Susan Brokensha

Academic writing in Blackboard: a computer-mediated discourse analytic perspective

This article reports on how text-based synchronous and asynchronous modes of communication in Blackboard were employed at tertiary level to encourage students to share their perceptions of academic writing and sensitise them to the writing process. Employing a computer-mediated discourse analytic (CMDA) framework, three research questions were posed: What were the discussion topics in each mode of computer-mediated communication (CMC)? What types of knowledge construction were reflected in each mode? What kinds of discourse features were generated in each mode? The overall conclusions reached were that both modes of CMC reflected conceptual moves, although few theoretical ideas were present in asynchronous CMC and none in synchronous CMC. Asynchronous CMC was also more syntactically complex than synchronous CMC. This preliminary study suggests that both modes may help learners achieve the above aims.

Akademiese skryf in Blackboard: 'n rekenaarbemiddelde diskoersanalitiese perspektief

Hierdie artikel rapporteer oor 'n analise van twee kommunikasiemodusse via Blackboard – sinchroniese en asinchroniese kommunikasie – en hoe hierdie modusse benut is om tersiêre studente aan te moedig om hul persepsies van akademiese skryf te deel en hulle bewus te maak van die skryfproses. Binne die raamwerk van rekenaarbemiddelde diskoersanalise is drie navorsingsvrae geformuleer: Waaroor het die studente gesels gedurende rekenaarbemiddelde kommunikasie (RBK)? Watter soort kennis is ontwikkel gedurende RBK? Watter soort diskoerskenmerke is deur studente gegenereer gedurende RBK? Die resultaat van die analise dui daarop dat beide sinchroniese en asinchroniese RBK konseptuele kennis gereflekteer het, alhoewel daar min teoretiese idees aanwesig was in asinchroniese RBK en geen in sinchroniese RBK. Die grammatikale konstruksies in sinchroniese RBK was sintakties ook meer kompleks as in asinchroniese RBK. Hierdie aanvanklike studie dui daarop dat beide kommunikasiemodusse gebruik kan word om bogenoemde doelwitte teweeg te bring.

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> ... we know that a lifetime of casual chatter, either talk, or 'talk' in print, does not a [...] writer make (Day & Batson 1995: 25).

In recent years, many educational researchers have focused on facilitating the academic writing process through e-learning modes that include discussion boards (Bacabac 2010a), chat sessions (Xing *et al* 2008), weblogs (Kelley 2008), and wikis (Kuteeva 2011), to name just a few. What these studies have in common is that, in addition to sensitising learners to some aspect of writing, they also encourage both collaborative and constructivist learning which, in turn, promotes self-regulated learning (Loyens *et al* 2007: 180-1). The aim of this article is to report on a small-scale project carried out in 2010 in a computer-assisted language learning (CALL) classroom, explaining how two self-regulated e-learning environments – synchronous and asynchronous modes of computer-mediated communication (CMC) – were used by third-year university students to share their views of academic writing and heighten their awareness of academic writing in English. With a view to answering three specific research questions, the author analysed the two modes of CMC in terms of a computer-mediated discourse analytic (CMDA) approach (*cf* Sotillo 2000, Veerman & Veldhuis-Diermanse 2006, Paulus 2009). The following questions were posed: What were the discussion topics in each mode of CMC? What types of knowledge construction were reflected in each mode? What kinds of discourse features were generated in each mode?

1. Literature review

1.1 CMC and academic writing

A review of the literature indicates two obvious facts, namely that academic writing is a highly complex phenomenon in the sense that it reflects myriad genres such as essays, case studies, journals or research reports (Carstens 2008: 50), and that teachers tend to opt for a process-focused approach rather than for the traditional, product-centred one when it comes to the teaching of academic writing. Whichever genre type and teaching approach is favoured, the use of e-learning platforms to teach writing has become increasingly popular at South African schools and universities (Nagel & Kotzé 2009: 45).

