FOSTERING CRITICAL THINKING IN LARGE CLASSES: AN INVESTIGATION INTO LITERACY PRACTICES ON UNDERGRADUATE COURSES

EKUA TEKYIWA AMUA-SEKYI

Department of Arts & Social Sciences Education, University of Cape Coast, Private Post Bag, University Post Office, Cape Coast, Ghana

ABSTRACT

The study observed five introductory courses for one semester at one public University in Ghana to find out academic literacy practices being engendered and how critical thinking is fostered through those practices. Five lecturers observed were interviewed. Forty students from classes observed participated in group interviews. Interviews were replicated with five lecturers and sixteen students in two other public universities. Data was triangulated to identify emergent patterns of lecturers' and students' experiences with teaching and learning. Findings raise questions around the levels of congruence between lecturers' personal epistemology and practice. Consensus about the importance of critical thinking in lecturers' aims for student learning was not translated into literacy practices. There is a disconnection between the goals for learning and the teaching, learning and assessment system. Practices described by both lecturers and students are completely in tension with university polices. Lecturers need to learn new skills to cope with large classes.

KEYWORDS: Critical Thinking, Academic Literacy Practices, Large Classes

INTRODUCTION

The development of students' abilities to think critically is one of higher education's most widely professed goals. Traditionally, critical thinking, analytical capability, problem solving and originality have been central to the goals of higher education. The educational objective of fostering critical thinking in students may be so widely valued because it is an enduring skill that adds value to higher education; it prepares students to handle the multitude of challenges that they are likely to face in their careers and their personal and social lives where the content of education gives way to application of knowledge and skills. The higher education experience is to enable students to achieve the type of education that liberates them from dependence on lecturers and teachers, to get them to learn to think on their own and in collaboration with others, to enable students to challenge, question and express dissent. Higher Education pedagogies, Barnett (2009, p. 432) suggests, should assist students in moving effectively from a relative state of ignorance to a state of well-formed knowing. It could be argued that one of the aims of 'higher' learning is the development of a more questioning, critical engagement with the world. It is not surprising then that the charters of universities worldwide signal the institutions' definition of the educated person as one who is critical and reflective. Consequently many institutions, through their mission or vision statements, profess their capacity to foster critical thinking in their students and universities in Ghana are no exception.

Gosling (2006) observes that a majority of graduates never directly use the subject matter of their degree after graduation, a view that suggests that qualifications, despite signifying a general level of ability, do not necessarily equip individuals with the skills necessary for particular occupations. Many graduates may change careers several times in their

lifetime. Those who remain in the confines of their academic discipline are in the minority. While all will have gained the specialist knowledge of their degree subject, since that is the material they have been taught and which they have used to complete their assessments and examinations, only some will be able to use this knowledge directly in their professional lives as teachers, doctors and engineers. Others will be able to give direct application to their subject-specific knowledge as consultants. But for many, the study of a discipline is merely a means to an end. While the attainment of a subject-specific degree is essential for certain types of jobs where subject knowledge is necessary, for many it is the skills and dispositions to engage with the world around them in order to deal with change throughout their careers that matter (Morley, 2007).

The mental framework or the critical perspective they develop through academic literacies (the more holistic, inseparable skills of critical reading, critical writing, critical listening, critical speaking and critical thinking within disciplines that constitute central processes through which students learn), is in many instances transferable (Neeley, 2005). They are able not only to build productive connections between their academic community and their employment community when they graduate, but have developed a flexibility of thought that will serve them well in any encounter. They have acquired a skill over and above subject knowledge.

Definitions of critical thinking are wide-ranging. However, key categories composing the construct of critical thinking include interpretation, analysis, evaluation, inference, presenting arguments, reflection, and dispositions. In a discussion on critical thinking, Van der Wal (1999) highlights the individual's personality traits, their willingness to engage in cognitive processes, as well as one's discipline as factors that influence the individual's willingness to engage critically. While the individual's personality traits cannot easily be changed, one's environment and how one relates to learning experiences in that environment, to a large extent tacitly influence the tendency to be critical. By implication, the extent to which teachers encourage or use students' ideas, the amount and cognitive level of student participation in class, and the amount of interaction among students in a course are three instructor-influenced classroom interactions which are noted to consistently and positively relate to gains in critical thinking.

