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Integrating inquiry-based learning into the Academic Literacy course to enhance student learning

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ABSTRACT

In this paper, integrating inquiry-based learning (IBL) into an Academic Literacy (AL) course is examined in terms of student perceptions and experience. The study used a questionnaire to establish student perceptions and experiences of the intervention. The findings indicate that integration of IBL into Academic Literacy content could provide rich potential for promoting student engagement, and developing academic literacies, basic inquiry skills and higher-order skills. However, these benefits can only accrue if a programme-wide approach is adopted and there is collaboration between Academic Literacy lecturers and discipline experts. The findings also reveal that student identities, conceptions of learning, conceptualisations of AL, and the disciplinary context in which the IBL is incorporated into AL, all influence the success of the intervention. The study concludes that context is a key factor in the implementation of guided IBL at undergraduate level. Academic Literacy practitioners and subject specialists need to synergise their efforts and work collaboratively to achieve the learning objectives of guided IBL within AL.

Introduction

An extensive body of knowledge exists concerning the academic reading and writing challenges of undergraduate students at South African universities and the literacy approaches that have been adopted in universities to induct students into these academic literacy practices (Boughey 2002, 2005, 2016; McKenna 2004; Archer 2012; Pineteh 2014; Wingate & Dreiss 2009; Jacobs 2007). In their discussion of understandings of literacy in South Africa, Boughey and McKenna (2016:2) borrow from Street (1984, 1993, 1995) to identify two literacy models that have been adopted in the field of Academic Development in South African universities since the 1980s, these being the autonomous and ideological models. The autonomous model is a deficit model that focuses on fixing the 'language

problem' of (largely) black students. In contrast, the ideological model conceptualises literacy practices, reading and writing, as socially embedded. Class, race and gender intersect with disciplinary norms and institutional culture: all these factors need to be considered when explaining student experiences at university (Boughey & McKenna 2016). The thinking that underpins the ideological model is that there are multiple literacies, each of which is shaped by the particular disciplinary context in which it is used (Boughey & McKenna 2016:3). This study concentrates on students' responses to a process of integrating guided inquiry-based learning (IBL) into an Academic Literacy (AL) module.

Study Context

The Professional Studies course in the B.Ed. Intermediate Phase/Intermediate Senior Phase (IP/ISP) qualification comprises three modules – Academic Literacy, Media Studies and Computer Literacy. Each of these three modules is offered by different lecturers as a stand-alone module that contributes to the overall mark for Professional Studies. Academic Literacy is offered from the first year to the fourth year and is aimed at developing the academic reading and writing skills of teacher trainees. It is skills-based and students are expected to transfer their learning about academic reading and writing, critical listening and speaking skills to disciplinary content. The module employs continuous assessment and is offered once a week during a 45-minute period over 27 weeks in a year.

Students and the lecturer/researcher

Participants in this study comprised 46 second-year undergraduate B.Ed. (IP/ISP) teacher trainees. This was a multicultural and multilingual group of students with varied levels of academic literacy skills and schooling backgrounds. Most of the students were not first-language speakers of English and only a few were L1 speakers. The lecturer offering the course is a developing researcher whose exposure to readings on IBL and ways of involving undergraduate students in research prompted her to contextualise Academic Literacy with a view to promoting deep learning, and developing students' academic literacy and research skills. The study was undertaken in her first year of teaching Academic Literacy. The researcher's academic background is in Language Education.

What makes the research site unique is the fact that the faculty had adopted an autonomous model in the teaching of Academic Literacy, in that students were expected to transfer academic reading and writing skills to other subjects. An autonomous view of Academic Literacy is skills-oriented and supports an uncritical academic socialisation model (Jacobs 2007). It does not view literacy as a social practice. Also, there is no collaboration between Academic Literacy lecturers and subject specialists regarding the literacy needs of students in the different subjects and how best to develop them. As such, the introduction of guided inquiry-based learning marked a departure for the module.

