

Introduction

This chapter focuses on the effect that the introduction of a reality game such as *Survivor*© (revised as a metaphor of the original game and reformatted to suit the researcher's purpose), has on the dynamics and complexities of group functioning and interaction in a web-based module. This chapter describes the unique characteristics of the *Survivor*© game and the impact that these characteristics exerted on the group's functioning. I would like to explore the manner in which and the extent to which the tribal members, both as individuals, and as tribes, responded to the introduction of the elements of the reality game.

The following question guides reflection in this section:

How did the adult learners respond to the reality game elements that were introduced in the elearning module?

The elements of the *Survivor*© game that will be discussed include the following:

- Group composition and the effect of the rearrangement or shuffling of tribal members into new tribes
- Isolation as experienced on the virtual island
- Tribal assignments
- Individual assignments

- Reward challenges
- Immunity challenges
- Tribal councils
- Voting
- The jury
- The Grand Prize

It is important to note that this chapter is not presented in the chronological order in which the previous chapter was presented. Each of the topics listed above is dealt with as a separate unit.

While the *Survivor*© metaphor may be regarded as *the* meta-game that connects and is relevant to all modules, many other smaller sub-games, such as the Immunity and Reward Challenges, were being played at the same time.

Apart from the *Yahoo Groups* e-mails, the *WebCT* bulletin board messages, the instant messages sent using *Yahoo Messenger*, and other sources, this chapter makes extensive use of the comments made by learners in three electronic tests and a *WebCT* survey that was conducted on Wednesday, 28 August 2002.

The survey asked learners to comment on the positive and negative influences that the metaphor of the reality game had exerted on their learning processes. When the data thus requested from learners had been both quantitatively and qualitatively analysed, a

number of noteworthy trends and incidents became evident.

The survey results showed that learners identified peer support as one of the more helpful features of the game. Many learners said that they had been both encouraged and supported by other players – sometimes even by learners from different tribes. Others stated that compulsory collaboration had affected their learning process positively.

In their survey comments, quite a number of learners explicitly identified *competition* as one of the strong motivators that was introduced by the Surviver game. Others, in contrast, stated that they had been demotivated by the element of competition.

Among the negative elements of the game that learners identified were the voting process and the conflict that was engendered within some tribes. Learners also felt negatively about the exorbitant costs incurred by their having to be online for hours on end, the heavy workload, the asynchronicity, and the unavailability of certain members.

It is interesting to note that a number of students thought that the game metaphor had been introduced to offset the debilitating effect of the heavy workload that the module required. One learner commented:

The game was actually the sweetener to six weeks of real time torture. [Anonymous survey response]

The CyberSurviver game

During the first contact session, I asked learners to identify (by a show of hands) those who were familiar with the *Survivor*® reality show on television. I found that most learners had either watched it regularly, or had at least seen a few episodes. These then at least understood the conventions of the game. But a number of learners indicated that they did not understand the concept at all. I carefully explained to these how the game worked.

In spite of this, it soon became clear that one could not make the assumption that those learners who were unfamiliar with the *Survivor*® concept did indeed understand what was going on simply because one had verbally explained the concept as best one could to them. Roleen (Monday 22 July 2002, 22:08) was one of the learners who indicated that she still did not understand how the game worked:

I do have another problem – I do not watch TV, which means that I have no idea what survivor is. What is it all about?

Catherine (Tuesday 23 July, 2002, 6:41) responded early the following morning with a simple instruction:

Watch the game tonight @ 19:00 on TV3.

There were obviously mixed feelings among the learners about the *Survivor*® metaphor, and their responses to the survey question that dealt with this question manifested a variety of opinions. Gabrielle (Response to Question 4, Test 2) identified the metaphor of the *Survivor*® game as one of the strengths of the module:

Although [an] adult learner in our group, I experienced one of the strengths of the module [as being] the game and competition element made possible by Internet-based learning. It inspired people to achieve technical difficulties as challenges and [they] probably succeeded above their own expectations.