Three key assumptions underlie this investigation: that first, effective learning in higher education depends on being able to transform the knowledge presented, and so be able to use it in novel contexts. Such ways of thinking do not develop automatically. They are acquired through instruction and practice and are crucial to success in all academic disciplines. Second, from a constructivist view of learning (which suggests that knowledge is not possessed, rather, it is constructed and at best contingent upon sources of new knowledge), critical thinking might most usefully be seen as a social practice embedded in academic literacy practices. Consequently, the development of critical thinking is a product of cognitive activity performed in social acts of communication. Third, it is assumed that certain teaching practices might develop greater synthesis and critical analytical skills within the student and encourage more reflective and questioning approaches to studies which would encourage deeper learning.

Research Context and Questions

Student enrolment in universities in Ghana has increased steadily since 1999. A major challenge is the reclassification of non-graduate occupations into graduate occupations (Yikpabongo, 2011), as many find themselves unemployed. While widening participation is seen as desirable, the effects of large classes are problematized by both male and female lecturers with reference to overcrowding, staff overwork, resources issues, and the threat to quality and standards (Morley, Leach, Lussier, Lihamba, Mwaipopo, Forde, & Egbenya, 2010). This notwithstanding, complaints

about the quality of student learning and by implication methods of teaching abound (*The Mirror*, 2008; Gobah, 2007; Viala, 2007). When university teachers themselves discuss publicly in various fora what they perceive to be a lack of critical perspective in students, it begs the question: what is it that our graduates are taking from higher education as they move into employment?

Research on the development of critical thinking during degree-level courses suggests that critical thinking does not emerge from *ad hoc* practice. Rather, it is nurtured through sustained literacy practices on a longitudinal basis as an integral part of courses when explicit instruction and the use of explicit description (models) of what is involved in thinking critically raise students' meta-cognitive awareness of learning (see Chabrak & Craig, 2013; Ritchhart, Turner & Hadar; 2009; Walker, 2006; Wilson, Devereux, Macken-Horarick & Trimingham-Jack, 2004; Canagarajah, 2002). What there is, however, focuses on specific contexts such as Australian and British universities, or the classrooms of overseas students in the United States of America. Besides, much of the research emerging from within the disciplines on how to teach critical thinking more effectively within subject areas focus on the level of individual courses, usually the researcher's own. These are often published in discipline-specific journals and tend to be silent on cross-disciplinary implications. Research into the development of critical thinking during degree-level courses in Ghana is a relatively unexplored field. This study attempts to fill this gap in knowledge. It seeks to find out what literacy practices are being engendered in undergraduate classrooms and what kinds of critical thinking, if any, are undergraduate students learning in their courses. In line with the assumptions outlined earlier on, this study seeks to answer the following research questions:

- What are students' experiences of academic literacy practices on entering university?

- What do lecturers say they are doing to foster critical thinking in students?

- How do practices described by students and lecturers correspond to university policies?

METHODS

A case study seemed appropriate particularly with this kind of insider research that is trying to get at the complex issue of experiences, actions, behaviours, and beliefs. My interest in exploring social practices, social relations and experiences rather than testing hypothesis by or against empirical research is matched to qualitative research. While quantitative methods can effectively identify broad trends and common associations, in many cases qualitative methods are more suited for in-depth analysis of contextual elements. Consequently, I anticipated that a qualitative approach to data collection, involving observation of what transpires in classrooms coupled with probing interviews, would yield valuable data and insights. Quantitative methods that have structured response categories would impose a limited overview on participants (Marshall & Rossman, 2006), and run contrary to the general objective of developing a full understanding of what goes on during the teaching/learning encounter. In gathering data therefore, I worked within a qualitative framework. The strategy was to identify how participants themselves characterize and describe the teaching/learning activity in order to convey their explanations for why, how or which particular practices happen.

An institutional case study, involving a collective case study (Stake, 2000), of five first year courses across faculties was undertaken. First year students were selected for this study because the first year experience is most likely to represent the extent to which students and universities negotiate their engagement with one another, and of the effects and efficacy of those negotiations. One public university (institution A) was the focus of this study and although the results are

not generalizable in the probabilistic sense, the experiences of lecturers and students in two other public universities (institution B and C) were drawn upon for a wider theoretical resonance. Participants were selected purposively enabling quick access to the research participants. Random sampling might have resulted in settling on participants who would not have helped in addressing the specific research questions. A total sample of 10 lecturer-participants (8 males and 2 females) and 56 student-participants (28 males and 28 females) took part in the study. The gender imbalance among lecturer-participants was due to staffing issues.