Conceptualisations of IBL

IBL has been defined by Levy, Little, McKinney, Nibbs & Woods (2010) as a "cluster of strongly student-centred approaches to learning and teaching that are driven by inquiry or research". Teaching begins by "presenting students with a specific challenge, such as experimental data to interpret, a case study

to analyse, or a complex real-world problem to solve" (Prince & Felder 2007:14). Aditomo, Goodyear, Bliuc and Ellis (2013) state that the concept of IBL is contested, and not widely used in educational literature and refers to "both a process of seeking knowledge and new understanding, as well as a teaching method". It is used interchangeably with phrases such as 'guided inquiry'; 'problem-based learning'; 'research-based teaching'; 'learning through inquiry'; 'undergraduate research' and 'enquiry-based learning'. IBL is "question or problem-driven" and "entails students performing investigations of some sort to address questions and solve problems" and "excludes teaching approaches which are primarily concerned with the exposition of content or of a topic". Justice, Rice, Warry, Inglis, Miller and Sammon (in Aditomo *et al*. 2011) offer a more comprehensive definition of IBL. They conceptualise IBL as a "range of instructional practices that promote student learning through student-driven and instructor-guided investigations of student-centred questions". Aditomo *et al.* (2013) identify various forms of IBL that are used across disciplines and universities: for example, 'problem-based', 'project-based' and 'case-based teaching and learning', traditional science laboratory activities, dissertations or theses, as well as newer approaches such as knowledge-building and Learning by Design.

Based upon the work of Justice *et al.* (2007), Khan and O' Rourke (2004) and Weaver (1989), Spronken-Smith and Walker (2010:726) identify three forms of inquiry: structured, guided and open inquiry. These are based on the following criteria: level of scaffolding; emphasis on learning existing knowledge or constructing new knowledge; and scale.

The core characteristics of IBL are: (i) learning is stimulated by inquiry and driven by questions or problems; (ii) learning is based on a process of constructing knowledge and new understanding; (iii) it is an 'active' approach to learning; (iv) it involves learning by doing; (v) it supports a student-centred approach to learning in which the role of the teacher is to act as a facilitator; and (vi) it promotes self-directed learning with students taking increased responsibility for their learning.

In this paper I argue that a *guided approach* to the integration of IBL into Academic Literacy provides a rich context for promoting student engagement, and developing academic literacies, basic inquiry skills and higher-order skills across disciplines. However, the successful integration of guided IBL into AL depends on context and lecturer conceptualisations of Academic Literacy.

Problem Statement

Student access to disciplinary knowledge at university is closely tied to academic literacies. Jacobs (2007) and Boughey and McKenna (2016) recommend an integrated approach to the development of academic literacies through collaboration between discipline experts and academic literacy practitioners. Although some studies have been published on the process of integrating IBL into a variety of disciplines and interventions aimed at developing language and literacy at undergraduate level, there remains a gap in the literature on the integration of IBL in language support programmes such as 'Academic Literacy' modules, or on the integration of IBL across disciplines.

This article reports on undergraduate Education students' perceptions and experiences of guided IBL being phased into a course to enhance student engagement and improve students' research and academic reading and writing skills. It highlights the challenges of integrating such a complex

pedagogical approach within a stand-alone Academic Literacy module. In this paper, I argue that context is a key factor in the implementation of guided IBL at undergraduate level and that AL practitioners and subject specialists need to synergise their efforts and work collaboratively to achieve the learning objectives of guided IBL in AL.

Research Question

This exploratory study employed a questionnaire made up of closed- and open-ended questions to establish possible answers to the following question:

1. How do undergraduate teacher-trainees experience an AL course which integrates guided inquiry-based learning of its content?

Conceptual Framework

Key concepts in Vygotsky's work, such as scaffolding, the Zone of Proximal Development (ZPD), and collaborative learning tasks/activities were useful in analysing the data. 'Scaffolding' refers to cognitive or intellectual support that an adult or teacher gives to a student to improve learning. It leads to the 'appropriation' of content, ideas and opinions (Mercer 1994). The theory of ZPD is closely related to scaffolding and represents the difference between what learners can do on their own and what they can do when they have been given cognitive support through scaffolding and engaging with socially and culturally-designed activities/tasks (Mercer 1994). In this study, scaffolding refers to academic/language support offered by the lecturer to students to help them make sense of the content and reach their ZPD.

Research Methodology

This exploratory study adopted an interpretative paradigm. A questionnaire comprising both open- and closed-ended questions was administered by a lecturer and a tutor to a class of 66 third-year IP3B students taught by the researcher in their second year of study. Forty-six students returned the questionnaire. Its content focused on their classroom experience, how the course was delivered and how it did/did not enhance their learning.

