Critical thinking lexical competencies in higher education programmes: Verb choices for knowledge assessment in the B.Ed. curriculum studies courses at the National University of Lesotho

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Abstract

Language is a context-bound phenomenon. This notion about language transcends even concepts such as critical thinking (CT) as one of the key goals of education and training in higher education. The extent to which knowledge assessment in Lesotho's higher education focuses on CT-related linguistic competence has hardly been investigated. A qualitative situation analysis type of design through use of conversational interviews with curriculum studies lecturers, an open-ended students' questionnaire and documentary source analysis was adopted to examine curriculum studies courses in the Department of Languages and Social Education (LASED) at NUL for the extent to which a linguistic perspective prevails in the formulation of knowledge assessment tasks. Findings point to among others: sophistication in students' and lecturers' concept of critical thinking and unintentional instructional exclusion of CT-oriented linguistic competence in the courses resulting from unawareness of the importance of critical thinking cognitive skill linguistic competence (CTCSLC). The study recommends need for adoption of a language- in context approach to teaching and assessment in higher education programmes with specific reference to teacher education and training programmes

Key words: *Critical thinking, Lexical competence, Linguistic competence, Task formulation and Knowledge assessment*

1. Introduction

Education, worldwide is being reconceptualised as a process wherein students should acquire facts, principles and theories as conceptual tools for reasoning and problem-solving in meaningful contexts (Kannan & Bento, 1996). Consistent with this is Kakai's (2000: 110) adoption of Aristotle's view of thinking, to argue that critical thinking allows citizens to form intelligent judgements on public issues so that they can contribute to the solutions of social problems in a democratic way.

This suggests a shift from the Skinnerian objectivist teaching model in which: teachers are perceived as founts of "unquestionable knowledge"; lecturers fail to promote intellectual potentials (Lancy, 1983) and continue to develop assessment tasks which are grounded in the rote-learning ritual hardly requiring lengthy responses and high level cognitive functioning (Russell, 1993).

The shift is towards the constructionist model which advocates adoption of learner centred instructional approaches in which construction of meaning and knowledge formation are achieved through ability to: tap personal experience; appreciate the learning context; and eliminate uninformed inputs in the process of open-mindedly interrogating issues and solving problems. Essentially, the shift is about provision of education that is premised on need for development of skills for "ownership" of knowledge construction. The shift is in sum, about conscious adoption of teaching, training and learning approaches that are participatory and specifically geared towards development of critical thinking skills in learners.

Critical thinking is central in knowledge construction and therefore in the pedagogical life of every teacher. Contextualizing this view into education, Kakai (2000) asks whether education programmes can help students become critical thinkers so that they can survive in the rapidly changing and therefore challenging modern society. Central in Kakai's question is another question

on measures to be taken to prepare students to become critical thinkers.

For the foregoing to effect, Hare (2000) argues that "there is need for a good teacher." The scholar's notion of a good teacher includes: an inquiry ability, open-mindedness, initiative, reflective judgement, inquisitiveness, systematicity, analyticity, self-confidence, truthfulness/intellectual honesty and tolerance. In sum the notion portrays a good teacher as one who is a critical thinker. Since not many would be born critical thinkers, it would seem that teacher education and training has the challenge through properly oriented programmes to produce good teachers who in turn should have the skills to nurture critical thinking in students at classroom level. For this to happen however, a basic understanding of critical thinking needs to be established.

A simplistic and inadequate concept of *critical thinking,* as commonly thought is that it: entails negativity; is fault-finding and engenders cynicism (Hare, 2000: 90). In this study a broad definition of critical thinking resultant from the 1990 American Philosophical Association Delphi research project (Facione, 1990; Facione *et al*, 1995) is adopted. The definition is that critical thinking is "purposeful, regulatory judgement which results in interpretation, analysis, evaluation and inference, as well as the explanation of the evidential, conceptual methodological, criteriological or contextual considerations upon which that judgement was based" (Facione, 1990: 3; Facione *et.al.* 1995: 1).

A number of observations about critical thinking as a concept surface from the Delphi definition above. First, is that critical thinking is about open-mindedness and dynamism of thought. Second, is that critical thinking is not about passiveness and unquestioning receptiveness. Third, critical thinking is about being cognisant of the validity of research-informed decisions. Fourth, critical thinking is comprehensively dialogic and as such is typified by higher order cognitive skills and dispositions. Finally, critical thinking is about being rationally independent in thought, thus being constructionist in approach to real life problems.