A list of introductory courses at the case study site (institution A) was selected and lecturers who teach those courses were contacted to negotiate access. Since the study was on participants' experiences and perspectives, the option was to contact the lecturer with the longest record of service and work my way down if he/she declined to participate in the study. In all cases though, my initial contact was successful. Student-participants were randomly selected from a list of volunteers taking the courses observed. Going by these lists, four male and four female students were selected to form a sample of eight students for each of the five focus groups from the five courses chosen from the five faculties. Insofar as this research represents a descriptive and exploratory study, this self-selecting sample of five groups of students was deemed to be appropriate both to provide data that could be pursued in the study and in accordance with the need for participants' consent in research. Five lecturer-participants (4 males and 1 female) and 40 student-participants (20 males and 20 females) from the Faculties of Arts, Science, Education, Social Science and the School of Business from the case study site were engaged in individual interviews and focus group discussions respectively. Lecturers who participated in the study have at least five years experience of teaching in university. A mix of disciplines was used to elicit more variation in perspectives.

Participants from two other public universities, institutions B and C were purposively sampled in order to seek out emerging resonance. Lecturers who teach first year introductory courses and students who take such courses in these universities were contacted through my social network. Three lecturers from the Faculties of Social Science, Engineering and Pharmacy in institution B agreed to participate in the study. At institutions C, one lecturer each from the Faculties of Arts and Social Science agreed to participate in the study. A third lecturer from the Faculty of Science, who had initially agreed to participate in the study pulled out. Consequently, five lecturers from institutions B and C (4 males and 1 female) participated in interviews, while sixteen students (8 males and 8 females) participated in focus group discussions.

Classes at the case study site were observed for one semester. Single interviews were designed to allow lecturers to focus in depth on their individual experiences in managing and teaching their courses. Focus group interviews with students were to give them a voice, to provide them with a comfortable setting to explore sensitive questions, and to compare and share their ideas and experiences (Cousin, 2009). Documents such as academic programmes, policies and regulations, course outlines and examination questions were obtained in order to examine the implicit messages within them. Documents are part of the public face of institutional activity. A qualitative content analysis of documents was carried out to yield data on the formal and administrative expectations of the university and lecturers' wishes and intentions for students.

The constant comparative method of data analysis (Glaser & Strauss, 1967) was employed. Interview transcripts, observational notes and documents were repeatedly reviewed. Similar or related categories were "clustered" into themes from which conclusions were drawn. Analysis of the data explored causal links and investigated plausible and rival

explanations (Yin, 2003). Triangulation of data allowed for refinement of interpretations and solidification of findings. While a two-step approach to data collection (observation and interviews) was used, the data was treated as one corpus during analysis. This is because the research aimed to explore the same themes within the observation, focus groups and individual interviews.

As an insider, my knowledge of how the informal organization works gave me good access. However, what gives good access can sometimes be problematic in terms of actually doing the research. It involves confronting the dilemmas of loyalty, behavioural claims and identification in terms of relationships with participants and the institution and includes difficult role conflicts (Coghlan & Brannick, 2005). I was more concerned about the quality of the data and problematizing the issues which I have been thinking about for a number of years. This is not to say that I did not respect or put aside my sympathies with lecturers who were after all facing the same conditions as myself when teaching at the university, but rather that I was always trying to go beyond the selective description of classroom experiences that tends to be self justifying. The number of hours that I spent sitting with the students was helpful in interrupting my lecturer's-eye view of the classroom. Rather than being able to remove my disposition to think as a lecturer, what I was doing was trying to experience the teaching/learning encounter with students. By maintaining a reflexive stance, being aware of my own biases and trying to keep an open mind minimized the extent to which my researcher identity as an insider might distort the research.

Findings

Classroom observations suggest that students were engaged in literacy practices with oral discourse dominating classroom interaction as summarised below:

Table 1: Academic Literacy Practices

Listening • Students listened to lectures and asked questions to make sure they understand. *Speaking* • Lecturers mostly model authoritative expounding. • Question and answer activities mostly followed the teacher initiates, students respond, teacher gives feedback (IRF) discourse. There were no opportunities for evaluative reasoning that might foster critical thinking. • There were some opportunities for peer discussions in the Business and Education classes but these were short and not usually well structured. • Students had no model for critical interaction. **Reading**	Classroom feedback may be described as minimal. They hardly required evaluation of ideas that would invoke critical thinking. Feedback on writing came too late, partly as an effect of large classes.

- Students had little physical access to texts with nowhere near enough copies for the number of students, except for Sociology.