The lecturer obtained ethical clearance for the study. Other ethical aspects the lecturer had to confront during data collection were 'demand characteristics': subjects could produce responses that they thought their lecturer wanted (Mouton 2015). To avoid compromising the trustworthiness/validity of data collected, the purpose of the study was explained when handing out the consent forms. The participants were informed that their honest opinions would help shape the delivery of the course the following year and improve student learning.

Data analysis was conducted through identifying themes within the responses to the open-ended questions. Frequency tables were drawn up based on the responses to the quantitative questions. Concepts from Vygotskyan theory were applied to make sense of the data.

Integrating Guided IBL into an Academic Literacy Course

The synthesised inquiry-based learning framework (Pedaste & Tsourlidaki 2015) was used to integrate IBL into the AL course. The process undertaken with the students is described in the subsections that follow.

Orientation and Conceptualisation

Students were informed about the learning objectives of the course as well as the new way of offering the course. As part of the orientation and conceptualisation process, students were first introduced to a newspaper genre – with an article that had an educational focus – to stimulate their thoughts on educational issues that they might wish to investigate. They were given pre-reading, reading and post-reading activities to work on in small groups and present on in class. The readings were aimed at raising their awareness about education-related challenges in the South African education system and to help them identify topics and questions they would be interested in researching.

Inquiry Tasks and Academic Support

In terms of scale of inquiry, students interrogated the inquiry tasks over a period of three academic terms, once a week during 45-minute lecture periods. The lecturer provided broad direction and guidance on how to complete the tasks (hence, *guided* inquiry). However, more capable students were given leeway to construct their own questions/problems and to think of suitable ways to solve them. More scaffolding was provided for struggling students.

Students were then divided into groups and asked to identify a number of higher education challenges for their research topics. The following are some of the topics/themes that students formulated: #FeesMustFall,[1] decolonisation, access and success, and teacher supply and demand. Students were assisted in writing their ideas succinctly, crafting a problem statement and identifying research question(s).

Students were also introduced to online databases by the Faculty Librarian and shown how to search for and evaluate data sources. Each group had to choose and read five journal articles on the chosen topics/themes and then craft their research questions. Considerable scaffolding was provided by the lecturer in class and during the normal consultation times to help each group refine their title and research statement/questions.

Developing Academic Reading and Writing

Guidelines were provided during a formal lecture on how to select a journal article relevant to one's inquiry, read the article, annotate it and make notes. After a few lectures of presenting the articles they had read, they were given a lecture on how to survey/review literature. They were then

[1]#FeesMustFall was a student-led movement in South African universities which began in October 2015. Students were fighting for increased government funding in universities and for government to cap student fee increases.

introduced to the structure of a journal article and directed to relevant texts on basic research skills in the library. Activities on summary-writing and paraphrasing skills were discussed in class. The literature review task was completed in pairs or in groups of three.

Collaborative Learning

The literature review assignment led to the next stage, namely, the design of data collection instruments in which the focus was on ethics in research, questionnaire design and conducting interviews. Students engaged in role play to demonstrate how they would conduct interviews. They then gave feedback on the interview role play.

The students were also given a questionnaire to critique using a checklist. They had to interrogate the questionnaire in pairs and add their own questions if they chose to. The students were allowed to use other languages as well during group discussions. Some of the students did not like this new way of presenting the course and stopped attending lectures, or became disruptive when they were expected to work in groups and make presentations.

Formative Feedback

The group was given an opportunity to submit their literature review twice. This made it possible for them to revise the first draft and integrate the constructive feedback given by the lecturer into the second submission. Global comments on common writing mistakes were given to the whole class. Some of the students found it challenging to complete these writing tasks. This created an opportunity for the lecturer to refresh their minds as to what they had learnt the previous year about, for example, the Harvard referencing style, paraphrasing, writing coherently and so on. Although initially planned, subsequent submissions of their writing, for example, their data analysis and the individual research report, could not be submitted twice because of the student unrest[2] that spread across universities at that time. The lecturer avoided discussing conceptual-theoretical frameworks so that students did not have more content than time allowed.