One learner simply stated

VERY GOOD GAME

while another learner commented anonymously in the survey

Metaphor or not, I have never learned so much in so little time and

been so severely challenged in my life before. The game was actually the sweetener to six weeks of real time torture (meant in the best possible way). This is, however the most relevant course and has left me with a new vision and a wish for time to explore the possibilities and nitty-gritty of online learning more. [...] I came into it with no previous knowledge or experience, and walk away, limping, but informed.

Some learners recognised the potential inherent in using games in an educational setting. Beatrice (Response to Question 1, Test 3) specifically applauded the incorporation of games into the elearning environment as a device that could mitigate the sense of isolation and loss of social context that elearning formats can sometimes engender. She wrote:

Include relaxing exercises like games, immunity, puzzles, etc.

Not everyone however was appreciative of the fact that this module was presented in a game format. As one learner explained:

I am not fond of playing games. It makes me feel insecure and not in control and I do not like the feeling. I felt that it was called a game so that we would not become so uptight and stressed. Perhaps it was

also meant to cover the workload under the metaphor of it being a game.

To me it was everything but a game – it was a lot of hard work and asked for many a lonely night in front of my computer.

Other negative responses included the following:

Yes, I mentioned at the beginning that I dislike it, and I think I still feel that way. I watch very little television, and I don't think that I am a competition person. I may actually have learnt more if it wasn't for the game. [Anonymous survey response]

But it [the Survivor© metaphor] was ... a separate dynamic from the rest of the process. At times it was distracting. [Anonymous survey response]

Another learner also initially disliked the use of the game metaphor, but noted that it became irrelevant as he/she became more involved in the learning activities.

I personally didn't like this metaphor. It has to do probably with the T.V. show that I don't like. At the beginning it made me nervous, but

then I was doing the task and that metaphor was irrelevant.

In closing, one of the learners made the following statement in a focus group discussion about the metaphor format :

Painful learning. It was no game. You know that, hey... it was no game.

In the following section, I shall examine the dynamics in the group on the basis of the various elements of the Survivor© reality game that were introduced into the module.

Group composition

Because groups are an inevitable component of society and most work situations, they also feature in higher education teaching and learning. Groups are often formed in the workplace in order to improve performance (Wageman 1997). University teaching may benefit learners by giving them some introduction to the experience of working in groups (Anderson & Moore 1998), a skill that they will be able to use for the rest of their lives.

Since the study was based on the premise that 'group assignments in a cooperative learning environment can improve student learning' (McDonald 1995), we divided the learners in the module into groups (or 'tribes',

to use the *Survivor*© metaphor) during the first face-to-face contact session we held for the module. It was during this first brief contact session with the group that the *CyberSurviver* game concept, by means of which the module was going to be presented, was introduced. Learners were told what to expect, and were given the opportunity to post questions about the way in which the module was to be offered.

Tinzmann et al (1990) state that shared knowledge and authority, and heterogeneous groups of students, are essential characteristics of collaborative classrooms. Whereas homogeneous groups place similar students together, heterogeneous groups emphasize diversity in groups. Thus, according to Tinzmann and others, a critical characteristic of a classroom in which learners are supposed to work cooperatively together is that learners are not segregated according to ability, achievement, interests, or any other characteristic.

Time and care were therefore expended during this introductory contact session to ensure that learners were *not* divided into their respective tribes on the basis of their homogeneous Internet literacy. I requested the students present to position themselves on an imaginary straight line in a way that self-identified their degree of Internet literacy. Thus one end of the line represented those who possessed little or no

Internet experience while the other end of the line represented a high level of familiarity.

Learners at each point on the line were then numbered from 1 to 4 and were afterwards grouped together by number. Thus all the ones were placed in one tribe, all the twos were in another, and so on. In theory, this ensured that each tribe consisted of an even mix of both skilled and inexperienced learners with varying degrees of Internet literacy.

What in fact happened though was that only a handful of learners identified themselves as 'knowledgeable' as far as Internet literacy was concerned. The majority of learners crowded together on the non-skilled end of the line. Even so, I was, in the end, able to assign at least one learner who was an experienced Internet user to each of the tribes, and he or she was able to take on the role of *Webmaster*.