The author contends that since "... academic writing [...] does not occur in a vacuum" (Kelley 2008: 18), but is also a social practice (Starfield 2005: 67), asynchronous CMC and synchronous CMC may constitute useful modes for the teaching of writing as they allow for collaboration among "... students writers [who are able to] exchange preliminary ideas [and] are freed from the grips of seclusion and apathy" (Bacabac 2010b: 2).

Several studies lend weight to the contention that asynchronous CMC (ACMC) and/or synchronous CMC (SCMC) may help students during the writing process. Davis & Thiede (2000), for example, report that since ACMC reflects many of the features of written language, such as subordinate clauses and modal auxiliary verbs, and given that it allows students to brainstorm ideas among themselves in delayed time, it facilitates the development of writing skills. It is interesting to note that Barile & Durso (2002) do not reach the same conclusion in their study of synchronous chat and asynchronous email, asserting that because the flow of interactivity in the latter mode is interrupted, students tend to experience coordination problems during the writing process. However, "... groups writing in a synchronous CMC setting will produce good quality work" (Barile & Durso 2002: 189) because learners are able to work together more harmoniously. By contrast, Sarieva (2007) found that both modes of CMC may help English language learners to carry out prewriting tasks.

However, the author of this article adopts a cautious stance on the teaching of writing via CMC. The view adopted in this instance is that teachers should not rely solely on CMC to improve academic writing per se, but that it can be used as a prewriting tool to encourage students to think about the academic writing process and to share their perceptions of their own writing with one another (Bacabac 2010a: 344).

1.2 Current theory on prewriting

The process-based approach to writing, which entails focusing on prewriting, drafting, and editing, is rooted in cognitive psychology research, and several studies support the use of CMC as a tool for the first stage (*cf* Abrams 2003, Chanrungkanok 2004, Bacabac 2008). This stage involves innumerable activities to choose from, ranging

from brainstorming and cubing (an information-gathering technique about the writing topic from specific points of view) to debating and role playing (Baroudy 2009: 82). In this study, the author employed "talking" – via Blackboard – as a prewriting activity.

Some research studies indicate that computer-based prewriting fosters students' awareness of the cognitive processes involved in writing (Butcher & Kintsch 2001), while others contend that it improves their writing performance (Englert *et al* 2007). Eib & Cox examined a language teacher's use of prewriting activities, and concluded that these activities resulted in "... increased proficiency in the [organisation] strand of writing" (Eib & Cox 2003: 55). In a study of computer-based scaffolds, Proske & Narciss (2008) found, among other things, that prewriting benefits the writing behaviour as well as the performance of student writers, although they do make the *caveat* that prewriting appears to be of more benefit to experienced and motivated writers, since inexperienced, less motivated students have a tendency to shy away from the prewriting stage altogether.

2. Methodology

2.1 Background and data collection

This 2010 study involved keeping electronic records of 51 third-year students' lingual contributions to Blackboard's discussion and chat forums. These students were registered for an English module comprising two separate disciplines each reflecting 8 credits – computer-assisted language learning or CALL and discourse analysis.[1] The latter component required students to explore soap opera dialogue from a discourse analytic perspective, and one of the assignments to be completed carried the following instructions:

> In a well-constructed response, analyse the soap opera you have selected in terms of From's (2006) analytical framework as well as Wheatley's (1999) model. Remember that you will have to select one

1   The reason for this rather odd combination was that in 2010, the Department of English phased in new 8-credit modules at third-year level, and to accommodate students who had failed 8-credit modules in the previous year, it was necessary to retain certain combinations to give students a final opportunity to pass the relevant section of the new module.

or two key scenes, transcribe the dialogue (speaking turns) and then analyse the dialogue within the above-mentioned frameworks.

The author of this article used the CALL component to encourage students to share their perceptions of academic writing and sensitise them to the writing process. For these reasons, students were instructed to complete specific activities via Blackboard's discussion and chat forums over a five-week period (*cf* Figure 1).