Teaching and Learning

Teaching was contextualised because students were learning about research by participating in research that was education-focused. Formal 'mini lectures' were prepared by the lecturer to support the students in their reading, research and writing. This preparation involved lecturing for 15-20 minutes to highlight pertinent information that would help students complete a reflective reading or writing task. Students then engaged in group work activities during the remaining 20 minutes.

[2]The student unrest was related to the #FeesMustFall protests.

Data Collection, Analysis and Research Ethics

Some of the students were reluctant to interview fellow students in their sample groupings or random students on campus. They were advised to declare upfront that this was a practice exercise and that the report would not be published in any academic journal.

A formal lecture was presented on data handling, that is, how to analyse and interpret questionnaires and interview data. By the time the student protests had started, only one lecture on data analysis was presented to only a handful of students. As such, reading material on data analysis was uploaded on Blackboard, the University's Learning Management System, for students to read. Individual reports or summative assessments were submitted to the lecturer at the end of the third term.

Assessment, Feedback and Evaluation

Continuous assessment was used in the course and students were initially required to submit each section of their report twice for constructive feedback. Evaluation was built into the course to create an opportunity for students to articulate their course experience. However, due to the #FeesMustFall protests in South African universities at the time, the course evaluation instrument could not be administered at the end of 2016 as planned. As such, it was administered at the beginning of 2017 to the same group of students while they were in their third year of study.

Whole-class and small group discussions were weaved into all the sections discussed above. Students also worked on the activities in pairs and individually.

Data Presentation and Analysis

The first question of the survey instrument asked students to indicate which aspects of the module they most enjoyed. The aspects of the course that most students reported enjoying were the education-focused readings from peer-reviewed journals and searching for and reading academic journals. The aspects that the fewest students reported enjoying were: reading for understanding, designing data collection tools, data collection, writing up the findings, delivering oral presentations, conducting a literature review, learning about data collection methods, and writing up the findings and submitting a research report. Each of these were rated as enjoyable by fewer than 50% of the students. Table 1 below is a summary of their responses to the question**.**

Table 1. Student responses to the survey on the course.

The readings which had an education focus	60%
Searching for and reading journal articles which formed the basis of my research project	53,3%
Crafting a research problem /research questions	46,7%
Learning about methods of data collection when conducting research, e.g. interviews and questionnaire	46,7%

Delivering oral presentations	46%
Doing a Literature Review on my chosen topic	40%
Writing up the findings of my study and submitting an individual research report	33,3%
Working in groups	33,3%
Designing the data collection tools e.g. designing a questionnaire/an interview schedule	20%
Collecting data using an interview schedule/questionnaire	13,3%
Reading for understanding	6,7%

Although closed-ended, this first question also allowed students to list additional aspects that they enjoyed about the module. Some of the responses included comments like: "I enjoyed discussions with fellow students in class"; "I enjoyed the course because I like working with people, group work, and presentations were interesting to me and what I enjoyed the most was creating a research topic, find more information about it and presenting in class."

Some felt that the course had strengthened their knowledge base regarding school and university education: "I read about things I did not know before"; "I could engage with studies that would impact me personally in my chosen field – would help me one day in the classroom." Furthermore, some students appreciated the fact that "… the content was reinforced and as students we were encouraged to work together and teach each other. This improves understanding through additional discussion and explanation, which our lecturer forged".

The second question asked students to explain how the aspects they selected in the first question helped them in their learning. Some respondents felt that the course improved their academic reading and writing skills: "I learned to be authentic in my writing and quote sources correctly."

For some students, the course gave them "an opportunity to learn more about how to do research": "I'm intending to study further. If you want to study further, you must be a good researcher." For others, the course "encouraged positive and critical thinking": "I find reading and writing stimulating my brain power." The course stretched their intellectual horizons: "Academic Literacy plays a fundamental role in my academics." Another student wrote: "We were exposed to the experience of examining and understanding the academic publications and journals, which in turn enhanced our academic progress in the different disciplines."

Some students were able to do a self-assessment of their own writing following participation in the course: "I can see now that my writing has improved"; "The course helped me formulate the research problem and questions as well as analyse questionnaire and interview data", and "because the tasks were done for a purpose, I understood the reason for doing them. The aims were clearly stated."

The value of the course was explained as follows by one student: "It helped me with writing essays, formulating questionnaires, compiling the literature review. I learnt a lot, but I feel the subject has not been allocated enough time." Overall, students appreciated receiving one-on-one written feedback on their assignments.