Education is about preparing people to meaningfully have life. Critical thinking, therefore, becomes its main goal.

Yet it is important to appreciate that this goal may not be realised without commensurate efforts in teacher education programmes. According to McNamara (1989), teacher educators have to break away from "technician" models of teaching (McLaughlin, 1991), a conformity (Lawton, 1983), a recipe formula approach to knowledge assessment, teaching and training (Avalos, 1989; McNamara, 1989; Meyers, 1986), or a ritual in teaching approach typified by rote-style teaching with concomitant expectation of rote-style learning (Guthrie, 1986).

2.   The Problem

Several studies have been undertaken in higher education to determine among others, subject matter-related students' abilities challenged by lecturers' tasks and the extent to which programmes challenge students' general critical thinking ability (Horowitz, 1986). Hardly investigated however, is the extent to which teaching and resultant knowledge assessment in higher education programmes address the critical thinking-oriented-linguistic-and-communicative proficiencies and competencies embodied in the word-choices made by lecturers in their formulation of knowledge assessment tasks. Knowledge assessment task formulation requires proper focusing achieved through clarity of key words, most of which are verbs as doing words in their different tense forms. In their own right, verbs chosen to formulate a knowledge assessment task dictate the critical thinking cognitive skill to be demonstrated by the person attempting the set task. In the absence of empirical evidence, the extent to which critical thinking – based lexical communicative competence forms part of knowledge assessment task formulation in higher education programmes in Lesotho, particularly teacher education, remains an assumption. Hence, this study.

This gap in research overlooks the research-evidenced perception that language as a context-bound phenomenon

transcends all aspects of knowledge (which for purposes of this study) are inclusive of *critical thinking* as a concept. In the context of teacher education and training in Lesotho, the need to establish the extent to which critical thinking skill development and requisite lexical communicative competencies are addressed in the B.Ed curriculum studies courses at the National University of Lesotho may not be overemphasised. Hence the study.

3. Purpose and objectives of the study

The study examined curriculum studies courses in the B.Ed. programme in the Faculty of Education at the National University of Lesotho (NUL) to determine the critical thinking skill communicative abilities challenged by verb-choices made by lectures in their knowledge assessment tasks. The specific objectives for the study were to:

1. Determine students' and curriculum studies' lecturers' concept of critical thinking;

2. Determine critical thinking abilities challenged by the most- commonly used knowledge assessment task formulation verbs;

3. Determine from the verb-choices the requisite critical thinking lexical communicative competencies to be demonstrated by the students in attempting the tasks;

4. Determine critical thinking related language problems experienced by teacher educators and students with regard to formulation of and attempting knowledge assessment tasks respectively; and

5. Establish the extent to which critical thinking lexical communicative competence is formerly addressed in the B.Ed. curriculum studies courses.

4.   Methodology

The study is a descriptive situation analysis type of design.

4.1   Population and Sample

The population for the study were students as well as lecturers in the B.Ed programme in the Faculty of Education at the National University of Lesotho (NUL).   For purposes of this study, purposive and census sampling were used to include only but all 3rd and 4th year curriculum studies courses in the Department of Languages and Social Education (LASED) – thus excluding the Educational Foundations Department of the Faculty.   The same procedure was also used to include only B.Ed 3rd and 4th year students and lecturers in Languages and Social Education Department.   A total of 416 students and 12 lecturers participated in the study.

Other units of analysis were all assignment and examination questions set for 3rd and 4th year B.Ed (Secondary) students. Knowledge assessment tasks for the sample were assignments and examination questions covering the period 1999/2000 to 2003/2004.   With an average of four tasks per course a total of 320 tasks became units of analysis.

5.   Data collection techniques

Interviews, documentary sources and Questionnaire were the main data collection techniques for the study.

5.1   Interviews and Questionnaire

Face-to-face conversational interviews were conducted with seven (7) lecturers purposively selected to represent the seven subject areas in which the Department of Languages and Social Education (LASED) trains teachers.   A questionnaire based on the objectives of the study was administered to student-teachers.

5.2 Documentary sources

Documents in the form of examination question papers, course outlines and descriptions as well as assignment tasks became sources for additional data for the study.