Orientation session: an introduction to Blackboard's discussion board and chat forum
Preparation for Week 5: Click on the links given below and read through Writing – Introduction and Preparation. <http://unilearning.uow.edu.au/essay/1a.html to http://unilearning.uow.edu.au/essay/2c.html>
Discussion board contribution #1: Post your own two-paragraph response to the following questions: Many students are ambivalent – even negative – about the writing process: What is your attitude towards academic writing and towards improvements in your own writing habits? Is there anything new you have learned through Unilearning about essay writing at tertiary level when it comes to preparation? Preparation for Week 6: Click on the links given below and read through Writing – Research. <http://unilearning.uow.edu.au/essay/3a.html to http://unilearning.uow.edu.au/essay/3e.html>
Chat forum: Having worked through the above links, participate in Chat #1. Chat topic #1: Discuss the following statements: "Most student essays and research papers bore the teacher to tears, which makes sense because doing the research and writing the paper bores the student to tears" (Lorcher 2011: 1). Preparation for Week 7: Click on the links given below and read through Writing. <http://unilearning.uow.edu.au/essay/4ai.html to http://unilearning.uow.edu.au/essay/4av.html>
Discussion board contribution #2: Post your own two-paragraph response to the following question: What is your plan for your soap opera assignment? Preparation for Week 8: Click on the links given below and read through Effective Writing. <http://unilearning.uow.edu.au/effective/2.html to http://unilearning.uow.edu.au/effective/3c.html>
Chat forum: Having worked through the above links, participate in Chat #2. Chat topic #2: Chat about what makes academic writing effective. In addition, share your views on plagiarism.

Figure 1: Blackboard activities

The lingual contributions generated by the students were automatically archived by Blackboard's course management system. A total of 78 contributions generated in two discussion forums were downloaded, while 13 chat room conversations were logged over a 5-week period. Forty-seven students contributed to the first chat forum and 43 to the second one. Using a predominantly qualitative approach, the author initially analysed five contributions to a discussion forum and five to a chat-room session reflecting a total of 95 turns/postings. These contributions will be discussed later in this article. The nine participants who contributed to each mode of communication comprised eight female students and one male student. Out of the eight female students, five came from an Afrikaans-speaking background. The male student's home language was also Afrikaans, while the three remaining students' home language was either Sotho, Xhosa, or Zulu. Four of the students were Education majors, two were Media Studies students, and two were registered for BA (General) degrees. The remaining student had enrolled for non-degree purposes (Occasional Studies). With the exception of one student in her early 50s, all the others were in their 20s or early 30s. Since the sample was very small, the author analysed an additional ten students' discussion forum contributions comprising 124 moves and a further 81 moves generated by five students during a chat-room session. Despite analyses of additional data, the sample remains small, and for this reason, the findings are preliminary ones.

Following Herring (2004: 350-1), random sampling was avoided in favour of motivated samples: the discussion forum selections were topic- as well as length-based. That is, contributions were selected on the basis of students adhering to the two discussion topics posted. Discussion contributions that were shorter than the two paragraphs required were disregarded. The selection of chat contributions was topic-based: chat sessions about so-called "boring academic essays" which were produced on 24 August 2010 were selected as were those about plagiarism generated on 7 September 2010.

2.2 Research questions

To determine what actually took place in each of the two CMC environments, the author posed the following questions: What were

the discussion topics in each mode of CMC? What types of knowledge construction were reflected in each mode? What kinds of discourse features were generated in each mode?