The third question asked students what they did not enjoy about the course. In this regard, some of the activities were found to be quite challenging, e.g. writing the research report and critiquing a questionnaire that somebody else had put together: "When you come across a really good questionnaire, it is hard to recreate something similar when it's right in front of you." The requirement that each student should read five journal articles on the chosen topic was identified as too much by some as there were other competing tasks to contend with. One of the respondents had this to say about assessment in the course: "Great course, however, the number of assignments and readings must be re-evaluated." Others felt that more time should have been spent on developing their research skills: "Research was new to me so spending more time on it would have helped me understand better and be comfortable to use the methods in my teaching and learning."

Other challenges identified by the student-respondents included: "There was too much class discussion during lectures and very little practical work", "It was a lot to expect from students as not every second-year student (group) was doing the same thing", and "I didn't enjoy the class presentations because I am shy and easily intimidated." One student argued that there was too much content to cover in the course and they were "overloaded for 45 minutes".

The course was demanding and confusing for some: "Analysing the data was a lot of work"; "I felt like I did not have enough knowledge and skill with regard to data analysis, or perhaps I was not ready"; "The number of assignments I felt was too much for the weighting of the course"; "There was a lot of work to cover for very few credits"; "Not all of us enjoyed how the course was presented"; "There were too many discussions and not practical work of how to do specific academic exercises"; "There was no prescribed text for us to read and get a deeper understanding of the aspects covered in the course. The lecturer insisted on frequent class attendance and there was no direct instruction given", and "Although the lecturer was passionate about the course students did not enjoy it."

The use of technology in the course posed challenges for some: "Downloading lecture notes on Bb [Blackboard] is not right for me because you can't understand what is required and sometimes you struggle to get computers in the university due to lack of resources." One student claimed, "I would have liked to have submitted my drafts online because of #FeesMustFall". Some of the students revealed how their socio-economic situations impacted on class attendance: "The lecture was offered at 8:30am and most of the students experienced challenges with (public) transport and could not attend classes." One student, however, wrote that: "There was not a single aspect of the course that I did not enjoy … the only problem was that there was not enough time to complete all the activities."

The fourth question asked students what they found difficult or challenging about the course, and why. Students found the following aspects of the course difficult to manage: group work, submitting work online due to the #FeesMustFall protests, writing the research report, and crafting the research questions. Other challenges were: "We did not have enough time during class to do it (reviewing the literature) properly"; "I was not experienced with regard to referencing and the register that was used

in newspapers and journal articles was difficult to master. The words were sometimes too advanced for one to understand."

While some enjoyed working collaboratively, others did not because, "some group members did not pull their weight". Perceptions about the course also contributed to a lack of participation in group work: "Group work was not very effective and the course was not taken seriously"; "group work was quite a daunting task, because people do not pull their weight when it comes to group tasks"; "some students didn't participate at all."

Others felt their expectations had not been met: "There was no direct instruction and this led to a lot of confusion in class. There was no form of reference – like a book that we could refer to, just to get a deeper explanation of what was going on and how to think in those terms."

The fifth question asked whether students felt that integrating research into the course helped their learning, and why. Only a few students were able to articulate that research and enquiry helped their learning: "I used the research skills, reading and writing skills which I learnt from AL *in other courses* as well"; "I developed skills that I was able to transfer to other contexts", and "Most of what I was taught in AL, now I can apply in my other subjects where research and my own writing are involved. I understand why academics write journal articles the way they do and I relate to it well."

Others expressed ambivalent feelings: "The course was interesting *sometimes,* when we were learning things of value about the future." Another perspective was that the topics, though education-focused, did not talk directly to their classroom experience: "It helped my learning, but, I would have liked to work with research topics that pertain to what we as teachers need to know."

The final question asked students whether integrating research into the Academic Literacy course helped them understand the link between AL and research, and why. For this question, one student wrote: "Initially, I did not understand what AL was about. Now I know what to do for research purposes and how to draft my findings and write a research report." Others argued: "The course was all about literacy development and for me it worked as one day I would like to conduct a research study of my own" and "The course improved my academic writing skills, helped me evaluate sources and choose relevant articles for my study." Overall, many of the student-respondents were of the view that most of the work required them to do research and the course helped them understand the basics of research and use an academic writing style.

