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The effectiveness of WebCT as a progress-assessment tool in English Studies

A B S T R A C T Given the acceleration in the international and local information and knowledge revolution, the University of Stellenbosch (US) has implemented an e-learning strategy to gain maximum benefit from the developments in information technology. In support of this strategy the US has implemented WebCT as an electronic course management system. The purpose of this study was to investigate whether the complementary learning and assessment techniques provided by WebCT are suitable for the evaluation of student responses in a subject like English. This was accomplished in conjunction with research of relevant literature, own experience, categories of student learning, and feedback from students. The WebCT assessment function was used as a complement to traditional lectures and traditional end-of-course written assessment to enrich teaching, promote learning and gauge student insight and progress. Bloom's Taxonomy was used to compare the validity of tests conducted through multiple choice WebCT assessment during the term with the results of the end-of-term traditional, written assessment to ascertain whether a reliable impression of student competence can be gained before students sit for their main test at the end of the term. It was concluded that WebCT is a constructive and effective teaching tool that motivates students both intrinsically and extrinsically and gives a fair reflection of student insight and progress. It can be a meaningful and enriching extension of a lecture course if the tool is used by willing lecturers in an innovative manner.

Keywords: Assessment English, Computer-assisted language learning (CALL), Computer-assisted assessment, Computer-assisted teaching, Multi-sensory teaching, Online-assessment English, Teaching English, WebCT assessment

1. Introduction

During the past decade technological development, and specifically information technology, has had a dramatic effect on the spheres in which corporations function and individuals live. The information era has of course not bypassed educational institutions, with the result that

a wide variety of software packages has been developed for use in education. Recently, however, the collapse of many businesses specializing in information technology has had a notable effect on the development, implementation and use of software. Consequently, the value that information technology holds is being reassessed widely, particularly in education.

In the world of education, lecturers at tertiary institutions are being placed under increasing pressure to cope effectively with large student numbers whilst at the same time delivering mandatory research projects and community service. The greatest demand that large student groups make on lecturers is undoubtedly that of assessment. Each additional student in a class means more exam and test scripts have to be marked, more consultations arranged, more enquiries answered and more administration dealt with. As the groups grow in numbers, new classes have to be arranged, which of course impacts significantly on assessment.

The above-mentioned scenario occurs in an information era that is characterized by an increasing number and variety of high-quality software suitable for use in outcome-based education. It is thus important that its value and effectiveness be assessed.

The University of Stellenbosch (US) is aware that the rapid pace of the revolution in the dissemination of information and knowledge lies at the core of economic development and growth. For universities this trend does not only create opportunities, but also responsibilities and risks. In order to compete on this global playing field, the strategic plan of the University of Stellenbosch identifies the need for the optimal development of information technology in both administration and academia (US 2000: 5, 11-12).

After a thorough evaluation of available software, the US decided to invest in WebCT, a web-based course management system. Other products that were initially considered were Blackboard and Online Learning (Van der Merwe, Pool and Adendorff 2002). Once the choice fell on WebCT, aggressive marketing followed to arouse the interest of lecturers. Training courses were offered and a development fund for the use of WebCT and e-learning initiatives was created. These initiatives contributed to an increase in student users of WebCT from 50 in February 1999 to approximately 20 000 of the 22 000 students enrolled at the US in August 2004. One should note, however, that the complexities of the WebCT utilisation vary a great deal between modules.

The Faculty of Arts, of which the Department of English is a member, has similarly committed itself to using WebCT and to establishing a specified minimum e-learning presence in all its modules by the end of 2004.

In 2001 one of the authors decided to use WebCT to complement a seven-lecture course for second-year students in the analytical study of "Rhetoric and Propaganda" as a mode of communication. The fact that WebCT made it possible for the lecturer to provide the students with additional reading material and illustrative video and sound clips on public and political speeches was of course a distinct advantage. In addition to attending the seven lectures, students had to read the additional material presented on WebCT and then complete the quizzes set on them by a specific date. The marks generated by WebCT would give both the lecturer and the students an idea of their level of insight and competence before they were due to sit for the course test at the end of the term. The WebCT mark would contribute 20% to their final mark for the course. The literary essay written during the formal test would make up the balance of 80%.