- Intellectual access only for the exceptional student (for example, in the Sociology class) as the texts seem too difficult for most students.

- Provision of supplementary materials was seen by students as authoritative as they were able to predict what is required in examinations.

- Many students read no books or articles and rely on supplementary materials.

Writing

- Note-taking was the major writing activity of students. This was mostly based on lecturers' cues or dictation or copying from the chalkboard.

- Some students were able to take their own notes which may have enabled them to recall content of the lecture and if they read them again they may have been able to reflect on what had gone on.

- Multiple choice testing removed the need to write for assessment.

- Most students extracted from texts for presentations (Sociology class).

- Some students wrote term essays but they were given no guidance on how to construct an argument within the specific discipline.

Documents

The academic programmes, policies and regulations document of the case study institution outlines the university's philosophy of teaching and learning as one with a focus on nurturing and challenging students to grow intellectually. It stresses, among others, inquiry and application of knowledge to real-life situations, critical thinking and the value of life-long learning. The course descriptions of lecturers outlined objectives which stressed analysis, problem solving, application of knowledge, evaluation and reflection. Examinations on the other hand mainly consist of multiple choice questions.

Students' Experiences of Academic Literacy Practices

In the focus group interviews, students' descriptions of academic literacy practices include: *'listening to what the*

lecturer is saying and asking yourself questions to make sure you understand what he or she is saying' (Focus groups, institutions A, B and C). Students described listening as an active process which involves trying to interpret what they hear and obtaining feedback from the lecturer in the process of negotiating the content of the interaction. Consensus among students was that: '*being at lectures has an advantage ... any clarifications and examples lecturers give may prove useful'* (Focus group, institution A). Students perceive questioning during lectures as very important in the pursuit of understanding. Their descriptions of classroom interaction involved mainly question and answer activities, confirming my observations. Three patterns emerged. First, there are lecturers who: '*… ask you questions, if you don't know the answer they will tell you'* (Focus group, institution B). This practice is consistent with the IRF pattern of classroom interaction observed in classes which is known to encourage transmission of information. Second, lecturers '*... ask questions and they add more to your answer'* (Focus group institution C). Lecturers explain issues to students. They do the talking while students listen. This is not very different from the IRF pattern. Third, lecturers: '*ask students to comment on answers of other students or ask us to discuss with those sitting around us... we get to share ideas'* (Focus group, institution A).

My classroom observations, however, showed that there were few opportunities for students to engage in such discussions that were organized by the lecturers. Instead, the idea of forming study discussion groups resonated among both male and female students in various focus groups: '*Our lecturers tell us to form study groups ... we share our ideas about lectures and what we read ... they help you to understand the subject better'. (All focus groups).* The encouragement to interact in study groups, outside the classroom setting most likely will enable students to practice disciplinary discourse. However, only 70% (20) of males as opposed to 98% (27) of females invest time in discussion groups. While Pharmacy students in institution B claim they do case studies, Sociology students at the case study site were observed making presentations. These presentations were however extractions from texts.

Students' descriptions of an instructional protocol involving every lecturer starting a course with 'a course outline ...with a list of books to read and websites to consult' (Focus group, institutions A, B and C), was consistent with observations. However, only 55% (15) of females and 40% (11) of males said they always read before lectures. If less than half the number of students, 46% (26 out of 56) make the habit of reading prior to lectures, it would seem to vindicate lecturers' claim that students do not read. Students would not read because of what they described as a mismatch between lecturers' demands that they read widely and their assessment requirements:

The same people will tell you to go and read all those books and look for information from the internet but they don't want the information you get on your own... we answer multiple choice questions ... we don't write essays...of what use is our research?' (Focus group, institution A)

Samples of examination questions corroborated students' claims. Students they do not see the relevance of reading when assessment tasks do not demand commitment to reading. Students linked this more strongly with summative assessment and observed that:' *... the incentive or motivation to explore to learn is not there'* (Focus group, institution B). Meeting assessment requirements is a determining factor in how students learn. Students are not going to put their best efforts into work which is not going to count. Although course descriptions emphasised problem solving, analysis and evaluation among others, these are in tension with assessment requirements. Students also described the lack of continuous writing in their courses. Those who write term papers observed that:' *most of the assignments..., we don't even get our papers back'* (focus groups, institution A and B). This, as was also observed, lends credence to students' claim that they do

not get feedback on their writing that would regulate their learning (Nicol & Macfarlane-Dick, 2006). The focus seems to be on the successful completion of the task in hand. In interviews with lecturers many denied that this happens, yet the data collected from my extensive observation and interviews with both students and lecturers suggest otherwise.

