### Introduction

In this chapter, I will describe the design of the CyberSurfiver module on which this research is based. I will explain how the CyberSurfiver game worked, and how the various game elements, such as the Immunity Challenges and the Grand Prize, were introduced to the learners. The context for the case is therefore described below. This description situates the case within the online learning environment.

### The case study: CyberSurfiver

The case study upon which this thesis is based is the facilitation of a particular module that is presented as part of a twoyear tutored Masters degree in Computer Integrated Education at the University of Pretoria. The learners who enrolled for this module are all working adults who have completed studies in Education and who range in age from between 23 and 62. They all intend to complete the degree on a part-time basis while they continue to work full time. The module on which this study is based is entitled eLearning, and it was presented over the period of six weeks between 18 July 2002 and 29 August 2002. This module was one of a number of electives that can be done to complete the degree.

The module was presented almost entirely online – the only exceptions being an introductory contact session at the beginning of the course, an emergency tribal council after the first chaotic week, and a closure session right at the end. From a pedagogical point of view, one might say that the module was both learner-centred and firmly grounded in a constructivist philosophy, even though a number of instructivist elements were included wherever and whenever this was considered to be necessary. The presentation of the module simulated the spirit and atmosphere of *Survivor®* – an award-winning reality series that has been shown on national television.

Apart from differences in location (which, in the television programme, is usually an exotic site in some remote, often inhospitable but beautiful part of the Amazon, Africa or some country such as Thailand, and which, in this study, was Cyberspace), the researcher (1) applied similar rules to those that were applied in the television reality programme, and (2) arranged for analogous events to take place in Cyberspace.

One other difference is that we called our game 'CyberSurfiver', with the emphasis on the 'surf' part that relates to the activity of browsing the Web. While the reality show offers the final survivor a dazzling cash prize of \$ 1 000 000, CyberSurfiver managed to offer a rather more humble but nevertheless very appealing weekend away for the winning CyberSurfiver.

As the module was experienced as

six weeks of real torture
(Anonymous survey response)

and many of the learners spent a considerable number of hours behind their computers in order to complete their challenging assignments, they frequently experienced conflict at home with family members who felt neglected and abused because of the hours that they had to devote to the project. As one learner put it:

My wife is talking about divorcing me (money for my child's clothes used for the online discussions).

The weekend away for a family of six at a local resort was therefore perceived as a most desirable incentive.

The other significant incentive was the marks that were awarded for the module and the fact that the module earned the learners credits as he or she worked towards obtaining the degree.

All interactions for the duration of the module had to be carried out online (on the 'Cyberlsland'), and interpersonal telephone calls or any form of face-to-face contact between learners were strongly discouraged. We do know, though, that learners who experienced

technical difficulties in, say, ftp-ing their web sites to the server on campus, got together with more experienced learners on a number of Saturday mornings in order to be able to meet deadlines and achieve milestones. It is thus fair to say that most interactions took place online, even if this was not the only type of contact that took place. In addition, learners admitted to having had occasional face-to-face contacts and discussions of some kind behind the scenes, even though this was not officially allowed.

**Participant** instructions for the weekly assignments had to be accessed via the Internet. All the interactions among tribal members themselves, or between tribal members and the facilitator of the course, took place through the medium of a number of pre-selected web-based communication tools such as Yahoo Groups, Yahoo Messenger, NetMeeting, WebCT, and InterWise. These tools were selected because they provided learners with a wide range of experiences in the use of a variety of applications. Learners all obtained a useful representative knowledge of what the Internet has to offer in terms of synchronous and asynchronous communication from their use of these tools. In addition, their use of these forms of communication presented learners with opportunities to evaluate the different functionalities that are offered by both expensive commercial learning management systems – and those applications that are available at no charge on the Internet.

One cost-effective application, namely Yahoo Groups, was used as 'base camp' throughout the duration of the module. This application required all learners to get a Yahoo ID, which is available at no cost. The drawback of this service is the fact that it is heavily supported (financed) by paid advertisements that are attached to all messages. This renders it less than ideal as an environment in which to learn. During the first week in which the module was presented, this service was the sole available medium of communication. While, from the second week onwards, other tools were introduced and integrated on a regular basis, it soon became clear that Yahoo Groups were going to be the more formal medium of communication, particularly if the intended message was intended for the entire group. One might note at this point that Yahoo Messenger proved to be a popular medium for

making interpersonal contacts – even across tribal boundaries.

For this module, the 24 learners were divided into 4 groups (tribes), each of which consisted of 6 learners (tribal members) – all of whom possessed widely differing levels of computer and web literacy skills. It was at the introductory meeting that the first tribal task was given to the tribe. The task was to come up with an original name and slogan for the whole tribe.

Tribal members were required to complete, on a weekly basis, a number of collaborative (tribal) and individual assignments. For the tribal assignments, learners were required to collaborate and negotiate online by using the web-based mediums available to them. All assignments also had to be 'handed in' electronically. One example of such a tribal assignment follows below (See Table 9):

Table 9: Example of a Tribal Assignment

# **Tribal Assignment 4**

In your tribes, create a clickable concept map of the most important issues/concepts related to teaching and learning via the Internet. In this assignment, your tribe should demonstrate that you truly understand the intricacies involved in elearning.