As a traditional lecture course provides limited opportunities for lecturer-student interaction, it was felt that the use of WebCT as a complementary teaching tool would provide more scope for individualized teaching and student self-monitoring. One of the main pedagogical advantages of using WebCT to complement traditional teaching is that WebCT pedagogy reverses the "instructor directed activities and discussions, and a passive or merely responsive role for students" of a conventional lecture course. The use of WebCT makes "the instructor less present" and increases "the interactive and leadership roles of the learners" (Zapalska et al., online). According to Black and William, assessment can be broadly defined to include "all activities that teachers and students undertake to get information that can be used diagnostically to alter teaching and learning. Under this definition, assessment is not limited to just assigning grades to students in the form of paper-pencil exams" (Liang and Creasy, online). WebCT quizzes taken during the term enable both lecturer and student to recognize gaps in understanding and thus to adjust instruction and questions during lectures accordingly. "Increasing the frequency of assessment and improving feedback are recognised motivators for learners, and they can also help staff to identify weaker candidates who need remedial assistance." (Scottish Qualifications Authority, 2003).

One of the advantages of WebCT multiple choice quizzes is that the lecturer does not have to do any marking, but can very quickly ascertain the problem areas as WebCT provides a comprehensive and easily accessible analysis of each question within a question bank. In addition, "Rather than being an event at the end of a course or period of learning, good assessment is an instructional event that describes, and promotes students' best performance across time and uses a range of methods" (Liang and Creasy, on line. Our emphasis).

WebCT's limited assessment techniques did, however, present a problem as assessment in the English Department normally takes the form of an end-of-term essay in which the students have to write a critical analysis of a literary text. The critical question was whether multiple choice questions presented through WebCT during the term would adequately reflect student competence in critical analysis. Large student numbers and time and marking constraints made any other kind of WebCT assessment such as written paragraphs or essays requiring lecturer input impracticable.

The use of Bloom's Taxonomy of cognitive skills provided an evaluation instrument and additional insight as to the effectiveness and range of the multiple choice quizzes in WebCT and allowed a comparison with the educational value of analytical essays. In view of the heavy marking load of lecturers, the specific aims of this study were to determine firstly whether the multiple choice assessment techniques provided by WebCT were suitable for the evaluation of student responses in a subject like English Studies, and secondly how assessment through WebCT would compare with traditional methods of assessment, namely analytical literary essays. The purpose was not for WebCT testing to take the place of traditional testing, but to support it. Although WebCT offers multiple choice and essay type questions, only multiple choice questions were used in this study to take advantage of the automatic grading feature in WebCT.

The following methods were used to ensure an objective finding:

- An appraisal of the advantages and disadvantages of computer-assisted assessment based on a study of relevant literature; and 12 years of combined practical experience of the authors

in using WebCT assessment techniques;

- A comparison between WebCT assessment and traditional methods of assessment based on Bloom's taxonomy, in addition to practical experience;
- An empirical study to measure student perceptions and preferences.

2. The advantages and disadvantages of computer-assisted assessment

As far as computer-assisted assessment in general is concerned a number of interesting studies have been done, but it seems that consensus has not been reached as to whether students fare better in traditional, written tests [supported by the studies of Green et al. (1984), Reckase, Carlson and Ackerman (1986)] or in computer-based assessment [supported by Bocij and Greasley (1999) and Bugbee and Bernt (1990)]. Factors that might have influenced the positive response in the later study are possibly that at this stage students were more computer literate, that the quality and speed of computer hardware had vastly improved since 1986 and that in this study the students could take the tests when it suited them (Bugbee and Bernt 1990).

Bocij and Greasley's research (1999) not only indicates that students fared better in computer-based testing, but that they completed their test more quickly. They maintain that students are better able to focus on questions and spend more time thinking about and recalling information. They also find that the atmosphere in the computer laboratories was more relaxed than in examination rooms. This final point is significant as numerous educational researchers like Jensen, (2000: 206), Sylwester (1995: 73), Krashen (in Brown 1994: 280) and Hand (1986: 12-13) stress the importance of a positive and stress-free learning environment, which they maintain is more conducive to optimal thinking and learning.

For Bugbee and Bernt (1990) the main advantages of computer testing are that students receive the results immediately and that they are able to take the tests when they are well prepared. As disadvantages they list the high costs of technology and problems with hardware and software. An important point mentioned by Kruk and Muter (1984) in their research is that it takes longer to read material and recognize errors on screen than in print.