Right from Week 1, the tribes were bombarded with technical challenges, both as individual learners, and as groups. It was clear from the beginning that it would be essential for each tribe to have skilled Internet users because the outcomes of many assignments were dependent on the possession of various computer-related skills such as the ability to create a tribal website.

A degree of diversity was achieved through the division of *CyberSurviver* learners into tribes in the way mentioned above. This tactic also tended to separate people who would usually form groups on the basis of shared characteristics and cultures. Learners with such similarities now found themselves in different groups.

Strong leadership was established in at least three of the four tribes. Those with technical expertise automatically became influential tribal members because of the direction that they could provide. In each these three tribes, leadership was established along these lines. Those who were less skilled provided (in most cases) enthusiastic and appreciative support in whatever way they could.

In the tribe that remained there were at least two strong personalities, even though neither of them possessed exceptional Internet skills. What aggravated matters for this tribe was that these two learners clashed quite early on in the game and thereafter seemed unable to resolve their differences.

Since one of their other tribal members withdrew from the course at the beginning of Week 2, and because the other three members could at best be described as 'lurkers' (i.e. learners who did not formally withdraw from the module, but who did not actively take part in tribal assignments), it became a matter of importance for these

two active and dominant tribal members to cooperate. Unfortunately, their inability to resolve their differences for the greater good led to the demise of this particular tribe.

One of these learners commented in the survey:

I hated the first tribe. The only other person that was more or less active – only when it suited him – refused to work at his own expense at night and during weekends with the result that he only worked during office hours from his office at the university while I tried to run a business during the day and only worked at night – like most of the other students.

Brenda also commented in her response to Question 3, Test 3, that

Leaders were hardly ever democratically chosen. They tended to be the person with the most technical skills. They were often self-appointed.

It was clear therefore that active participation and open channels of communication were of the utmost importance to these learners.

Active participation and availability

Hairman (1951) noted that while some group members devote a major part of their lives and thoughts to the group, and therefore become centrally involved, others remain on the fringes and only become peripherally involved. In the Surviver case study, this was particularly true in each of the initial four initial tribes. There was a clear divide between those who were fully committed to the learning process from the start, and those who could never quite decide whether to commit or not.

While Lisandra believed that the function of community identity is important, she also indicated in her response to Question 3, Test 3, that it is important in a learning community to have a

shared space with the aim of bringing people together in an socially enabling environment. This worked well [in CyberSurviver], although not everybody made use of this shared functionality to share and learn from each other.

The active participation of all members was in fact urgently required because all the tribal assignments were both demanding and time-consuming. This meant that when only two members of a tribe were active, those two carried a much greater responsibility and workload than the

members of tribes in which everyone participated equally.

Geronimo (*Yahoo Groups*, Wednesday 24 July 2002, 12:11) expressed his concern about the lack of response from many of his tribal members. After many failed attempts to make meaningful contact with them, he asked:

I basically want to know if it will be OK if we do not do the assignments with the rest of the group?

Once initial misinterpretations of the nature of the game, and accompanying expectations, had been clarified, the tribes slowly started to make contact with their members in order to collaborate. At first, specific members made tremendous efforts to make contact with the other learners in their tribes. This turned out to be a more than daunting task because not everyone logged in regularly and sometimes days would pass before contact could be made with some learners.

Personal preferences

People in everyday life make decisions about what groups they would like to join. If they support a cause that is advocated by a particular group, they might seek to join that group. In such circumstances, membership might be both profitable and logical for

them because they perceive the group to be compatible with their ideals and purposes.

I'll join you!!

Geronimo yelled (Wednesday, 24 July 2002, 12:28) after Brenda, in frustration, had suggested to Lisandra that they form their own group – with the proviso that they should obtain the active support of someone who was skilled in web design. This was still early on in the game when learners were upset about the unavailability of some of their tribal members.