2.3 Frameworks of analysis

To answer these questions, the Blackboard logs were analysed in terms of computer-mediated discourse analysis or CMDA, a model developed to analyse "... logs of verbal interaction (characters, words, utterances, messages, exchanges, threads, archives, etc.)" (Herring 2004: 339). To answer research question 1, Paulus' (2009) analytical model for the types of functional moves students generate in CMC was applied to the data (*cf* Table 1). To answer research question 2, the author employed the knowledge construction model proposed by Veerman & Veldhuis-Diermanse (2006) (*cf* Table 2). Finally, to answer research question 3, Sotillo's (2000) approach to analysing students' online behaviour was adopted (*cf* Tables 3 and 4). Both the categories identified and the analyses carried out were cross-validated by a fellow linguist.

Table 1: Students' moves in ACMC/SCMC
(adapted from Paulus 2009: 233)

	Move	Definition
	Conceptual move	Reflects a student's understanding of/engagement with the learning materials [In the lingual data, opinion discourse is classified as conceptual if it relates to academic writing.
Non-conceptual	Logistical move	Entails students talking about task management
	Social move	Reflects a social exchange ('small talk') among students
	Technical move	Addresses a technical issue such as the server not working

Table 2: Students' knowledge construction in CMC
(adapted from Veerman & Veldhuis-Diermanse 2006: 345)

Category	Definition
New idea	A content-related message that reflects "facts, experience/opinion, and theoretical ideas ..." (Ghazali *et al* 2009: 665).
Explanation	A message that elaborates on a previous message
Evaluation	A previous message that is critically discussed

Table 3: Discourse features in ACMC (adapted from Sotillo 2000: 109-10)

Coding	Definition
T-unit	"A T-Unit is defined as either an independent clause and all its dependent clauses ... or as an independent clause onl y..." (Sotillo 2000: 109).
Independent/ Main clause	A clause that has a subject and a verb and functions as a complete sentence
Dependent/ Subordinate clause	A clause that has both a subject and a verb, but cannot stand alone as a complete sentence

Table 4: Discourse features in SCMC (adapted from Sotillo 2000: 107)

Category	Definition
Greeting	An opening move that initiates a chat session
Topic initiation	A move that initiates a particular topic for discussion
Assertion/Imperative	A declarative statement/command
Question	This may include clarification requests, comprehension checks, or explanation requests
Response	A response may be an elaboration, explanation, clarification, apology, or agreement
Adversarial move/ Challenge	A move in which one chat participant challenges another participant
Off topic	A speech act that wanders off the topic
Floor holding/Topic continuation	A speech act where a participant dominates the floor/keeps the conversation going
Corrective move	A speech act in which one participant corrects another
Reprimand	A speech act in which one chat participant chastises another
Humour	A speech act that reflects or expresses any form of jocularity/ jocular emotion
Closing move	A move that terminates the chat session

3. Findings

3.1 Discussion topics in each mode of CMC

• ACMC

In week 4 of class, students were required to visit the Unilearning website on academic writing and familiarise themselves with following the writing process, analysing the assignment topic/question, finding the key concept/main idea of the assignment, and understanding the

assignment's instructional words. In week 5, students were asked to post a two-paragraph response to the following questions: "What is your attitude towards academic writing and towards improvements in your own writing habits? Having worked through the Unilearning links, is there anything new you have learned about essay writing at tertiary level when it comes to preparation?"

Table 5 provides examples of the types of moves five students generated when posting their responses to the discussion forum. To protect his/her identity, each student is identified by his/her initials. Where a student has addressed a classmate by name, the name has been changed. Where examples of moves are provided, original language and spelling errors have been retained.

Table 5: Students' moves in ACMC

	AS	CB	NM	EB	BC	Examples of contributions
Conceptual	6	7	14	17	17	"... reading and writing goes hand in hand, and without extensive reading, it is impossible to write a well-planned, comprehensive essay" (AS)
						"I think that OBE can be a contributing factor [to poor writing skills] but not necessarily the core issue when it comes to negative feelings towards writing ..." (CB)
						"The first sentence should contain the "reverse hook" which ties in with the transitional hook at the end of the introductory paragraph" (NM)
						"Understanding the question and all the aspects regarding the question, is the first step to a successful writing process" (EB)
						"Students should also be taught how to transform their thoughts into word, and how to express themselves in a suitable way" (BC)
Logistical	0	0	0	0	0	
Social	0	0	0	0	0	
Technical	0	0	0	0	0	
Total	6	7	14	17	17	

• SCMC

Having articulated their attitudes towards writing and familiarised themselves with the stages involved in the academic writing process, students participated in a chat in Week 6, discussing among themselves why academic writing is sometimes regarded as boring by both teacher and learner (*cf* Table 6).