Although these factors apply well to a subject like English, a traditional test in a language has a further dimension: it usually also assesses the students' skills in writing and expressing themselves, as well as their general competence and performance. For large groups of students (more than 50) assessment of individual writing skills is obviously not possible in the multiple choices, true or false or matching exercises that constitute the main offering in automatic WebCT testing and grading. Smaller groups, however, can be catered for if the lecturers or tutors are prepared to mark sentence or paragraph answers in WebCT themselves.

A further important factor that has to be considered is that the study of English at tertiary level at the US entails the close reading and analysis of literary and communicative texts. Consequently, there is not always a single correct response to a question and the compiler of multiple choice options, for example, will have to take care to include the various nuances suggested by the language of the text. A question that asks for two or three possible interpretations would then cater better for subjectivity of interpretation than a single answer. An advantage of such an approach is that students are encouraged to think wider than the single interpretive answer that seems obvious at first glance.

The fact that WebCT supports graphic, sound and video inserts is a distinct advantage in a language. Students can, for example, read the text of Shylock's impassioned speech against racism in *The Merchant of Venice*, watch the video clip of the scene, listen to the nuances and the emotive appeal in the voices of the actors, and then, immediately afterwards, complete the test set on the speech. Such full use of multimedia obviously caters for more learning styles (auditory, visual, kinesthetic and verbal) than the printed word (Hand, 1986: 11). In addition to having their answer graded immediately, students also have the opportunity of comparing their answers with the model answers provided by the lecturer.

For the lecturer there are also advantages above and beyond the fact that WebCT tests circumvent the marking of endless scripts. A summary containing the test result as a whole or for individual questions is available virtually immediately after the test has been taken. The summary indicates how many students attempted a question and what the average is for each question, thus making it easy for the lecturer to recognize questions that are too easy or too difficult. Tests can be devised so that questions are selected randomly from previously compiled sets of tests that ensure fair treatment. This feature is obviously very useful and relatively easy to compile in content subjects and particularly in mathematics and accounting. In the analysis of literary texts, however, it is extremely difficult, if not impossible, to devise three or more alternative questions of equal value on one text; consequently, cheating remains a problem in cases where there is no test supervision.

Finally, the educational value of an assessment mode is of great importance. Bocji and Greasley (1999) quote Jones (1990) who maintains that assessment on computers can usually only assess on Level 1, the knowledge level, of Bloom's Taxonomy for cognitive skills. If this is the case, then assessment through WebCT has only limited value for departments and virtually none for the advanced study of languages.

3. Traditional methods of assessment and WebCT assessment based on Bloom's taxonomy and practical experience

Assessment in the second-year English course "Rhetoric and Propaganda" traditionally assesses student analysis of the rhetoric of persuasion used in an unseen political speech. Student grades for the course are based solely on this once-off test opportunity and the lecturer has no other opportunity to assess student insight and understanding beyond the few questions raised during the lectures.

Benjamin Bloom's taxonomy for categorising levels of intellectual behaviour proved to be useful in deciding on the validity of multiple choice assessments: whether the cognitive challenges inherent to an analytical essay could be matched during WebCT quizzes employing only multiple choice questions.

Bloom's six cognitive levels (Bloom, 1956) characterise the intellectual skills needed to complete a course successfully. Bodenstern (1999:4) and Steyn and Van der Walt (2002) describe the levels and provide active verbs for use in designing the outcomes and assessment of a course. The University of Leicester (2002) defines the complementary learning objectives for each level. A summary of the above is given in Table 1.

The WebCT module that complements the course in "Rhetoric and Propaganda" consists of five