6. Analysis

The 3rd and 4th year curriculum studies courses offered in Languages and Social Education Department (LASED) are respectively in English Language, English Literature, Sesotho, History, Geography, Development Studies, Religious Studies and Business Education subject areas. For purposes of this study each task was examined for key task focusing verb with an intention to relate the verbs in task formulation to the American Philosophers Association's (APA) Critical thinking cognitive skills framework (Facione, 1990). The critical thinking skills are: explanation, interpretation, analysis, evaluation inference and context. *Webster's* and *Doubleday Roget* thesauruses were relied on to determine meanings and synonymous relationships between the most commonly used task-focusing verbs and the critical thinking terms in the APA critical thinking cognitive skills framework.

Teacher-educators and students' responses from interviews and open-ended questionnaire items were thematised to determine differences and similarities in conceptualisation of critical thinking.

Questionnaire, interview and document analysis generated the following findings from the study by objective.

7.   Findings

7.1   Students' and lecturers' concept of critical thinking

In addition to stating their understanding of critical thinking, students and their lecturers were also to comment on what they considered the implications of the concept (critical thinking) for their teacher education and training programme. A thematic analysis of students' and their lecturers' responses points to the following as the general understanding of critical thinking:

1)   A habit of selecting, organising and examining facts before accepting them as truth.

   Illustrative excerpts from data

   a) *It is one's ability to analyse different points of view to convince oneself **(Student)**.*

   b) *Not accepting without questioning issues and arguments etc **(Lecturer and student).***

2)   The ability to differentiate fact from opinion and recognising insufficient evidence before drawing uninformed conclusion.

Illustrative excerpts

   a) *Critical thinking has to do with wanting to be convinced through supported facts not just through subjective opinions **(Student's response).***

   b) *Basing conclusions on supported facts **(Student).***

   c) *It is about rejecting facts that have no empirical basis **(Lecturer).***

3)   Purposeful, less haphazard and goal-geared thinking based
     on ability to engage the cognitive skills of interpreting,
     explaining, judging, inferring and analysing.

Excerpts

> a) *A critical thinker is able to engage his/her thoughts
>   about things deeply (Student's response).*
>
> b) *Critical thinking refers to ability to interrogate
>   issues, arguments by others in order to pass sound
>   judgements (Lecturer's response).*
>
> c) *It has to do with basing explanation and assessment
>   on evidence (A lecturer and a student).*
>
> d) *Having a purpose in dealing with information of all
>   kinds and being analytical in dealing with such
>   information (Lecturer)*

4)   Intelligent and disciplined process of actively and skilfully
     conceptualising issues by analysing, synthesising, and
     evaluating information gathered from observation, personal
     experience, reflection, reasoning and other sources to guide
     belief formation and behaviour.

Excerpts:

*a)   Using real life experiences as lessons to guide one's
reasoning   (Student's response.)*

*b)   Taking issues and other people's opinions seriously based
on real life experiences to develop personal philosophies
and behaviour (lecturer's response)*

These responses are indicative of sophistication in student-
teachers' and their lecturers' concept of critical thinking.

7.1.2   Implications of CT for student teachers and educators

Based on the most recurrent words, students' responses point to need for them to demonstrate critical thinking abilities by being able to: interpret, describe, argue, reason, analyse, evaluate, develop, expound, explain and infer. The fact that these terms were almost invariable in students' responses could render reasonable the conclusion that these have been taught in some course that is common to all. Yet this was not so, for follow-up interviews with students indicated that the latter by default learn from their lecturers' post assessment-feedback that they lack what it takes to be critical thinkers. More reasonable therefore seems to be the conclusion that lecturers seemingly equate feedback on lack of critical ability with formal instruction on CT-related lexical communicative competence.

Also interesting though not from all responding students, was inclusion of the words: *describe, argue, develop and expound* as some of the critical thinking related abilities. Emerging from this is the realisation that students are not aware that the meanings of some of the key critical thinking words in the APA, CT framework embrace these. For instance, ability to *develop* is embraced in the key APA words: *explanation, interpretation, analysis and evaluation*; while explanation embraces the ability to: *describe, argue, develop and expound.* Also invariable is the realisation among students that in turn they must be equipped with instructional skills for developing content-subject-based critical thinking lexical competence in their students. These findings suggest therefore that critical thinking- cognitive skill - related lexical communicative competence is not part of offerings in the curriculum studies courses of the B.Ed. programme in the Faculty of Education at the NUL.