Table 6: Students' moves in SCMC – Chat 1 (95 postings)

	EM	BC	RN	BO	KM	Examples of contributions
Conceptual	19	12	17	16	11	‹EM› "... whether I enjoy essay writing or not depends on the topi c.." ‹BC› "And therefor it is so important to do your research about the topic and understanding the topic before you write about it" ‹RN› "Well, I knowe forshure that you need to understand the arguement properly, and then pick a point of view" ‹BO› "... If the topic is exciting I will put in more effort to make it a very good essay" ‹KM› "Well they are most likely trying to stick to the curriculum or something ..."
Logistical	1	1	0	0	0	‹EM› "Now should we start chatting about the topic or what?" ‹BC› "Yes i think so" [in answer to the above question by EM].
Social	4	5	4	3	2	‹EM› "Hi Barbara! How are you?" ‹BO› "Fine thanks and you?" ‹RN› "Good morning to all!" ‹BC› "Haha Robin" ‹KM› "Bye bye ... till next time"
Technical	0	0	0	0	0	
Total	24	18	21	19	13	

3.2 Types of knowledge construction reflected in each mode

- ACMC

Since all the tasks designed by the CALL facilitator were essentially discussion tasks as opposed to analysing, design or problem-solving tasks and since they were also not heavily structured in the sense of students being compelled to comment on or evaluate one another's postings, student contributions reflected new ideas rather than explanations or evaluations (*cf* Table 7).

Table 7: Students' knowledge construction in ACMC (61 moves)

	AS	CB	NM	EB	BC	Examples of contributions
Category New idea Fact Experience/ Opinion Theoretical idea (from Unilearning)	 4 1 1	 3 4 0	 0 3 11	 3 9 5	 2 12 3	Opinion: "I find it sad that so many students are negative about the writing process ..." (AS) Fact: "[Good writers] have second and third and sometimes even fourth opinions on their work, to eliminate the element of error" (CB) Theoretical idea: "The introductory paragraph should also include the thesis statement, a kind of mini-outline for the essay" (NM) Experience: "I have learnt that a good way to improve reading and comprehension skills is to challenge yourself in your reading and to always try to understand what it is that the author is saying" (EB) Fact: "In addition students must be made aware of the fact that an academic article is not something that can be written overnight" (BC)
Explanation	0	0	0	0	0	
Evaluation	0	0	0	0	0	
Conceptual moves	6	7	14	17	17	

- SCMC

Using Veerman & Veldhuis-Diermanse's (2006) categories to analyse Chat 1, it was clear that students used this mode of communication to trade opinions about writing, while explanations, evaluations, and theoretical ideas were noticeably absent (*cf* Table 8).

Table 8: Students' knowledge construction in SCMC – Chat 1 (95 postings)

	EM	BC	RN	BO	KM	Examples of contributions
Category New Idea: Fact Experience/ Opinion Theoretical idea (from Unilearning	0 15 0	1 9 0	1 12 0	1 12 0	1 9 0	Experience: ‹EM› "Like I said Robin when I have an exciting topic to write about, it would tend to inspire me to start writing ..." Fact: ‹BC› "And therefor it is so important to do your research about the topic and understanding the topic before you write about it" Opinion: ‹RN› "Yes it [writing drafts] bores me to death" Fact: ‹BO› "If you know nothing about the topic you cannot write something on that" Experience: ‹KM› "i do my research and maybe note important facts ..."
Explanation	0	0	0	0	0	
Evaluation	0	0	0	0	0	
Conceptual moves	19	12	17	16	11	

3.3 Kinds of discourse feature generated in each mode

- ACMC and SCMC

In line with Sotillo's (2000) findings, contributions to the discussion forum revealed syntactic complexity and virtually no collaboration among students (*cf* Table 9), while discourse generated in the chat room reflected less attention to form, but a greater degree of interactivity (*cf* Table 10).