The data collected and described above was analysed using coding. Codes were identified through deductive content analysis. However, in instances where Vygotskyan ideas could not explain the data, inductive coding was used. Similar and sometimes opposing codes were grouped together to form themes. Table 2 provides an overview of the codes developed and the themes identified.

Table 2. Codes and themes identified in the research.

Codes	Themes
Scaffolding (activities, peer and lecturer feedback and assessment)	Task-related activities provided scaffolding and helped students complete their enquiry lines.
Cultural Activities (delivery/presentation, nature of inquiry activities)	Teaching-learning activities aimed at helping students solve real-world problems or collect information on existing problems through inquiry require a host of learner-centred strategies such as: role-play, whole-class discussions and *collaborative* group work. Some students disengaged from these activities and bunked classes. Others stayed the course and completed the class-based activities and their research reports.
Mediated learning (through language), **Zone of Proximal Development**	Activities that involved the integration of the four skills – *reading* academic journal articles, *listening* to a lecture aimed at explaining concepts, *writing* drafts and re-submitting them after receiving feedback, and *making oral presentations* – provided the necessary scaffolding for task completion. Some of the students could not make the link between the activities and the task at hand.
Collaborative learning	Despite its benefits, collaborative learning/group work was occasionally ineffective for extended tasks that involved inquiry. Some students disengaged and did not pull their weight because of their conceptions of learning and how they perceived the course.
Varied experiences	Guided IBL was experienced in different ways by students in the same course. Some viewed it as difficult, too demanding and confusing, while others viewed it as beneficial.
Time factor	Students need sufficient time to engage with the 'inquiry activities' designed for each stage of the enquiry process.
Perceptions	Student perceptions of the 'new approach' (IBL integration into AL) influence the level of engagement/participation in the course.
Disengagement	Resistance and ambivalent feelings are to be expected when introducing an intervention/innovation. These feelings could lead to disengagement.
Role of technology	Technology aids learning and is very useful in facilitating the completion of extended enquiry tasks.

Divergence

As can be seen in the presentation of the data above, there was considerable divergence within the data. Some students embraced integration of IBL into the language support module. Others resisted it. This polarity suggests that students in the same programme experienced that programme differently, possibly because of their different educational backgrounds and identities. According to McKenna (2004:269), although students adopt practices that are important for membership in new social groups in higher education, they do not, "in general, identify with the academic literacy practices that perform a gate-keeping function for success in higher education. These literacy practices were found to be confusing, difficult to access and at times, as alienating from the African identities they valued". Conversely, students whose literacy practices were supported by higher education had positive statements to make about the course that integrated enquiry into AL.

An unexpected outcome of the study was that some of the students resented the fact that they were required to go out and collect data, work collaboratively in groups or pairs and make presentations in class. They found it difficult to manage group dynamics. They felt that there was too much reading to do – individually and during lecture time. This may be attributed to the fact that the students' timetables were packed and they did not have the time to do data collection, or the fact that participation in knowledge-creation and discovery, which is the essence of a university education, was not viewed as important by these students. Instead, learning was conceptualised as the act of reading what is in a text and giving it back to the lecturer in a test or examination.

Integration of Guided IL into Academic Literacy

Almost all the participants complained about the time allocated to the module and the volume of work they had to cover. The findings seem to suggest that the main emphasis should not be on coverage but depth. For example, instead of focusing on the whole inquiry cycle at second-year level, developing a problem statement and conducting the literature survey could be the main focus. The other stages could be tackled in subsequent years. The data seem to suggest that a programme-wide approach to the implementation of guided IBL would create more opportunities for students to reflect on their learning and transfer new knowledge to other disciplines. According to Aditomo *et al.* (2011), IBL is practiced in a wide range of disciplines, in both undergraduate and postgraduate course-work programmes, in smaller and larger classes, and in universities that are more and less research-intensive. Many of the students complained that the course had become too demanding and left them little room for attending to the demands of other courses. For many, the time allocated to the course was inadequate. This partly explains why some were overwhelmed and disengaged as a result.