Teacher educators observe the need for pedagogy to develop acquisition of critical thinking skills in student-teachers as a way to ensure realisation of the same in the secondary school system. However, what remains their concern is how best they can effect this. Most interesting about the responses from both the students

and their teacher educators, and thus of particular focus in this study, was the conspicuous no-mention of the need for development of critical thinking-related linguistic communicative competence.

7.2   **Critical thinking abilities challenged by verb-choices for knowledge assessment task formulation**

An examination of 320 tasks, being assignment tasks and examination question papers for the period of five academic years 1999/2000 – 2003/2004 depicted the following as the most commonly used task formulation verbs. Each of these was looked up in a thesaurus for its synonyms. Purposive sampling was used to include only those synonyms that matched the APA Framework of critical thinking cognitive skills- namely, *interpretation, explanation, evaluation, analysis, inference and context* (Facione, 1990). The table below presents the most commonly used task formulation verbs as matched with the APA Framework of CT cognitive skills.

Table 1: **The Most-Commonly Use Verbs in Knowledge Assessment Task Formulation by CT Cognitive Skill**

Task formulation verb	APA Critical thinking cognitive skill match
Explain	Analysis, Explanation, Interpretation, Evaluation
Comment	Explanation, Inference, Interpretation
Discuss	Analysis, Evaluation, Inference, Explain
Suggest	Explanation, Interpretation, Analysis, Evaluation
Develop	Explanation, Interpretation, Analysis, Evaluation,
Illustrate	Explanation, Analysis, Evaluation, Interpretation
Determine	Analysis, Inference, Evaluation
Examine	Analysis, Evaluation, Explanation
Describe	Explanation, Analysis, Interpretation
Identify	Explanation, Analysis
Elaborate	Explanation,
What is your understanding of	Evaluation, Analysis, Interpretation, Explanation, Inference
What is your opinion about	Evaluation, Analysis, Interpretation, Explanation, Inference
Imagine	Inference, Explanation
Argue	Explanation, Analysis, Interpretation

According to the mapping in the table above, knowledge assessment task formulation in the B.Ed programme curriculum studies courses is characterised by verb choices that challenge student teachers' critical thinking skill application beyond mere recall. Two important observations from the data are that: (1) each one of the most-commonly used verbs challenges students to demonstrate ability to apply multiple critical thinking cognitive skills in attempting tasks; (2) Some of the most commonly used task formulation verbs are implicit. For example '*What is your opinion about...?'; What is your understanding of...?'.* It would seem from the finding that: (a) construction of knowledge assessment tasks by lecturers in the Languages and Social Education Department (LASED) is characterised by choice of high order cognitive skill verbs which provoke students' ability to apply multiple critical thinking cognitive skills; (b) implicit in this style of knowledge assessment task formulation, is students' functional linguistic proficiency in a repertoire of explicit and implicit verbs. This nature of knowledge formation is consistent with Giancarlo & Facione's (2001: 2) summation that "*critical thinking is non-liner and recursive to the extent that in thinking critically, a person is able to apply critical thinking skills on each other as well as on the problem at hand."*

7.3 Lexical abilities implied by the critical thinking cognitive skills challenged by knowledge assessment task formulation verb-choices

Teacher educators and students were to explicitly derive linguistic competence abilities implied by the critical thinking cognitive skills challenged by verb choices most commonly used by the former in the formulation of knowledge assessment tasks. Students were to provide in writing as many verb synonyms as possible for each one of the critical thinking cognitive skills: explanation, inference interpretation, evaluation and analysis. They were also to specify the training implications of the synonyms. The responses were matched against the APA Framework for critical

thinking cognitive skills. Lecturers were interviewed for critical thinking-related linguistic competencies they expected of students. As was done for *Table 1* above, purposive sampling was used to include those most-recurring verb synonyms which matched the APA critical thinking cognitive skills framework. The table below presents the most recurring synonyms by critical thinking cognitive skill as combined responses from 62% (258) students and 83% (10) lecturers in the Department of Languages and Social Education of the Faculty of Education.