Table 9: Discourse features in ACMC – first and second discussion forums

	AS	CB	NM	EB	BC
Coding T-units: [square brackets] Independent clauses: underlined Dependent/ Subordinate clauses: bold Subordinate clauses modifying main clauses: *bold italics* A non-finite clause: *	[I find it sad **that** <u>so many students are negative about the writing process.</u>]	[I agree with you Pumla], [<u>writing is a skill</u> **which** <u>needs some nurturing</u>] and [<u>developing a habit of that does have positive outcomes.</u>]	* [The reason for learners to be ambivalent and negative about writing is because of not receiving proper training at the High school level.]	[<u>Academic writing is usually a process I enjoy</u>], **but** [<u>it depends largely on the topic of the essay and the amount of time available to complete the assignment.</u>]	[I agree **that** <u>many students are ambivalent or even negative about the writing process.</u>]

Table 10: Discourse features in SCMC – Chat 1 (95 postings)

Category	Examples of contributions
Greeting	‹EM› "Hi Barbara!"/‹BC› "Hello everyone!"
Topic initiation	‹EM› "Now should we start chatting about the topic or what?"
Assertion/ Imperative	‹EM› "Well Robin, whether I enjoy essay writing or not depends on the topic"
Question	‹RN› "Does anyone have anything specific that might inspire you to start writing?"
Response	‹EM› "… What about you?" ‹BC› "Yes I also think that the topic plays a big part in the writing of an essay"

Category	Examples of contributions
Adversarial move/ Challenge	No adversarial moves or challenges were found.
Off topic	No off topic moves were found.
Floor holding move/ Topic continuation	‹RN› "How about writing drafts?" ‹BO› "Ann research take very long time so I leave it and just write on what I know" ‹BO› "Well Robin to write a draft also takes very long so I leave it and just write on what I know"
Corrective move	No corrective moves were found.
Reprimand	No reprimands were found.
Humour	‹EM› "Haha, that's for sure Robin, I was never taught the steps of essay writing ..."
Closing move	‹BC› "All of you must enjoy the rest of your day! Good bye"

4. Discussion

Conceptual knowledge: According to Paulus (2007), students appear to favour discussion forums rather than chat rooms when it comes to generating conceptual moves, and to a certain extent, the present study reflects a similar finding regarding theoretical ideas: that is, theoretical ideas were entirely absent from the chat session analysed (*cf* Table 8), but were produced in the discussion forum (*cf* Table 7). The author speculates that conceptual moves (61 in total) were frequent in the discussion forum because of task structure: the task focused students' attention on attitudes to writing and the academic writing process itself. Since the task encouraged students to focus on theoretical notions such as topic sentences and transitions between paragraphs, it is not surprising that conceptual moves were frequent, while non-conceptual logistical moves were not produced.

Although theoretical ideas were not generated in the chat room, facts and opinions/experiences were. Specifically, 59 conceptual moves out of a total of 95 moves were generated, and 49 of these reflected either facts or opinions/experiences (*cf* Table 8). This finding is contrary to that of researchers such as Davidson-Shivers *et al* (2001), but supports that of Levin *et al* (2006: 439), who have established

that there may indeed be high levels of critical reflection among students in the chat room because they enjoy real-time discussion as well as immediate feedback from their peers. In this article, critical reflection is defined as "... the process of reflecting back on prior learning" (Mezirow 1990: 5) as well as "... thinking and reflecting during practice" (Glowacki-Dudka & Barnett 2007: 44). Both kinds of reflection were produced in the chat analysed (for example, "I must admit I was never taught at school how to write an academic essay, [referring] to the steps ...; Being [on] the verge of becoming language teachers, what can we do to improve our own writing skills?; but research depends on the resources you have and [where] I come from we [were] short of those").