Table 1: Bloom's six levels with descriptions, verbs and learning objectives

| Bloom's level | Bodenstein's description | Descriptive verbs | Learning objectives |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge | What do the students know? | Arrange; define; identify; list; recognise | Know common terms, specific facts, methods, procedures, basic concepts and principles. |
| Comprehension | To what degree do the students understand what they know and how deep is their comprehension? | Classify; describe; discuss; paraphrase; select | Understand facts and principles, interpret verbal material, justify methods and procedures. |
| Application | Can the students apply the knowledge by using it in another context than the one in which it was originally acquired? | Solve; outline; apply; describe; demonstrate; dramatise. | Apply concepts and principles to new situations, apply laws and theories to practical situations, and demonstrate the correct usage of a method or procedure. |
| Analysis | Can the students analyse information and systematise knowledge by comparing different aspects and / or classifying according to specific criteria. | Arrange; define; identify; list; recognise; repeat. | Recognise unstated assumptions, recognise logical fallacies in reasoning, distinguish between facts and inferences, analyse the organizational structure of a work (art, music, writing). |
| Synthesis | Can students recognise coherencies and integrate their knowledge in order to gain new insights? | Integrate; organise; create; design; forecast; prepare; suggest. | Write a well organized theme, give a well organized speech, write a creative short story (or poem or music), integrate learning from different areas into a plan for solving a problem. |
| Evaluation | Are students able to make their own derivations and to evaluate intellectual arguments or creative adaptations of previous knowledge? | Confirm; deny; defend; evaluate; adjudicate; judge; determine; value. | Judge the logical consistency of written material, judge the value of a work (art, music, and writing) by the use of internal criteria, and judge the value of a work (art, music, and writing) by use of external standards of excellence. |

topics, each of which is tested through 20 multiple choice questions. Below are four examples of questions from one test on Shylock's speech from *The Merchant of Venice* and descriptions of the level of Bloom's Taxonomy on which each functions.

The first question tests comprehension and application as cognitive outcomes. In this question the students have to show that they understand that Shylock is using a metaphor that compares his desire for revenge to hunger.

Question 1

In the line "If it will feed nothing else, it will feed my revenge." Shylock compares his desire for revenge to ...

- a. nothing else
- b. hunger
- c. feeding
- d. anger

Question 2 tests analysis as cognitive outcome. In this question students have to analyse the motive that underlies Shylock's caustic remark. To do this they have to understand the extreme bitterness that has driven Shylock to this action.

Question 2

In answer to Salerio's question as to what he wants to use the pound of flesh for, Shylock answers "To bait fish withal". He answers in this way because he ...

- a. wants to shock Salerio into recognising Shylock's need to avenge the way he has been treated.
- b. wants to show off and prove how vengeful and cruel he can be.
- c. is teasing Salerio.
- d. really wants to use the flesh as bait when fishing.

Another cognitive outcome is the ability to synthesise. In order to answer such a question, students have, for example, to evaluate the complex relationship that exists among the words in a list. They have to recognize that the relationship functions on three levels, namely physical to emotional, external to internal and concrete to abstract.

Question 5

The sentence "Hath not a Jew hands, organs, dimensions, senses, affections, passions?" is ordered according to the following principles: (choose one or more correct answer)

- a. physical to emotional
- b. internal to external
- c. emotional to physical
- d. concrete to abstract
- e. abstract to concrete
- f. external to internal

In question 17 students have to evaluate the logic used by Shylock to justify his determination to take revenge.

Question 17

Which of the following statements are true of the lines "If you prick us, do we not bleed? If you tickle us, do we not laugh? If you poison us, do we not die? And if you wrong us, shall we not revenge?" (Choose one or more correct answer)

- a. The final claim is as inevitable as the first three: if you are wronged by someone, it is natural and inevitable to want revenge.
- b. The first three statements are based on biological inevitabilities, whilst the final claim is an ethical choice, not a natural consequence.
- c. The claims work up to an illogical conclusion.
- d. the claims work up to a logical conclusion.

A competent analytical essay would include comments on these aspects of Shylock's speech; in other words, students would have to demonstrate skill in using the higher levels of abstraction, namely comprehension, application, analysis, synthesis and evaluation, in their formal course test.

In Table 2 the authors compared the WebCT and traditional assessment techniques used in English 278 with Bloom's taxonomy for cognitive outcomes (see Table 1).

Table 2: Comparison between the WebCT and traditional assessment techniques

| Bloom's level | WebCT assessment | Traditional assessment |
|---------------|------------------|------------------------|
| Knowledge | a | a |
| Comprehension | a | a |
| Application | a | a |
| Analysis | a | a |
| Synthesis | a | a |
| Evaluation | a | a |

Key: a = Applicable for Bloom's level of cognitive skill

From the examples and the table it is clear that WebCT makes assessment on all six levels possible as is the case with traditional analytical essays. Students are thus given practice in the higher level skills they will need to demonstrate in their written essay. A similar comparison was also done by two of the authors for Accounting (Lamprecht and Nel, 2004). Here, however, it was found that in Accounting, WebCT assessment could only utilise the first three levels of Bloom's taxonomy.