Gabrielle also indicated her wish to join a particular group. Gabrielle was quite despondent when she was voted off, and asked to be allowed to work with the stronger Tribe 7 who had in fact invited her to join them earlier in the day – rather than the notorious Tribe 5. In a *Yahoo Messenger* conversation (Tuesday, 20 August 2002) she stated:

I would much rather work with the strong group – simply since I am not going to be strong enough to create something sensible out of Tribe 5. [Translated]

The fact that Tribe 7 approached her with an offer to join them was indicative of the beginnings of an online community in which members were looking after each other. I

agreed with her that it would probably be better for her own learning if she were to spend the remainder of the time working with the members of Tribe 7.

During the next week though, burglars entered her office and stole her computer. This left her unable to collaborate with the other tribe members. She then informed us of her intention rather to concentrate on the Individual Assignments and to miss the Tribal ones for the ensuing week.

In the meantime, a number of other strong members had also been voted off and had ended up in Tribe 5. As the majority of them did not want to be associated with this dysfunctional tribe, they began negotiations among themselves to form a new tribe which they called Tribe X. Since the deadline for the week's Tribal Assignment had been (unofficially) postponed, newly formed Tribe X found that they also now had an opportunity to create a clickable concept map.

Shuffling the tribes

While, by the end of Week 4, some of the original tribes had established a sense of trust and group security among themselves, some other tribes had never been fully functional. For a number of reasons, some tribes had only had two active members from Week 1. In others tribes, tribe numbers

had dwindled as learners were voted off at the end of each week. In contrast to this trend, Tribe 5 had grown in proportions. In fact the number of learners in Tribe 5 would have become unmanageable if all the members had participated actively. By the end of Week 4, there was a clear need to regroup the remaining learners in order to ensure a degree of effective collaboration.

In spite of the fact that the remaining numbers of active members in each *CyberSurviver* tribe made effective group collaboration difficult, I tried to remain as true as I could to the reality show when designing the module. In the television version of *Survivor*® tribal members were often caught off guard by a sudden and unexpected regrouping of all group members about half way through the game. I therefore rearranged the members who were still in the running for the Grand Prize into two new tribes which were called Tribe 6 and Tribe 7. This surprise regrouping happened at the end of Week 4, immediately after the computer had finalised the voting results at midnight.

The literature is often contradictory in its findings on whether homogeneous or heterogeneous groups function best (Schriedewind & Davidson 2000; Anson & Dannels n.d.; Flowers & Ritz 1994). As part of the design experiment, I therefore divided the learners into more homogeneous groups for the remaining two weeks of the module.

I was interested to see how my regrouping would affect the dynamics within each tribe. For this reason, I deliberately grouped those learners with strong technological capabilities together in Tribe 6 while I constituted the other new tribe (Tribe 7) with learners who had strong educational skills and qualifications. Because there were only a few active members left in Tribe 5, I let them remain together as a group. The heterogeneous nature of the original tribes thus only endured until the end of Week 4 (the time when they were dismantled).

Shortly afterwards, some of the learners who had been voted off in previous rounds, and who were thus supposed to join Tribe 5, requested permission to establish a new tribe of their own. They preferred to do this (they said) rather than join Tribe 5 because, as they explained, they considered Tribe 5 to be totally dysfunctional. Tribe 5 had originally been created to accommodate expelled members. This new tribe (having been given permission) now seceded from Tribe 5 and called themselves Tribe X. Learners such as Gabrielle, who had earlier asked to join Tribe 7, now joined this new tribe instead.

Week 5 was therefore characterised by the side effects produced by radical changes as learners moved into new tribes. New members obviously needed time to settle into their new tribes, even though they were still required to produce scheduled tribal and

individual outputs by the end of the week. This was a particularly stressful requirement because tribe members had to go through all the usual phases of group formation (forming, storming, norming, and performing) all over again (Tuckman & Jenson 1977). In the anonymous survey one learner commented:

It was necessary to reshuffle, but challenging as the work also got more difficult and challenging and some time was needed to settle into new tribe.