I would like to see a holistic view of elearning when looking at your map. Please note that the idea is not to link the map to keywords only, but rather to extensive notes on each of the topic. Think big and read widely!

• Add this map to your tribal website and have it up and running by 17:30, Wednesday 21 August 2002.

Individual assignments varied from those that encouraged learners to improve their technical skills, to those that were more scholarly in nature. An example of each follows below (See Table 10):

## Table 10: Example of Individual Assignments

# Individual Assignment 4 (Technical Skill)

This week you should add the following feature to your personal web site:

• a sound file (approximately 30 seconds should do it) in which you give us your impressions of the first week on the Cyberlsland. Include at least one positive and one negative comment.

### Individual Assignment 6 (Scholarly activity)

Compile a report (600 words maximum) on ONE of the following topics:

- The role of the online facilitator as contrasted to that of the traditional face-to-face teacher.
- The strengths and weaknesses of the Web in an educational environment.

Mail your report in HTML format to the Webmaster of your tribal site with a request to have it linked from there. This link must be available by 17:30, Wednesday 7 August 2002.

In the spirit of the original *Survivor®* game, Immunity and Reward Challenges were also posted on a regular basis. The facilitator made use of these challenges to make learners aware of a number of related and important issues. For instance, at one point it became clear to me that

the learners had no idea what an IP address was. This problem area was then formulated into a question and posted as a Reward Challenge (See Table 11).

### Table 11: Example of a Reward Challenge

# **Reward Challenge**

Who can tell us what an IP address is? How can I find out what my IP address is? The first correct response will get the reward!

As this module was presented in asynchronous mode, there were quite a number of legitimate objections to the fact that the award was presented to the first correct response. While some of the learners had access to their networked computers only from home, others could only connect to the Web from their places of work. This meant that, no matter when – in any 24-hour period – a reward challenge

was posted, some learners were certain to read about the challenge before others could do so.

The reward was virtual by nature and came in the format of a picture attached to a bulletin board message. The pictures below depict an example of what these rewards were like (See Figure 4):

Figure 4: Examples of the typical rewards in the Reward Challenges



The way in which the game worked was that members would be voted off on a weekly basis until only one final survivor (our CyberSurfiver) remained. Thus, at the end of each week's activities, the tribes had to vote one member of the team off on the basis of a number of predetermined criteria. This member then joined the other evicted learners in a separate tribe that was called Tribe 5. Even though they were out of the running for the Grand Prize, all members of Tribe 5 were nevertheless required to complete all the tribal and

individual tasks that were given to those who remained in the game.

The only sure way not to be evicted was to win immunity for the week. Just as with the Reward Challenges, Immunity Challenges were also posted on a weekly basis and included tasks whose relevance to the purpose of the module was more indirect.

One of the Immunity Challenges, for example, aimed to assess the typing speed of learners in the course. I, as the facilitator,

needed this information because I planned to set up an online test that included a large number of paragraphtype questions which required learners to be able to type in large amounts of text. I obviously needed to take into account the typing ability of the students because that variable would influence the amount of time that I would allocate to the test.

The learners were therefore asked to download from the Web a typing tutor that included a typing test utility. Learners then had to type a paragraph, obtain their scores, make screen dumps of these scores, and attach them to a bulletin board message for all to see. The figure below shows the 'evidence' of the score of one of the participants (see Figure 5).

Figure 5: Example of Immunity Challenge 'Evidence

### Brenda

has today successfully completed a computer based TypingMaster typing test with the following results:

Test name: A Reflection

Date: 30.07/2002 00:46

Duration: 2 min. Done: 2 min.

 Gross speed:
 43 wpm

 Accuracy:
 88 %

 Net speed:
 38 wpm

Gross hits: 432

Error hits: 50 (10 errors \* 5)

Net hits: 382

As in the television show, tribes were required to vote off one member each week. In order to process these weekly votes, a web-based voting station was created with PHP. Learners gained access to the station by utilising a username and a password. It therefore became possible to limit each learner to only one vote – and a

vote for only one person. The voting station only allowed learners to vote for the members of their own tribes and they were not allowed to vote for themselves. The voting station usually closed on a Thursday evening at midnight – after which time the person with the most votes was automatically transferred to Tribe 5. If more than one person got the

same number of votes, or if no one got any votes, the computer randomly selected a person to be voted off.

Members of Tribe 5 did not have to vote, as they were no longer eligible for the Grand Prize. However, all learners became part of the Jury who, in the final week, had the opportunity to choose the winner of the Grand Prize from the remaining 'Surfivers'.