4. Results and analysis of empirical research

According to research done by Rivera and Rice. (2002) many previous research studies showed that cognitive factors such as learning, performance, and achievement in distance education classes (through the use of WebCT) are comparable to those observed in traditional classes, however, the perceptions and satisfaction level of instructors and students have not shown the same consistency. It was therefore decided to measure student perceptions and preferences through questionnaires.

Questionnaires were distributed to 38 (42%) students who completed the WebCT module (see Appendix B). After consultation with a statistician at the University of Stellenbosch, it was concluded that the sample (38 students) was of sufficient size to be used as a basis for statistical inference about the population (90 students).

The first part of the questionnaire measured student perceptions on various WebCT assessment issues such as a) advantages and disadvantages, b) suitability thereof for the evaluation of English 278 and c) the standard of WebCT assessment compared to traditional assessment. The second part of the questionnaire gathered biographical information. The questionnaire was an adaptation of a questionnaire previously used by two of the authors for a similar study in accounting (Lamprecht and Nel, 2004).

Nine male and twenty-seven female students completed the question on gender. The majority

of students did not perceive themselves as computer literate with only 39% of students rating their basic computer literacy on 1 or 2 on a scale of 1 to 5, where 1 is completely computer literate and 5 completely computer illiterate. Their lack of computer literacy was, however, not seen as a limiting factor in the use of WebCT. Only 3% of the students (1 student) agreed with the statement that WebCT requires too much computer expertise. In addition, only 21% of the students affirmed the statement that WebCT improved their computer skills.

The four most critical advantages and disadvantages as perceived by students are summarised in Table 3. The percentage students, who respectively rated each advantage and disadvantage as a 4 or a 5 on a scale of 1 to 5, where 1 is definitely not an advantage/disadvantage and 5 most definitely an advantage/disadvantage, are shown in brackets in table 3.

Table 3: Four most important advantages and disadvantages of WebCT assessment as perceived by students

| Advantages | Disadvantages |
|------------------------------------------------------------------------------------|-------------------------------------|
| Speed of feedback (92%) | Space to make notes (32%) |
| Promotion of a paperless environment (68%) | Limited assessment techniques (29%) |
| Accuracy of feedback (results) (63%) | Lack of hard copy of response (26%) |
| Opportunity to gain feedback on level of competence after completion of test (61%) | The fear of a faulty system (26%) |

The above information seems to indicate that students in general have a stronger sense of the advantages (92%, 68%, 63%, and 61%) of WebCT assessment than the disadvantages (32%, 29%, 26%, and 26%).

Students see the speed of feedback (feedback on the tests are given to students immediately after completion) as the most important advantage of WebCT assessment. This should be seen against the background where students normally have to wait for one to three weeks for feedback on traditional essay assessments (where test scripts are marked by hand). As expected, students also perceive the accuracy of feedback as an important advantage of WebCT assessment. Written tests are marked by humans where subjectivity and errors are detrimental factors, whereas WebCT tests are marked by computer software. Besides the speed and accuracy of feedback, students also appreciate the fact that WebCT assessment enables lecturers to give more feedback to them on their level of competence in the subject.

Students rate the 'promotion of a paperless environment' as the second most important advantage. This is contradictory to their rating on the disadvantages, where the lack of a hard copy is rated as the third most important disadvantage.

The above advantages and disadvantages are all essentially technological. It was argued earlier in this paper that both WebCT assessment and traditional assessment test on all six levels of Bloom's taxonomy for cognitive skills. Student responses that measured their perception on whether English 278 can be adequately assessed through WebCT are summarised as follows:

The majority of students (61%) are of the opinion that a subject like English 278 can be adequately assessed with the assessment techniques provided by WebCT. The remaining 39% are either uncertain (29%) or disagree (10%). Only 29% of students agree with the statement