[Anonymous survey response]

As I mentioned above, some of the original tribes had been functioning efficiently as those members who remained each contributing positively to the outcomes of the assignments. Other tribes, though, were ineffectual and ridden with conflict. It was therefore interesting to observe how various individuals interpreted the changes occasioned by the reallocation of existing members to new tribes. To some it was obviously a relief to be working with new tribal partners, while others felt shaken and disorientated by the changes that had been made. It was indeed surprising to find that only one learner indicated in the survey that his/her learning had been negatively influenced by the shuffling of the tribes. He/she stated that

... the collaboration wasn't on the same level as in the initial tribe.

[Anonymous survey response]

On Tuesday, 2 August 2002, Roleen (YM *Instant Message*) and I had a long discussion about the workings of the new tribe. Roleen felt that they had not been able to settle down and attain coherence as a new tribe.

Things have not yet been sorted out at all! [Translated]

She actually mentioned that she looked forward to the voting session on Thursday because she felt that things might go more smoothly with fewer members in the tribe, or with her no longer in it. She specifically commented on the fact that it is not easy for a leader to emerge because

everyone knows something.

In a *Yahoo Messenger* conversation, Dan (Monday, 19 August 2002) also confessed:

Actually it might be easier at this stage to be in Tribe 5!

When he was asked why he felt this way, he replied:

I could do it by myself ... Not that negotiation is a problem, it's just not that easy online!

In a *Yahoo Messenger* conversation with Catherine (Thursday, 22 August 2002), she indicated that one of the members of the new tribe had given up.

He voluntarily decided to joint Tribe 5.

It seemed as though Tribe 5 was becoming increasingly attractive as levels of conflict and the need for interpersonal negotiations rose steeply in the other tribes. Some learners simply preferred not do collaborative work. He/she showed this in his/her response to the anonymous survey:

I believe that much more could have been achieved if we had done individual assignments.

Some of the learners were more direct and expressed their negative experience of the shuffling exercise quite explicitly:

Not very happy. 5 of the top people were in a group and the other group were not very good and I and another person had to do all the work.

[Anonymous survey response]

Disorientating.

[Anonymous survey response]

I felt more confused as it became NOBODY's task to build a new website and have it up and running.

[Anonymous survey response]

Sadly, the collaboration wasn't on the same level as in the initial tribe.

[Anonymous survey response]

Others noted that their learning had been positively influenced as the fresh approaches contributed by the new members encouraged and motivated them. One of the learners expressed his/her delight unequivocally:

I could at last experience the joy of working in a functional tribe.

[Anonymous survey response]

Another learner commented that he/she was relieved to be in a functional tribe at last since his/her initial tribe had been riddled with conflict and had been unable to make any contribution to the learning process.

At last there was some participation. [...] When the new tribes were formed I was in seventh heaven. It was wonderful to be able to work with real students and not just ghost lurking in the back booing but doing nothing else. I could at last experience the joy of working in a functional tribe.

[Anonymous survey response]

Other positive anonymous survey responses are listed below:

My learning was encouraged by the new perspective added by the members of the group ... It also was an enormous morale boost to be invited to join Tribe X at that stage.

[Anonymous survey response]

They say a change is as good as a holiday! So I enjoyed the change – [and it] didn't negatively influence my learning – in fact it opened up new perspectives on the assignments!

[Anonymous survey response]

Some learners were grateful of the lighter workload that the regrouping of tribal members occasioned while others found it disturbing to find themselves in a tribe where all the members had more or less the same abilities.

Did not influence my learning at all.

Made my workload lighter!!

[Anonymous survey response]

I did not like it – Of the 5 learners 3 had the same abilities!

[Anonymous survey response]

Felder and Brent (1994) state:

The drawbacks of a group with only weak students are obvious, but having only strong students in a group is equally undesirable... The team members tend to divide up the homework and communicate only cursorily with one another, omitting the dynamic interactions that lead to most of the proven benefits of cooperative learning. In mixed ability groups, on the other hand, the weaker students gain from seeing how better students study and approach problems, and the strong students gain a deeper understanding of the subject by teaching it to others

While some learners were cautious, others were detached in their judgements:

It was fine for us since the more competent [learners] ended up in two tribes ... But it may not have been for the other tribes

[Anonymous survey response]

I didn't mind that I now had a different group to work with. I knew the people so it made no difference.