At one point, the number of active members in the tribes began to dwindle because more than half of the initial team members had either been voted off or had fallen out of the course for various reasons. In line with similar surprises in the reality show, I introduced a new tribal division that

elicited high levels of stress in some while elevating levels of satisfaction in others. This action entailed a shuffling of the tribes so as to combine into two teams (Tribe 6 and 7 – consisting of five and four members respectively) those members who were still in the running for the Grand Prize.

At this stage, a number of those who had been voted off expressed their dissatisfaction with Tribe 5's inability to obtain active participation from all its (evicted) members. They then started a new tribe (Tribe 8) that turned out to be highly functional after an additional shuffle had taken place. Figure 6 shows the interface of the Voting Station.

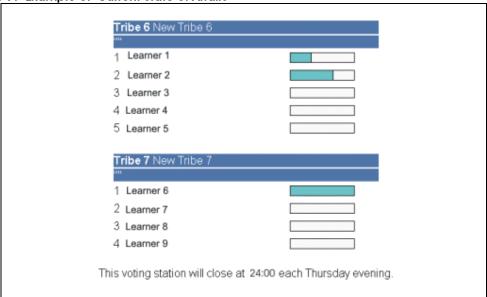
Figure 6: Voting Station Interface

# CyberSurfiver Voting Station Enter at your own risk ... WEEK 1 | Log on to vote | | Current state of affairs | | View final results | WEEK 2 | Log on to vote | | Current state of affairs | | View final results | WEEK 3 | Log on to vote | | Current state of affairs | | View final results |

The learners could log on to vote (and they could only vote once), but they could also see the current state of affairs at any time during the week. This link took them to a

page where the names of all tribal members were displayed and where they could see the number of votes that had been cast against the various members (see Figure 7).

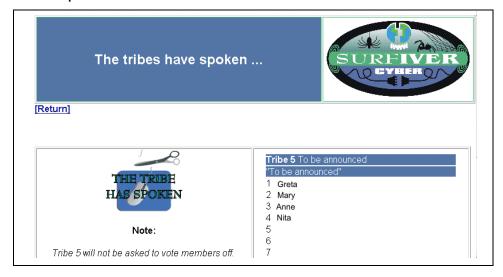
Figure 7: Example of 'Current State of Affairs'



Once the voting station had closed at midnight on a Thursday evening, the members who were voted off, were

automatically moved into their new tribe (see Figure 8).

Figure 8: Example of 'View Final Results'



Once the names of the evicted tribal members had been moved to Tribe 5, an animation would appear. The purpose of this was to recreate with as much verisimilitude as possible the features of the reality show. In *Survivor®*, the torch of the person who has been voted off is ceremoniously extinguished while the

presenter states dramatically that the tribe has spoken. On Cyberlsland, this same effect was created by an animation that symbolised a dangling computer mouse that is cut loose with a pair of scissors, accompanied by the statement: 'The tribe has spoken...' (see Figure 9).

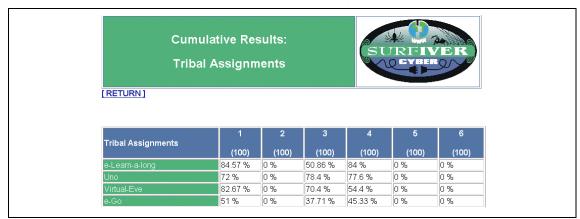
Figure 9: Example of the Cyberlsland 'Torch' Before and After the Votes Have Been Tallied



As higher order thinking and collaboration were skills that were deemed a priority in the module, learners were also required to carry out peer evaluation of the other tribe's collaborative assignments. Due dates for the assignments were usually set for the Wednesday evening. After the deadline had passed, learners were required to spend

time evaluating the collaborative work performed by other tribes. They then had to log onto the web-based assessment station, which was also developed in PHP, and assign a mark to each of the other tribes. They did not have access their own tribe's marks and could only vote once for each of the other tribes (See Figure 10).

Figure 10: Example of the Peer Assessment of Tribal Assignments



Furthermore, the learners were also required to evaluate their tribal member's collaborative behaviour. Here they had to assess the other members based on their

availability, level of participation and the quality and quantity of their contributions (See Figure 11).

Figure 11: Peer Assessment Criteria for Collaborative Behaviour

# Collaborative Behaviour Tribal Members



Criteria	Maximum score	Your assessment of the individuals in your tribe	
Availability	5		
Level of participation	5		
Quality of inputs	5		
Quantity of inputs	5		
Team spirit	5		
Total	25		

### Closure

This chapter explained the nature of the game and the manner in which it was played as part of the eLearning module that forms the basis of the case study under consideration. As the Survivor® metaphor was the basis on which the entire module was presented, the module was designed to reflect the nature of the reality show as closely as possible. The game elements that were simulated included the group constitution, the isolation on the 'virtual' island, the tribal and individual assignments, the Reward and Immunity Challenges, the

shuffling of teams half way through the module, the voting procedures and the Grand Prize waiting at the end of the module for the sole remaining 'CyberSurfiver'.

The next chapter will outline the highlights of the various weeks, and will deal with the above-mentioned range of game elements and their impact on the complexities of the group's functioning.