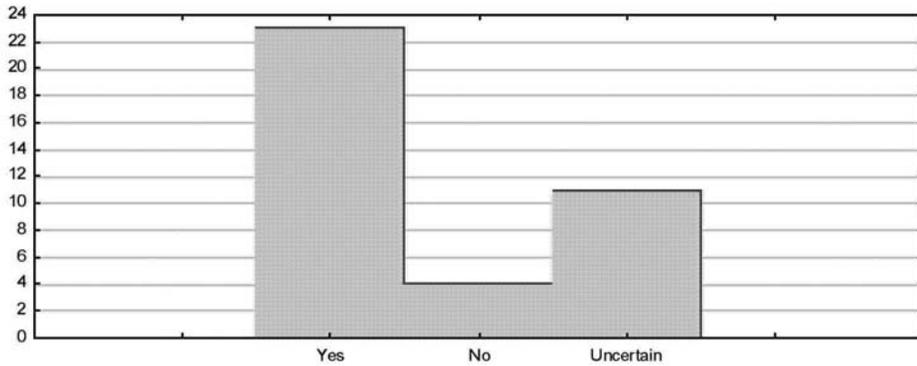


Figure 1: Student perceptions of WebCT assessment in English 278

that limited assessment techniques are a disadvantage of WebCT. The majority of students (87%) also support the fact that WebCT marks should form part of their final mark.

The following figure indicates the views that students have of the standard of WebCT assessment compared to traditional assessment.

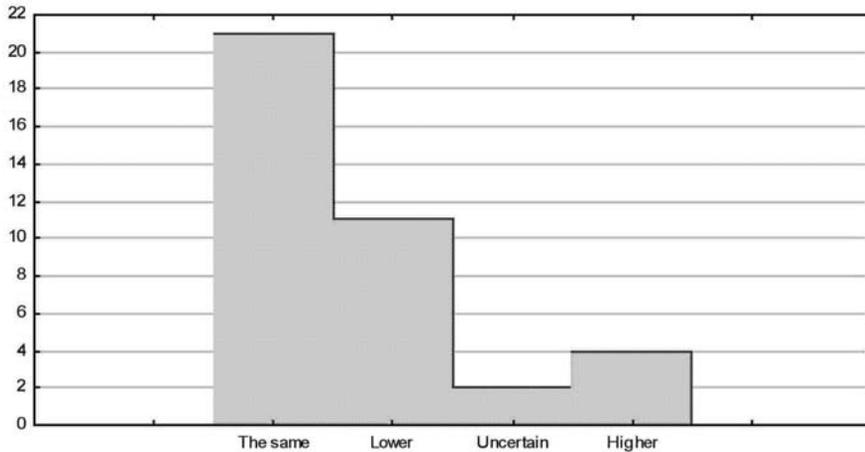


Figure 2: Student comparisons of WebCT and traditional assessment standards

The majority of students (55%) rate the standard of WebCT quizzes on the same level as traditional written tests. It is also noteworthy that 29% of students perceived the standard to be lower. A correlation test between the results of WebCT quizzes and their exam results (written format) showed a positive correlation of 0.44 (-1 is absolute negative correlation and +1 is absolute positive correlation). There is therefore a positive correlation between the marks that students receive in WebCT assessments and traditional assessments. This could be an indication of similar standards, although factors such as student preparation could also influence results.

Students were asked to indicate the combination between WebCT assessment and traditional written assessment they would prefer:

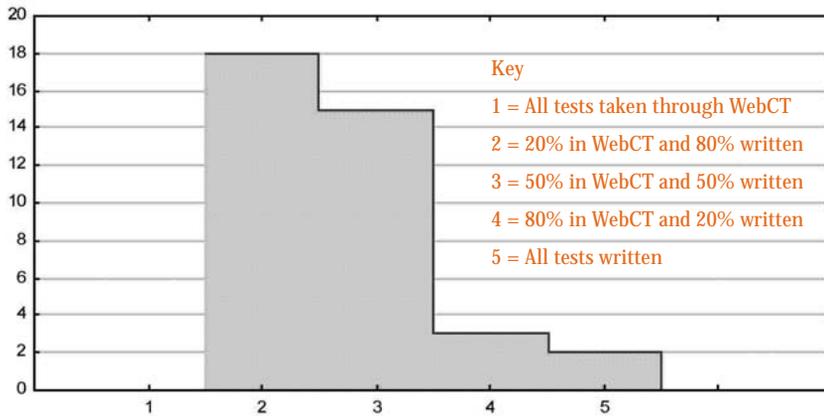


Figure 3: Preference for testing in WebCT or written test

It is clear that although none of the students would prefer all tests to be conducted through WebCT, the majority of students (95%) would opt for some combination of WebCT and written tests. Only 5% of the students preferred all tests written. In total 87% of students preferred either 20% or 50% of all tests in WebCT with the balance preferring written tests. The majority of students (76%) felt that more WebCT testing opportunities in other modules of English Studies would prepare them better for the formal tests and exams, which are in the written format. Of these students 93% would prefer to take these tests at a time that is appropriate to them.