[Anonymous survey response]

It didn't influence [me] much because I was already in a big tribe that had not acquired much

direction and the shuffling did not affect the tribe except [by] adding more members.

[Anonymous survey response]

There were quite a number of comments related to the disorienting nature of the changes. As one learner put it:

I felt more confused...

[Anonymous survey response]

In response to Question 3, Section 3, of the elearning test, Roleen had the following to say:

Disorientation is a problem which is frequently observed in studies of hypermedia users and a problem which significantly limits instructional outcomes. In our class this was a problem, especially when we started to shift in the egroups. One would feel orientated and know what to do and what skills all members have, and the next day be completely disorientated because you are in a new group.

It is significant to note that Roleen was a member of Tribe 1 (UNO) – the tribe that had had the largest number of learners actively involved throughout the first four weeks of the module.

Tinzmann et al (1990) argue that segregation seriously weakens collaboration and impoverishes the classroom by depriving all students of opportunities to learn from and with each other. As it happened, many of the members who remained in Tribes 1 to 4 were all moderately competent Internet users who had fulfilled the various roles of a webmaster in their earlier tribes to a lesser or greater extent. Once they were joined together with other learners with similar strengths in Tribes 6 and 7, they suddenly had to contribute individual skills on another level altogether. But this time round they were required to make individual contributions that were on a higher cognitive level than the technical contributions that they had made earlier in the game.

After the shuffle, all members in a tribe could, for instance, code in HTML, ftp with equal facility, or create a clickable map. They also had to be able to negotiate mental models and argue their positions with scientific skill. If they did not demonstrate such skill, the others simply disregarded their contributions.

Roleen made the following response to Question 3, Test 3:

I do think that this would have worked better if we stayed in fixed groups. When we were moved to new groups, people with the same abilities were grouped together and

those who were not very comfortable with the net were grouped together. I do not think that they learned much, eventually.

Anson and Dannels (n.d.) argues that groups that work together over a long period have the advantage of consistency of response, and the trust that develops over time. They get used to each other and find synergetic harmony in their mutual interaction. They note however that if groups change before each assignment, they benefit from the advantages that accrue from having the variety of perspectives that each student's learning will bring to any situation. This elearning module demonstrated both these points of view.

Some of the learners were deeply upset by the changes in the groups' formations. They argued that they had had a particular role to play in the old group, or that they had just managed to achieve a degree of understanding with their erstwhile team members.

The survey response

In Week 5, a survey was used to question learners about their preferences with regard to tribal composition. Surprisingly, 10 out of the 15 active learners indicated that they preferred homogeneous groups in which all the other learners had the same abilities as

they did. Only one learner indicated that he/she preferred a group in which all the other members were less able than him/herself (the survey was anonymous). Four learners favoured a heterogeneous group in which other learners were more able than themselves.

Although the survey alone does not provide enough information in this regard, it is anticipated that further studies will show that learners will indicate a preference for homogeneous groups in which members are willing to contribute to tribal assignments and make themselves available for contact and communication, rather than for groups distinguished by high levels of skill alone. Some of the learners were simply unable to function properly in their tribes because of interpersonal difficulties. The following anonymous response to the survey shows the frustration of one of the learners who felt strongly about the need for tribal members to communicate synchronously:

He was also not available for ANY synchronous communication – not even the forbidden telephone call.

The survey further revealed that most learners considered the lack of communication and active participation among tribe members as one of the most negative features of the module. One learner specifically identified the

"dead" tribe members

as a negative element of the game.

Even though the majority of the learners indicated a preference for homogeneous groups, it was clear from the start of the module that differences in levels of skills allowed weaker learners to survive during the first couple of steep learning curves.

The fact that most of the learners who ended up in Tribe 5 had little or no prior Internet experience also made them a homogeneous group. They also failed to demonstrate the same commitment to taking responsibility for their own learning that the others did. These learners did not do well and many did not complete the module.

Madeline (Response to Question 1, Test 2) emphasised her preference for heterogeneous groups when she identified level of competence as one of the indicators that a facilitator should keep in mind when he/she aims to address the inequalities of learners in a class.