What is lacking in the Levin *et al* (2006) study is an analysis of critical reflection in ACMC, and the present study fills this void: A total of 44 conceptual moves were generated in the discussion forum and many of the contributions reveal critical reflection on the part of students (for example, "At Secondary level the teachers were not interested in the way you gathered the data, interpreted and processed it, to form applicable information; The introductory paragraph should also include the thesis statement, a kind of mini-outline for the essay").

A central dimension of critical reflection involves the ability of individuals to ask pertinent questions about relevant issues within their sphere of experience (Hedberg 2009: 11), and several questions about writing and the teaching of writing were indeed posed by learners in the chat room (for example, "Do you think maybe if [lecturers] give us the chance to generate our own topics that it would go better?; What do you think would be [an] interesting topic to give to the children?; ... how do we teach learners to like writing as such?"). However, no such questions were present in the discussion forum. This absence – the possible reasons for which are considered later on – must be remedied to add depth to the meanings learners generate and allow them to challenge their own personal constructs.

As Table 8 illustrates, neither explanations nor evaluations were present in Chat 1. This is not surprising as "... students have less time to search for information, to produce extended explanations, to evaluate information thoroughly, to ask elaborated questions and so on"

(Veerman & Veldhuis-Diermanse 2001: 7). One could conclude that the corollary to this is that explanations and evaluations are present in ACMC (Veerman & Veldhuis-Diermanse 2001: 7). However, the data do not support this: Table 7 reflects the absence of explanations and evaluations in the discussion forum. This finding does not tally with that of Paulus (2007: 1331-2), who found that the asynchronous platform, as exemplified in discussion forums, yields conceptual moves that go beyond simply sharing information to discovering inconsistencies, negotiating meaning, and proposing compromise, for example.

There are a few explanations for this disparate finding in the present study. The asynchronous data show a lack of threaded discussions. Students were encouraged to contribute to common themes in the forum, but not to respond to one another's contributions. The forum functioned essentially as a virtual notice board to which students could add their contributions. As Swan & Shih (2005: 116) quite rightly point out, it is only threaded discussions that will result in "… a certain mindfulness and a culture of reflection in an online course". This observation is echoed by Erylimaz *et al* (2009: 2), who state that "… simply adding an online discussion forum in an instructional setting does not mean students will actively engage in cognitive activities such as explanations, articulations, and argumentations". The asynchronous data show interaction with content, and not with facilitators or peers. Moore (1989: 1-6) distinguishes between interaction with content, interaction with the teacher, and learner-learner interaction. The discussion forum clearly shows that learners interacted with Unilearning's course materials on writing, but not with the facilitator or with one another (*cf* Tables 5 and 7), the reason being that learners were instructed to interface with the materials only.

Of course, the lack of interaction with a facilitator and with peers in the above asynchronous mode needs to be addressed. Swan (2004: 3) counsels that all three kinds of interaction are essential if conceptual learning among students is to take place. Studies by Swan (2001) and Leasure *et al* (2000) suggest that continuous interaction with course content may improve online learning. A study by Shu-Fang & Aust (2008: 490) implies that both learner-facilitator interaction and learner-learner interaction promote "… posting frequency in online courses" as well as a "… sense of classroom community" or personal

relationship. In addition, these kinds of interactions "... contribute largely to online students' course satisfaction level and perceived learning" (Shu-Fang & Aust 2008: 479).