Table 2:   **Most Recurring Synonyms of Critical Thinking (CT) Cognitive Skills**

CT Cognitive skill	Synonymous verb
Explanation	Develop, justify, discuss, argue, reason, debate, describe, define, *interpret*, *clarify*, illustrate, state, *comment*, *account*, diagnose, *analyse*, demonstrate, expound, solve, defend, decode, elucidate, simplify.
Interpretation	*Explain*, *elucidate*, *expound*, *clarify*, classify, *decode*, workout, *demonstrate*, depict, paraphrase, *diagnose*, translate, *sort-out*, *define*, construct, understanding of, *comment*, describe, *solve*, advance, suggest.
Analysis	Break down, examine, *interpret*, investigate, *evaluate*, identify, determine relation, *sort-out*, question, *judge*, *assess*, review, *explain*, draw a *conclusion*, verify, *suggest*.
Evaluation	*Assess*, appraise, rank, rate, *determine*, measure, *explain*, opinionated, calculate, *judge*, *estimate*, *account*, *analyse*, *suggest*.
Inference	Deduce, *conclude*, presume, conjecture, *reason*, theorise, suppose, speculate, *estimate*, insinuate, hypothesise, state belief, state intuition, *interpret* assume, imagine, suggest

The responses were matched for accuracy with synonyms of key critical thinking cognitive skills in *Webster's Thesaurus*, 1996 and the *Doubleday Roget's Thesaurus* 1977.

Asked to comment on the data at different times, lecturers and students are surprised that effective management of knowledge assessment tasks and the extent to which the students can demonstrate critical thinking skill abilities, depend on mastery of

the meanings of verb-choices made in the formulation of tasks. Both groups admit that they are not aware of the relevance of lexical competence in the management of critical thinking-cognitive skill-related knowledge assessment tasks. Neither are they aware that choice of key CT cognitive skill terms such as *'explain'* in formulating tasks essentially suggest that the lecturer expects students to display critical thinking ability through functional knowledge of an array of verb meanings and applications in different contexts as dictated by the task. Students in particular are more overwhelmed by the extensive lexical vocabulary that they have to deal with to meet their lecturers' expectations.

Lecturers further observe that knowledge and understanding of the critical thinking-related lexicon is paramount in setting expectations for students to meet in their attempt of knowledge assessment tasks; and as such, cannot be assumed for both the lecturer and the student.

Of the five key CT cognitive skills, *explanation* followed by *interpretation* with the highest number of verb synonyms are the most demanding in terms of the repertoire of verb choices to make in formulating and attempting tasks that challenge students to display critical thinking ability.

It seems also from the bolded verb entries in the above data that each one of the critical thinking cognitive skills implies need for integrative functional knowledge of more than just a few verbs. Thus in formulating, as well as attempting knowledge assessment tasks, lecturers and students should note that a variety of verb options with serious implications for expectations is involved.

Also notable from the data is the tendency for some verbs to cut across some of the critical thinking cognitive skills. Examples of the cross cutting verbs are: *interpret, clarify, comment, account, analyse, explain, elucidate, expound, demonstrate, decode, diagnose, sort out, define, solve judge, evaluate, conclude, determine, estimate and reason* (note the bold-type verbs in the table above). This could suggest interdependence between the key critical thinking cognitive skills; thus reconfirming Giancarlo &

Facione's (2000) contention about non-linearity and recursiveness of critical thinking. For instance for one to interpret, there is need for skilfulness in explanation. Also evident though implicit from the data in the table above is the realisation that each one of the critical thinking cognitive skills requires lexical communicative competence in the form of ability to use appropriate English in the context of each one of the verb synonyms of each critical thinking cognitive skill terms as depicted in the APA Framework for critical thinking cognitive skills (Facione, 1990; Facione *et al* 1995).

7.4 CT-related language problems in knowledge assessment task formulation

Lecturers and students were to indicate language problems they experience in formulating and attempting knowledge assessment tasks. Responses point to the following as some of the problems encountered by lecturers and their students.

7.4.1 Students' failure to demonstrate critical thinking ability

Most intriguing about this finding is the fact that when asked to explain in exact terms what the disabilities are with respect to each critical thinking skill as depicted from students' submissions, lecturers' explanations of the problems lack a linguistic perspective. These explanations are characterised by general observations such as *"They just cannot explain, interpret, infer. They are simply not analytical that's all".* This vagueness could reasonably be attributed to what in this study is referred to as **Critical thinking- cognitive skill-lexical literacy unawareness (CTCSLLU).** Put simply, lecturers are not aware that each one of the critical thinking cognitive skills imposes communicative linguistic ability on lecturers' and their and students' part.