From the above it could be concluded that overall student satisfaction is relatively high on the use of computer-assisted assessment for English Studies. This is supported by research done by Jacobsen & Kremer (2000) where 49% of students were satisfied or very satisfied with the use of computer-assisted assessment in computer science, 27% were neutral, and 22,9% were either dissatisfied or very dissatisfied.

Notwithstanding all the advantages identified in this study, WebCT also holds very specific challenges when applied to assessment in a subject like English Studies 278. Table 4 is taken from strategies recommended by the University of Tasmania (2004) for specifically identified issues in online assessment, together with the perceived disadvantages of WebCT assessment (see table 3).

5. Conclusion

Despite the accelerated rate of development in information technology over the past decade, the use of computer-assisted assessment is still a relatively new and unexplored concept at most tertiary institutions. As a result of tradition, both students and lecturers are conditioned to limit assessment to written tests and exams.

To ensure a balanced and objective finding, various research methods were used in this study. A literature study was done of previous research on computer-assisted assessment. However, most of this research focussed on the technological advantages and disadvantages of computer-assisted assessment and did not differentiate between different subjects.

As all technological advantages associated with computer-assisted assessment will be meaningless

Table 4: Issues in online assessment and strategies for overcoming them

| Issues | Options and strategies |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access to online tests | Provide paper-based alternatives |
| Technical difficulties during an online test | Have contingencies / alternatives in place |
| Student anxiety (fear of system failure) | Provide sample tests for students to try first. Provide help during the test. Provide links to help resources in the unit outline |
| Cheating | Emphasize plagiarism and ethic rules. Restrict tests to be undertaken in a supervised computer room only. Use the random function to set a unique test for every student. Software is available to examine multiple electronic assignments and identify plagiarism and copying |
| Testing only a narrow range of cognitive skills (limited assessment techniques) | Use other (traditional pen-and-paper) assessment methods to test higher order thinking skills |
| Space to make notes | Re-design outlay of computer room |
| Lack of hard copy | Provide save and print functions |

if a minimum level of educational value or compliance is not present, WebCT assessment was compared to traditional assessment based on Bloom’s taxonomy for cognitive skills, as well as the authors’ practical experience. It was concluded that WebCT makes assessment on all six levels possible, as is the case with traditional methods.

The conclusion can therefore be drawn that computer-assisted assessment (such as WebCT) is suitable for a subject such as English Studies for the following reasons:

- From a cognitive point of view (Bloom) there is little difference between computer-assisted assessment and traditional assessment;
- WebCT has multi-sensory appeal and thus caters for more learning styles;
- The majority of students rate the standard of WebCT assessment on the same level as traditional assessment;
- A comparison between the results of WebCT quizzes and traditional tests showed a positive correlation;
- The majority preferred to have either 20% or 50% of tests conducted through WebCT, with the balance preferring written tests;
- Immediate feedback is a motivational advantage;
- Students in general have a much stronger sense of the advantages of WebCT assessment than the disadvantages;
- The majority of students have a positive attitude towards WebCT and are of the opinion that a subject such as English Studies 278 can be assessed adequately with the assessment techniques provided.

This research supports the conclusions of Liang and Creasy that “Assessment should be centered on ‘assessment for learning’ to increase learner autonomy” (Online) and Zapalska et al. who found that:

Careful, gradual introduction of Webbased technologies can guide and enhance learner’s transition from a traditional mode of pedagogy (in which their role is passive)

to a model in which they take a full, active role in directing and achieving their own learning (Online).