As mentioned at the beginning of this discussion, theoretical ideas were present in the discussion forum but not in the chat session. In addition to the fact that chat participants were not specifically tasked to focus on theoretical notions pertaining to academic writing, two CMC studies could explain the absence of this kind of knowledge. First, a study conducted by Wegerif (1997: 183) suggests that CMC participants have a tendency to subordinate content to superficial elements such as spelling and punctuation. Simply put, more effort is expended on typing than on content (Wegerif 1997: 183). Secondly, when it comes to generating discourse via the chat room, learners' fast-paced postings are both brief and numerous, which does not leave a great deal of time to focus on content (Veerman & Veldhuis-Diermanse 2001).

This does not mean that the language teacher should discard SCMC as a tool for the teaching of writing. Walker (2003: 34) observes that this tool can be quite valuable to scaffold learners' writing skills. Given that SCMC reflects not only written discourse, but also displays the features of orality, it "... lowers the cognitive demands on the participant" because "... there are fewer 'rhetorical problems' to solve" (Walker 2003: 34). This contention is supported by Spencer & Hiltz (2003: 36), who, in their study of text-based chat, argue that learners appear to perceive synchronous chat to be "rewarding" and less "complex" than asynchronous communication.[2]

An additional advantage of SCMC lies in the fact that the chat room affords learners' the opportunity to share their experiences of academic writing with their peers (for example, "... when I have an exciting topic to write about, it would tend to inspire me to start writing; I do my research and maybe note important facts then just go to my computer and come up with the ideas"). In an interesting study of how learners' tacit knowledge is made explicit in online

2   It should, however, be noted that Spencer & Hiltz's (2003) findings are not entirely conclusive, as they reflect mixed learner perceptions of synchronous chat, particularly when it comes to this tool's potential to promote social presence.

environments, Yi (2006: 663) asserts that sharing experiences is an "... effective way for people to share their tacit [or explicit] knowledge". This is supported by a number of studies that do not only fall within the realm of CMC (Yang & Chen 2008), but also emanate from the field of knowledge management (Lee 2000, Haas & Hansen 2007).[3]

Discourse features in ACMC and SCMC: There are certainly marked differences between the two modes of communication reflected in the data. ACMC generates many of the features of written discourse, such as subordinate clauses and modal auxiliary verbs, whereas SCMC, while displaying some of the features of written language, also exhibits orality, which is evident in the production of discourse features such as greetings, floor holding moves, humour, and closing moves.

5. Conclusion

How are these findings relevant to the teaching of academic writing? Since ACMC occurs in delayed time, it allows learners to produce ideas about academic writing that are more considered/detailed and writing that is syntactically more complex than that generated in synchronous chat (Sotillo 2000: 107). Arnold & Paulus (2010: 194) observe that, because ACMC tends to produce more contemplative posts, it is "a good fit for tasks targeting higher cognitive skills ...". As learners have the opportunity to draft responses at their own pace, they are able to focus on form and "reflect critically upon the content" (Lee 2010: 212) – in this instance, on the academic writing process as well as on elements such as thesis statements and topic sentences. The highly interactive nature of SCMC, by contrast, allows learners to generate and share ideas about writing which may translate into "a new or different way of thinking ... in ... writing" (Hewett 2006: 20). However, the rapid pace at which learners are required to communicate in the chat room can make it quite difficult for some learners – particularly those who do not type fast – to keep up with the conversation. At the same time, the fast-paced nature of this mode may inadvertently lead

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3   Of course, the author is not suggesting that learners' tacit knowledge can be described in explicit terms: "... tacit knowledge [... for the most part] can only be perceived in human minds and shared synchronously via discussion" (Yang & Chen 2008: 39).

to superficial talk (Lim 2011: 3366), although it has already been noted that learners' SCMC shows evidence of critical reflection as a result of real-time discussion and feedback immediacy.

The author preliminarily concludes that talking about writing via ACMC and SCMC allows students to share their views of academic writing and sensitise themselves and one another to the writing process.

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