What Lecturers Say they are Doing to Foster Critical Thinking in Their Students

There was consensus among lecturers that they wanted to foster critical thinking in their students and that this was an important outcome of university education. However in keeping with the notion of academic literacies these lecturers' views of the meaning of critical thinking varied depending on the discipline. In Biology students were expected to: ' *... be able to relate features or structures to function ... criticize each other's reasoning ... solve problems ... use basic laboratory equipment like measurement instruments and microscopes'* (Lecturer, institution A). Here, analytical thinking and problem solving are placed in the context of specific skills – on the one hand they are laboratory skills but on the other they are about being able to use peer interaction for critical engagement. In the African Studies class the lecturer was concerned that students should be able to 'state issues and critique' which to him seemed to be mostly about understanding causes of behaviour. However, he was also concerned that critical thinking was about being able to question what others say: 'I tell students to assess, evaluate, and question information' (Lecturer, institution A).

In Business Management, getting students 'to appreciate issues, analyze and solve problems' demonstrated that they were being critical. This has some similarity to what the Biology lecturer talked about. In Education, critical thinking entailed getting students 'to ask questions, probe and think analytically' (lecturer, institution A). While the Education lecturer shares the view with the Biology and Business Management lecturers that analytical thinking is essential to critical thinking, his definition seems to refer to the higher level skills of Bloom's taxonomy (Bloom et al., 1965). For the Sociology lecturer, critical thinking is: *'the ability to reason or demonstrate some form of analytical skill. All I look for is evidence of some logical thinking'* (Lecturer, institution A). While she shares the same sentiments with the Biology, Business Management, Education lecturers, and Sociology lecturer in institution B, in stressing the importance of analytical skills, her interest was in seeing her students engage in reasoned arguments.

The lecturer of Engineering emphasized: 'looking at things from multiple perspectives and combining ideas in the process' (lecturer, institution B). Critical thinking to him involves encountering varied views and allowing further information to continually shape one's opinions. This resonates ideas expressed by the Biology, African Studies and Business management lecturers in institution A. In Pharmacy, critical thinking involved getting students to 'describe substances, analyze, synthesize and apply ideas' (Lecturer, institution B). Just as the Biology lecturer in institution A placed critical thinking in the context of specific skills, here, analytical thinking and synthesizing are placed in the context of chemical processes. In Philosophy and indeed the Arts, critical thinking was described as: *'confronting new problems and thinking broadly to offer solutions ... go beyond the ideas and come out with your own position'* (Lecturer, institution C). Here, critical thinking involves problem solving, reflection, evaluative behaviour and making value judgments. The ability to recognize and make sense of the different aspects of the subject matter seems to run through almost all of these lecturers' ideas of what critical thinking meant in their subject. Being analytical, therefore, was one aspect of academic literacy practice involved in their discipline. However, beyond that they each stressed something slightly different and contextual in terms of the subject matter or 'tools' of the subject, for example, the notion of domestic violence in African Studies or the use of laboratory equipment in Biology. Despite these differences in what academic

literacy might mean, the evidence of the lectures observed suggests that the way that lecturers worked was remarkably similar. Indeed, even the idea of being analytical did not feature much. The majority of class time was taken up by the lecturer's efforts to transfer information to students, optimizing course material coverage, a compulsion Horgan (2006) notes as one of the greatest barriers to effective teaching.

While lecturers explained their concept of critical thinking, they were not very forthcoming with what they did to foster these. A common response among lecturers was that they engage students in dialogue through question and answer activities. My observations and students' descriptions of classroom interactions however indicate that what they were referring to was the type of questioning which largely followed the IRF pattern and seemed to be focused on directing students to the correct answer. In Education, Sociology, Business studies (institution A) and Pharmacy (institution B), the lecturers talked about engaging students in group discussions which they believe give students opportunities to exchange ideas and be more critical in their response. However, my classroom observations and interviews with their students confirmed that group discussions entailed asking students to talk about issues for short periods with those around them. Such emphases on class discussion were thus in contrast to what was found in practice. This suggests that the impact of this classroom experience on students' abilities to think critically is weaker than might be expected.