The findings of this study indicate that the complementary use of continuous assessment through the WebCT multiple choice function, is a practical teaching tool to monitor and inform student performance and progress, to facilitate teaching and enhance learning and learner autonomy. The use of WebCT offers both intrinsic and extrinsic motivation to students and it can form a meaningful and enriching extension of a lecture course.

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APPENDIX A

**UNIVERSITEIT VAN STELLENBOSCH, DEPARTEMENT OF ENGLISH (Mrs M. Swart)
STUDENT QUESTIONNAIRE ON THE USE OF WEBCT AS A FORM OF ASSESSMENT IN "Rhetoric and Propaganda"**

Please make a cross (x) in the relevant box. Use a pencil or a pen.

The aim of this questionnaire is to ascertain your perceptions of the value, if any, of the WebCT quizzes/tests in the second-year module "Rhetoric and Propaganda".

Did you experience the following as **advantages** in WebCT assessment?

(1 = definitely not, and 5 = most definitely)

| | 1 | 2 | 3 | 4 | 5 |
|---------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Speed of feedback (results) | <input type="checkbox"/> |
| 2. Accuracy of feedback (results) | <input type="checkbox"/> |
| 3. Improvement of your own computer skills | <input type="checkbox"/> |
| 4. Potential to decentralise the taking of quizzes or tests | <input type="checkbox"/> |
| 5. Promotion a paperless environment | <input type="checkbox"/> |
| 6. Opportunity to gain feedback on your level of competence after completion of a quiz/test | <input type="checkbox"/> |
| 7. Lecturer is more available to students as less marking is required | <input type="checkbox"/> |
| 8. Did you experience any other advantages? Please name them: | <input type="checkbox"/> |

Indicate to what extent you experienced the following as **disadvantages** of WebCT

(1 = definitely not, 5 = most definitely)

| | 1 | 2 | 3 | 4 | 5 |
|---------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. It requires too high a level of computer expertise | <input type="checkbox"/> |
| 2. The fear of a faulty system (e.g. that your quiz may disappear after completion) | <input type="checkbox"/> |
| 3. Work area around the computer | <input type="checkbox"/> |
| 4. Space to make notes | <input type="checkbox"/> |
| 5. Limited assessment techniques (WebCT is limited to multiple choice questions, true/false and paring) | <input type="checkbox"/> |
| 6. User unfriendliness of WebCT | <input type="checkbox"/> |
| 7. Waste of time moving from quiz to quiz | <input type="checkbox"/> |
| 8. Lack of a hard copy of your responses | <input type="checkbox"/> |
| 9. Did you experience any other disadvantages? Please name them: | <input type="checkbox"/> |

Do you think the complementary WebCT module attached to "Rhetoric and Propaganda" 278 can be adequately assessed given WebCT's restricted mode of assessment?

Yes No Unsure

Do you support the fact that your WebCT marks form part of the assessment for the module "Rhetoric and Propaganda"?

No Yes Unsure

How does the standard of the WebCT quizzes compare with that of the traditional written test?

Similar Higher Lower Unsure

Do you think that more WebCT testing opportunities in other modules in English Studies would better prepare you for the formal tests?

No Yes Unsure

If you answered "Yes" to the previous question, what format would you prefer

Written WebCT

If you answered "WebCT" above, how would you prefer to take these tests?

In your own time, when ready

Formally during specifically set times

From the list of advantages (1-7) on page 1, give the **numbers** of the four that you think the most important (**in order of importance**)

From the list of disadvantages (1-8) give the **numbers** of the four that you think the most important (**in order of importance**)

Keeping in mind the advantages and retrictions of WebCT assessment, which of the following options would you prefer?

- All tests taken through WebCT
- 20% in WebCT and 80% written
- 50% in WebCT and 50% written
- 80% in WebCT and 20% written
- All tests written

It is important that we should have certain personal information to ascertain how the perceptions of different people from different backgrounds vary.

Gender (1 = male en 2 = female)

1 2 3 4 5

How would you rate your basic computer literacy on a scale from 1 to 5

(1 = completely computer literate, 5 = completely computer illiterate)

What was your mark for English Studies 178?

How many hours do you spend on average per week on English Studies 278 (above and beyond contact sessions)?

None 1 - 2 3 - 4 5 - 6
7 - 8 9 - 10 10 + more

Any other general remarks or suggestions regarding the use of WebCT assessment in English Studies?

THANK YOU FOR YOUR TIME!