7.4.2   Tasks formulations that involve more than one verb

Interviews with students and their lecturers indicate that task formulations that involve more than one verb choice are problematic to students. Such are tasks like (i)*"Comment on "environmental education" and basing yourself on Lesotho, explain illustratively what you consider to be its role in national development" (Assignment task in Geography Education 2003); and (ii) "Examine the attached lesson plan format and comment on the extent to which it facilitates reflective practice during and at the end of the lesson(Assignment task in English Language Education 2002).*

According to lecturers, students tend to regard multiple verbs in such tasks as synonymous and concentrate the verb they understand better... *'and thus lose marks since they have not done justice to the rubric'*(captioned **during an interview session).** When asked to explain in linguistic terms what rubric (i) expects of students' response, lecturers' responses point to students' ability to *define* environmental education and use the definition as a basis for the second part of the question which challenges their ability to *explain.* Lecturers note upon being probed that the verb *comment* in the question could also be requiring the student to draw a conclusion or opinionate about *environmental* education before explaining its role in national development.

With respect to the second rubric lecturers had to reflect deeply during the interview to realise that the first task formulation verb requires students to *evaluate, question* thus *judge* the lesson plan format to be able to *reason, explain, opinionate or draw a conclusion* thus *comment* on it for the extent to which it facilitates reflective practice. Lecturers admit that although it is easy to tell a good submission from a poor one in critical thinking terms the linguistic ability embraced in the former is hardly thought of as part of the equation- *'which is no surprise therefore that we do not include critical thinking communicative competence in our*

courses' (captioned from a conversational interview with lecturers).

Students' responses are consistent with those of their lecturers in that they point to confusion caused by their lecturers' use of multiple verbs in knowledge assessment tasks. The consistency is embodied in responses such as the following:

a) *For example when a task reads* **'Describe the rock weathering process and explain how you would practically teach it to your Form B class',** *one is not sure whether the terms* **describe** *and* **explain** *are synonyms or different in meaning. The result is confusion which may lead to failure to attempt the rubric to the satisfaction of the lecturer. It is frustrating.*

b) *One is always confused if the question is set in more than one verb – sometimes a verb and either or both of the adverb and the adjective. It is always difficult to know which one of the terms to concentrate on in answering the question*

c) *If it is an assignment during the course one can seek clarification with the lecturer about these multiple- verb tasks. Under test and examination conditions there is a serious problem because it seems part of the task is to determine the extent to which one can differentiate between these terms. Hard luck if you cannot deal with each term according to the lecturer's expectations.*

d) *Lecturers' use of more than one task-focusing verb overloads the questions. We need to be taught how to manage the language of asking questions as part and parcel of our individual courses.*

Like their lecturers students attribute their unawareness of the specific linguistic abilities imposed by verb choices in the formulation of tasks they are assigned, to exclusion of relevant instruction in their courses.

7.4.3   Ambiguity of task-formulation tasks

Students also register concern with ambiguity of some verbs lecturers choose to formulate tasks such as **C***omment* **on** *HIV/AIDS as a national emerging issue* **(***July 2003).* According to lecturers, students are expected to among others define HIV/AIDS, explain how it is contracted, explain and infer through examples to justify how it is a threat and a critical emerging national issue. In a nutshell this requires students' submissions to be analytical and evaluative. Choice of such verbs in the experience of students leaves one unsure of whether to **describe,** **critique, explain, and/or analyse** the issue if not clarified in advance.   In short, they are confusing. This particular finding points to lack of common understanding of expectations between students and their lecturers over assigned tasks.