Lecturers described student engagement as central to promoting critical thinking but talked about it in terms of workload: '*when you engage students you see evidence of analysis, problem-solving, evaluation. We don't pursue it. We don't want to give ourselves too much work'* (lecturer, institution C). Fostering critical thinking is a challenging and often daunting task which requires additional efforts from lecturers. Faced with large numbers, doing this involves a risk of being dragged into very lengthy work which lecturers just cannot manage. Lecturers described tutorials as an aspect of their role they felt unable to prioritize. This suggests that they were not unconcerned about students. Instead, they felt they were being realistic about what they could achieve in the face of competing daily pressures.

Lecturers noted that getting students to read widely is another way of fostering critical thinking in their students. However, resource issues that create poor teaching and learning environments resonated in interviews (Morley et al., 2010). Apart from lecturers in Sociology in institutions A and B who claim students have plenty to read, other lecturers in the study stressed the need to give students supplementary materials because physical access to text is limited: 'I can't refer 800 students to the library when there are only twelve books for them to share' (lecturer, institution A). Lecturers, however, described students' refusal to read as the main impediment to effective teaching. They observed that widening participation has resulted in a much wider intake of ability and most students' lack background knowledge as in Pharmacy: '... we expect that they must have basic knowledge in Chemistry, Botany, plant physiology, human physiology ... they come in with their A's but they are found wanting in this particular subject (Lecturer, institution B). Also: '... Biology 101 cuts across a wide spectrum, those who might not have touched on certain areas have fundamental problems' (Lecturer, institution A).

Although all lecturers acknowledged the importance of socializing students into academic writing, the writing witnessed in classroom observations involved mostly students taking notes on lectures. Lecturers blamed pressure to meet deadlines and workload which dictate the length and types of assignments they can give students: '*... I limit them by the number of pages they can write because of marking constraints ...I can't meet deadlines ... I don't give them a free range'* (Lecturer, institution C). Lecturers I interviewed generally reported doing little to incorporate writing in their courses

because of student numbers and marking constraints which make it impossible to give useful and timely feedback on students' work. Thus giving students assignments seem unfair and will serve very little purpose in the circumstances. Clear anxieties emerged when lecturers were questioned on how equipped they felt to deal with writing in their classes. It was, therefore, surprising when a lecturer-participant talked about giving his 1,000 students an essay, discussing their work with them and asking them to rewrite. I wondered whether he was telling me what I wanted to hear rather than the reality of the situation. My suspicion was confirmed by students in the focus group who counteracted his claims. In the interviews, there were differences between what lecturers mean by critical thinking but what was striking about the way that they talked of fostering students' critical thinking was that apart from the lecturer of Philosophy at institution C, nobody seemed to refer to modelling it in their own discourse.

How Practices Described by Students and Lecturers Correspond to University Policies

In the most important sense that the university in its policy statements and course outlines prizes critical thinking and deep engagement with ideas and concepts, the practices described by students and lecturers are completely in tension. Teaching large classes has led to a preference for multiple-choice testing which has removed the need to read, discuss and write for assessment. This invites questions as to the kinds of changes in students that are particularly sought in the educational process and the kinds of encounter with knowledge that might engender the sought-for-changes.

DISCUSSIONS

In examining the findings against the three key assumptions made in the study, one can argue that literacy practices manifested in the types of talk encouraged, the reading required, the writing and assessment tasks present few opportunities for students to exercise critical thinking skills. Limited explicit avenues exist to provide and receive feedback on ideas, voice dissenting views and question others' views. As Canagarajah (2002) notes, an effective way multilingual students can become insiders in a discourse community is to enter the on-going discourse and conversation in a relevant but critical manner (p. 207). In the context of this study, both lecturers and students emphasised questioning as the main source of interaction. What happens in the classroom and how students think, therefore, depends upon the nature of questions posed and their use. This will require lecturers to move beyond the IRF pattern of classroom discourse and create opportunities for critical discourse.

An important way of working on the social constructivist view of learning is to give students the opportunity to assume greater control over their own learning by initiating ideas and responses. However, not much teacher-student or student-student interactions took place for lecturers to encourage or use student ideas. Class discussions described by both lecturers and students are far from that known to foster critical thinking, which requires the lecturer to rely less on lecturing, lecturers and students ask more questions in class; students are encouraged to respond to questions posed by their peers; a greater proportion of students participate in the discussion; students are motivated to question or challenge what is being said; and students are encouraged to volunteer comments rather than participate in discussion only when they are called upon or asked a question (Mulryan-Kyne, 2010; Carini, Kuh, and Klein, 2006). The virtual cessation of tutorials has robbed students of opportunities for such interactions.