Scaffolding and Collaborative Teaching-Learning Activities

Spronken-Smith and Walker (2010:726) assert that the learning outcomes of IBL include development of critical thinking, self-reflection, responsibility for own learning, the ability to undertake independent inquiry and intellectual growth and maturity. These outcomes can be achieved through "authentic knowledge-building activities" (Aditomo *et al.* 2011). The lecturer has to provide scaffolding in the form of authentic teaching and learning tasks and develop students' academic

language in the *context of a discipline* (reading and writing in English) to help students make meaning and complete the inquiry lines. The level of scaffolding provided by the lecturer should be challenging enough to bring the students to the theoretical ZPD level. Stand-alone language interventions such as the Academic Literacy module offered outside of the curriculum fail to fix the 'language problem' (McKenna 2004). Jacobs (2007:874) recommends an integrated approach to teaching academic literacies which must be underpinned by "sustained collaborative and collective engagement" between Academic Literacy lecturers and subject specialists.

Conceptions of Learning

In this study, students displayed varied conceptions of learning which in turn influenced the way they experienced the course. Some expected to be 'given' information instead of discovering/constructing new knowledge through active involvement, research and enquiry. Others embraced the 'restructured course' and indicated that more time should have been spent on honing their research skills. These findings point to a need for more guidance and focused scaffolding to be provided at the different stages of the enquiry and writing process. The lecturer has to identify those needs at each stage of the inquiry process. Some of the findings in Levy and Petrulis' (2012) study were similar to those made in the current study although greater ambivalence was expressed in the current study. Levy and Petrulis (2012:85) report that students experienced inquiry and research as empowering and as contributing to personal and intellectual development. They experienced inquiry and research in four distinct ways: gathering information; exploring others' ideas (associated with learning by engaging with a knowledge base*)*; evidencing and developing students' own ideas; and making discoveries (associated with an emergent sense of participation in knowledge-building, understood as the potential to bring something personal or new to an area of study).

Implications for Practice

In this paper, I have sought to establish undergraduate students' experiences of an Academic Literacy course that integrated inquiry-based learning using a guided approach. The aim was *not* to generalise the findings but to draw specific conclusions. The evidence presented in this paper suggests that a more guided approach to the integration of inquiry-based learning into subject content would provide a rich context for contextualising academic literacies teaching at undergraduate level. Lessons learnt from integrating IBL into Academic Literacy using a guided approach include the following:

- *Effective planning and orientation to the course* are essential to the efficient integration of IBL into subject content. For example, Academic Literacy practitioners could streamline the AL content, and adopt a programme-wide approach to the integration of IBL into Academic Literacy development, by focusing on the development of *specific skills* and knowledge required at each level in selected core courses and making sure that the scope and depth of the courses become more cognitively demanding as the students' studies progress. The specific skills required at each year of study would then be reinforced in other non-core courses. In that way, AL skills would be integrated into disciplinary content. Academic Literacy practitioners should collaborate with discipline specialists, as has already been argued by Jacobs (2007) amongst others.

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- *The use of technology and social media* can greatly enhance the student experience of a course that integrates IBL into subject content. Formative feedback would not only be given by the lecturer but also by the students themselves: online and in class. This would not only reduce the lecturer's marking load but also give trainee teachers an opportunity to learn how to give constructive feedback. The lecturer can exploit the affordances of the various e-tools, and introduce flexibility, openness and adaptability in the way the course is presented. Students could also provide feedback to one another in their preferred languages. An intensively blended approach could have benefitted students immensely given that the course had been allocated only one period per week. Students who expressed feelings of inadequacy regarding their levels of digital literacy would benefit from getting support from their peers and lecturers.
- The research report/essay could be submitted only in the last year of study (fourth year in the case of the B.Ed) if a *programme-wide approach* to the integration of IBL is adopted. The first three/four years of study could focus on developing particular skills that would help students complete the formative assessment tasks. This would contribute to the development of a quality research report at the end of the programme.

The lessons offered above may not hold for every course. The disciplinary context in which the intervention is implemented and the lecturer's understanding of how disciplinary literacies are acquired and made explicit to students seems to be key to implementing this complex approach.

Recommendations

The South African higher education sector has unacceptably low retention and throughput rates (CHE 2014). A programme-wide approach to the integration of IBL into courses at undergraduate level has the potential to develop discipline-specific academic literacies and enhance student learning. Further research into the integration of guided IBL and other forms of IBL into various disciplines will help explain how best to implement IBL in a manner that benefits students academically.

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