborations would be well-served to be aware of the potential for participants to receive mixed messages and to address this via considered, advance planning, establishing a shared understanding of the purpose of the endeavour, and careful unpacking of disciplinary and Discourse positions.

Ultimately, we can point to the potential of ICL and other interdisciplinary work to make a contribution towards opening up spaces where collaborative projects, including research projects, can thrive. The reflections of the participants attest to this. For the student researchers who were already demonstrating their presence, if not within the community of practice, at least on the threshold thereof, the collaboration was of equal importance for their own learning. One of the students described the depth of his new understanding as follows: "we were initially concerned about reaching 'strong conclusions' and did not put enough emphasis on the quality of our data"—a critical insight that many young researchers struggle to grasp. Wenger (2000) has described cross-disciplinary activities as "boundary projects" where "[p]eople confront problems that are outside the realm of their competence but that force them to negotiate their own competence with the competence of others" (p. 238)—such is the potential inherent in interdisciplinary work.

Finally we offer some closing comments about the role of the AD practitioner both in ICL and in other collaborative projects, particularly those that are positioned in an educational research paradigm. Brew (2002) has articulated a need for AD practitioners to consider adopting a new role that sees them becoming "credible researchers" that will enable them to become "credible as agents for change" (p. 117). For those in AD who are seeking to further the ICL agenda, the latent value in becoming credible collaborative researchers becomes self-evident. In their analysis of close to 1500 medical educational articles published in reputable journals, Cook, Bordage and Schmidt (2008) posited that few of these articles have contributed to theory building. I would argue that interdisciplinary studies, including those between language and
disciplinary specialists can address this gap and offer a unique opportunity to "advance the science" (Cook et al., 2008, p. 128).

References


**Contact Information**

Susan Van Schalkwyk  
Stellenbosch University  
South Africa  
Email: scvs@sun.ac.za

Juanita Bezuidenhout  
Stellenbosch University  
South Africa  
Email: jbez@sun.ac.za

Hugo Botha  
Stellenbosch University  
South Africa  
Email: brain.botha@gmail.com

Gerrit Van Schalkwyk  
Stellenbosch University  
South Africa  
Email: gvs.psych@gmail.com

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