It is quite clear from course outlines, observation and interviews that students have a lot to read, but this is not useful if text readings are not integrated into subjects to enable students to practice the patterns of presenting information

in particular fields of study. When supplementary materials supposed to promote the independence required rather directs students towards reproduction of content as students described, they lead students to focus on recall of factual knowledge or the straightforward application of principles to familiar problems instead. Consequently, students' understanding of courses will be very limited and hence their ability to transfer their knowledge effectively to new contexts would be equally poor. While students do not see the relevance of reading, lecturers attribute students' lack of reading to a knowledge gab which makes books inaccessible in terms of understanding, particularly where lecturers did not seem to cover the ground of how to read them. Wilson et. al, (2004) suggest a positive link between the active participation of students in teaching and learning and course reading. That aside, explicit models of what is involved in thinking critically that will raise students' meta-cognitive awareness (Barnett, 2009), was significantly absent in lecturers' teaching practice as only one lecturer-participant seemed to refer to modelling critical thinking in his own course.

Observations and interviews indicate that the constraints of marking and giving useful feedback might have forced lecturers to eliminate writing in their courses with educationally bad consequences. If students are going through a full course without having to write any essays, except perhaps very short ones during examinations, this must obviously be contributing to lowering the skill level for self-expression and critical thinking among graduates. Writing invites students into on-going intellectual dialogue that characterizes the various disciplines as they engage critically and thoughtfully with course readings (Svinicki, 2005). The nature of assessment, multiple choice tests, appears to detract from the aim of nurturing students' abilities to think critically. What is assessed determines what students see as being valued. The nature of assessment tasks thus greatly influences both the effort students put into learning and the quality of learning. The extent to which students believe that their efforts can make a difference to their success is an important factor in their motivation.

One notices a disconnection between the goals for learning and the teaching, learning and assessment system. While lecturers expect a critical perspective from students, my observation and interviews with students and lecturers described as typical teaching practice sessions designed to transmit information to students, indicating that our teaching does not support on-going commitment to critical thinking. Lecturers might cite contextual factors as creating impediments to providing quality teaching and learning. While these might provide excellent excuses for not doing much to make teaching better, it does not necessarily imply a reduction in standards. If lecturers do not want to risk being dragged into very lengthy work, they cannot legitimately fault students for not thinking critically.

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study indicate that lecturers in universities in Ghana have not really adapted to the changed circumstances of teaching large classes except in ways that mean that the critical acquisition of academic literacies is diminished, yet lecturers expect and demand critical thinking from their students, being 'often hesitant to question our own academic practices' (Robinson-Pant, 2005, p. 181). Findings from observations and interviews raise questions around the levels of congruence between lecturers' personal epistemology and practice as described. If this finding receives support in subsequent research, it can be concluded that lecturers lack training. Pedagogical training might increase lecturers' level of teaching consciousness and possibly increase their willingness to try to apply different methods of teaching. Such training should facilitate rather than impose knowledge and understanding of alternative discourse practices in order to address the realities of the classroom context and the needs of students. Professional training which builds on existing systems and structures, helps lecturers to explore their own beliefs and supports lecturers' reflection on their practice, is more likely to

have an impact than the more traditional top-down approach.

If as this study has shown, teaching large classes impact negatively on lecturers and students, it may be valid for lecturers to aim for a successful outcome within that context, rather than opting for methods which, while convenient and practicable, may also be viewed as dissonant with the ultimate aims of higher education. What is disturbing is that, in this small sample lecturers feel under pressure to teach in ways that conflict with their personal ideologies. What is even more disturbing is that while lecturers feel pressured to teach in ways that conflict with their personal ideologies, yet simultaneously they still aspire to critical thinking in their students. By maintaining an expectation of a critical perspective in students, lecturers are failing to address the real issues of students, which include external pressure to teach in ways that conflict with their expectations. As such, there is scope for lecturers to become ontologically insecure (Ball, 2003), which could result in forms of fabrication about what they do and why.

The study is limited by the small sample size, the inability to observe classes in the other two public universities and the purposive sampling of lecturers who volunteered for the study thereby excluding those whose balance of commitment may be different. While these findings will need further exploration, the issues raised by lecturers resonate with many of the informal discussions that occur around universities in the country. For this reason, the study begins to make a formal contribution to exploring teaching in higher educational institutions in the country, despite its limitations.