7.4.4   Students' difficulty with implied task formulation verbs

Students and lecturers concur that tasks with implied task-focusing verbs are problematic. For example: (1) *"How can the teaching of literature contribute to the teaching and learning of English Language?"* **(English education examination question for 3***rd* **Year B.Ed: December 2002).** (2) *What is your thinking about the argument that the Katse, Mohale and 'Muela Dams are a possible cause of climatic changes in Lesotho?* **(Geography education assignment question for 4***th* **Year B.Ed.: 1999).** *(3) What is the relationship between culture and religion?* **(Religious studies education assignment question for 4***th* **Year B.Ed. :2000).**

About this type of questions, students and lecturers relate failure to deduce explicit verbs from verb-implicit questions is due to lack of knowledge about the actual verbs implied by terms such as *how, what* and sometimes *why.* Furthermore, lecturers posit that among other reasons, this failure could be attributable to the fact that the teaching of cognitive academic communicative competence is not integral to their curriculum studies courses. '*During feedback sessions we repeat the importance of thinking*

critically without realising that ability to think critically is to a great extent intertwined with communicative proficiency and competence in the language for expression of thought'; one of the lecturers confirmed. Consistent with the lecturers' view are students' responses such as: (i) *'If only our lectures were not assumptive about our proficiency in academic English, they would inject some amount of time for reflection on language for learning and thinking critically in their courses'*; and (b) *Probably some of our lecturers lack the skills to teach the language of learning and attempting tasks in their subjects.'*

Another problem raised by students is that use of implied verbs through use of verb-implicit terms leaves them unsure of whether to respond briefly or extensively. Students believe that use of actual direct verbs would give them a clearer idea about how much elaboration should go into their responses.

8.   Extent of integration of critical thinking cognitive skill lexical competence in course offerings

Teacher-educators claim that they stress the need for student teachers to display critical thinking abilities in their attempt of assigned tasks and challenge such abilities through relevant tasks in oral presentations assignments and end-of course-examinations. None however, assigns any special teaching time to the nature of CT, its sub-skills and the task-specific lexical competence required for effective management of knowledge assessment tasks. Student-teachers likewise express a wish that academic language instruction should be integral to their curriculum studies courses. Thus acquisition of critical thinking cognitive skill–related lexical competence (CTCSLC) still remains an assumed academic ability, given that none of either the course outlines or course descriptions across courses reflects it as an independent topic.

9.   Conclusions

While the lecturers' and their students' concept of critical thinking is sophisticated and reflective of the American APA framework of critical thinking cognitive skills, it falls   short of the linguistic communicative competence perspective seemingly resulting from general unawareness of the fact that critical thinking is a context and as such dictates linguistic behaviour and related lexical communicative abilities. Equally complex are the high order knowledge assessment tasks set by lectures and their expectations of students' performance in these. Yet surprising is the finding that lecturers do not interpret students' acceptable critical ability in terms of how communicatively competent they are in the jargon of the critical thinking cognitive skill they are to display in their submissions. This conspicuous non-mention of need for functional lexical competence in the key task formulation verbs is suggestive of lecturers' and in turn students' unawareness of critical thinking cognitive skill literacy or of context-boundness of language as would be suggested by Matsoso (1998).

The cross-cutting nature of some of the critical thinking cognitive sub-skills and the most commonly used task focusing verbs (*Tables 1 and 2* above) seem indicative of the complexity of the concept critical thinking and its linguistic demands; and thus confirms Giancarlo & Facione's (2001) view about linearity and complexity of critical thinking (Hare, 2000; Paul, 1990; Kakai, 2000). This character of critical thinking lexis also suggests interdependence between key critical thinking cognitive skills, namely explanation, interpretation, inference, analysis and evaluation.

The study also points to lecturers' and students'awareness of the training implications of the linguistic perspective of critical thinking, particularly since it is not formerly integrated in the curriculum studies courses.

10.   Implication of the Findings

Matsoso (1998) argues that thoughts do not form in a language but innately. As such thoughts precede language. Yet many a critical thinker may go unnoticed if not exposed to appropriate and effective language for expression of such critical thoughts. Hence, Matsoso's (1998) further argument about the intrinsic relationship between thought formation and language. Another argument in this submission is that because language is context-bound and critical thinking as a concept is context in its own right, linguistic ability cannot be divorced from critical thinking skill development. The submission in this article is that the learning of the subject matter involves learners' construction and communication of knowledge. This requires the ability to interrogate subject-related information through application of critical thinking cognitive skills. Without functional application of critical thinking-cognitive-skill- typical language, critical thinking ability may not be claimed. Against this background, the study implies need for a departmental policy on formal inclusion of a linguistic approach to integration of critical thinking cognitive skills into teaching and knowledge assessment in curriculum studies courses. Also departmental in-service workshops and seminars on critical thinking skill development and its linguistic implications cannot be overemphasised.

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