REFERENCES

1. Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of Educational Policy*, *18* (2), 215-218.

2. Barnett, R. (2009). Knowing and becoming in the higher education curriculum. *Studies in Higher Education*, *34* (4), 429-440.

3. Bloom, B. S. (Ed.). Engelhart, M. D., Furst, E. J., Hill, W. H. & Brathwohl, D.R. (1965).

4. *Taxonomy of Educational Objectives, Handbook 1: Cognitive Domain*. New York:

5. David McKay.

6. Canagarajah, A. S. (2002). *Critical Academic Writing and Multilingual Students*. USA:

7. University of Michigan Press.

8. Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student Engagement and Student Learning. *Research in Higher Education, 47*(1), 1-32.

9. Chabrak, N., & Craig, R. (2013). Student imaginings, cognitive dissonance and critical

10. thinking.*Critical Perspectives on Accounting*, *24*, 91-104.

11. Coghlan, D. & Brannick, T. (2005), *Doing Action Research in Your Own Organization*.

12. London: Sage.

13. Cousin, G. (2009). *Researching Learning in Higher Education*. London: Routledge.

14. Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory*. Chicago: Aldine.

15. Gobah, T. (2007). Lecturer underscores the importance of critical thinking, *Daily Graphic,* No. 150018, Accra: Graphic Communications Ltd.

16. Gosling, D. (2006), Supporting student learning. In: H. Fry, S. Ketteridge, and S. Marshall, (2006). *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice*, 175-187. London: RoutledgeFalmer.

17. Horgan, J. (2006). Lecturing for learning. In: H. Fry, S. Ketteridge, and S. Marshall, (2006). *A Handbook for Teaching & Learning in Higher Education: Enhancing Academic Practice*, 83-94. London: RoutledgeFalmer.

18. Marshall, C. & Rossman, G.B. (2006). *Designing Qualitative Research*, Sage Publications, Inc.

19. Morley, L. (2007). The X factor: employability, elitism and equity in graduate recruitment. *Contemporary Social Sciences*, *2* (2), 191-207.

20. Morley, L., Leach, F., Lussier, K., Lihamba, A., Mwaipopo, R., Forde, L. & Egbenya, G. (2010). *Widening Participation in Higher Education in Ghana and Tanzania: Developing an Equity Scorecard.* Draft research Report http://www.sussex.ac.uk/wphegt/impact/dissemination.

21. Mulryan-Kyne, C. (2010). Teaching large classes at college and university level:

22. Challenges and opportunities, *Teaching in Higher Education*, *15*(2), 175-185.

23. Neeley, S. D. (2005). *Academic Literacy*. New York: Pearson Education, Inc.

24. Nicol, D. & Macfarlane-Dick, D. (2006). Formative assessment and self regulated Learning: a model and seven principles of good feedback practice. *Studies in Higher Education*, *31* (2), 199-218.

25. Ritchhart, R., Turner, T., & Hadar, L. (2009). Uncovering students' thinking about thinking

26. Using concept maps. *Metacognition Learning, 4*, 145-159.

27. Robinson-Pant, A. P. (2005). *Cross-Cultural perspectives on educational research* Berkshire: Open University Press.

28. Stake, R. (2000). Case studies. In: N. Denzin and Y. Lincoln (Eds). *Handbook of qualitative research* (2nd ed.), 443-466. Thousand Oaks, CA: Sage.

29. Svinicki, M. (2005). Student goal orientation, motivation, and learning. *Ideal Paper*, 41. Manhattan, KS: Kansas State University, Center for Faculty Evaluation and Development (February).

30. The Mirror (2008). *Banking and finance industry not satisfied with graduates,* Accra: The Graphic Communications Group Ltd.

31. Van der Wal, A. (1999). *Critical thinking as a core skill: issues and discussion paper*. HERDSA Annual International Conference, Melbourne, 12-15 July.

32. Viala, M. A. (2007). Encourage students to ask questions – Dr. Otabil, *Daily Graphic,* No. 149991, Accra: Graphic Communications Group Ltd.

33. Wilson, K., Devereux, L., Macken-Horarick, M., & Trimingham-Jack, C. (2004). *Reading readings: How students learn to (dis)engage with critical reading.* HERDSA Conference Proceedings.

34. Yikpabongo, N. D. (2011), Menace of graduate unemployment. *The Mirror*, No. 2938. Accra: Graphic Communications Group Ltd.

35. Yin, R. K. (2003). *Case study research: Design and methods.* London: Sage Publications