Learners at a lower level should be considered when groupings are made so that they can get assistance from their peers.

Larissa's agreement with this point of view was made clear in her response to Question 1, Test 2, when she stated that

collaborative learning through structured exercises will help: skilled partners can help the unskilled and learn a lot themselves in the process.

Catherine (Response to Question 1, Test 2) suggested that inequalities with regard to knowledge of and experience in computers and the Internet could be overcome by the appointment of a mentor:

an advisor to help the person with less experience.

In this particular group of learners, diversity was defined in terms of a number of factors that included language, age, race, culture, skills, experience, background, and gender. All these elements played a role in the dynamics in the various groups.

Isolation

HELLO ...? HELLO...? Hello...? Is there anybody out there ...?

These words from Pink Floyd's *Comfortably Numb* aptly describe many online learners' experience. In fact, when Lisandra (*Yahoo Groups*, Wednesday, 31 July 2002, 07:38)

got stuck with a particular individual assignment she used almost exactly the same words to express her feelings:

*HELP! ...ANYBODY OUT THERE? ...
HELLOOO!?*

Because *CyberSurviver* was presented entirely online and because learners had been specifically requested to refrain from personal and telephonic contact, I was interested to find out what effect this limitation would have on the learners in this module.

Quite a number of studies report on the importance of dealing with student's isolation in a distance education course (Besser & Donahue 1996; Twigg 1997; Galusha n.d.). Wegerif (1998) states that

individual success or failure in an E-learning course [is] dependent upon the extent to which students were able to cross a threshold from feeling like outsiders to feeling like insiders.

Lindner et al (2002) also note that learners in online courses and programmes often feel isolated and apprehensive, and InnoVisions Canada (2004) lists isolation as one of the biggest disadvantages of elearning. Contrary to these perceptions, Larry Danielson (InnoVisions Canada, 2004) experienced just the opposite. For him the

online environment was more intimate than the classroom because learners could be dealt with on a one-to-one basis.

According to Stelzer and Vogelzangs (n.d.), isolation has two dimensions:

- a physiological one (distance in place, being physically alone)
- a psychological one (distance in thoughts, feeling emotionally isolated)

They describe the challenge faced by online learning communities as one where the psychological dimension is a result of the physiological dimension.

At the introductory session of *CyberSurviver* (Thursday, 18 July 2002), the *rules* of the game were spelt out. Among other rules, learners were encouraged to make full use of the Internet as their *only* medium of communication and to refrain from using traditional means such as the telephone and other face-to-face contact opportunities. I reinforced this injunction in a *Yahoo Groups* message on Tuesday, 23 July 2002 (00:29):

This part of the module is all about virtual community formation. That implies that you should transfer your normal mode of communication (telephone / face-to-face contact) to the virtual environment (the www).

You are therefore encouraged to e-mail one another, to schedule tribal chat sessions in which you brainstorm your ideas for tribal assignments, to leave messages for one another on the bulletin board and to send each other instant messages online (the Internet equivalent of an SMS).

The idea is to have your conversations in cyberspace and to refrain from taking the easy way out – by discussing them in class on a Thursday evening.

This was certainly a new way of doing this for the learners. Brenda (Yahoo Groups, Tuesday, 23 July 2002, 06:43) commented on the isolation that she experienced in this type of learning environment:

Working on the Internet and having it as the only means of communication is a very lonely experience.

Not being allowed to use other ways of communication apart from what the Internet has to offer was a difficult injunction to honour because learners would still be seeing one another on Thursdays at a contact class. Initially the elearning module was divided into two units, an elearning unit (in which the *CyberSurviver*-game was played), and a portfolio unit which learners

were expected to use to build up an electronic portfolio of their work. The portfolio was to be done in PHP and learners were supposed to participate in weekly hands-on (face-to-face) workshops for this part of the module. Unfortunately, the technologies needed for this section of the work failed to work and the unit was scrapped after it had become clear that the problems would not be resolved. It was also clear by that time that the *Surviver* module was providing sufficient exposure to the elearning environment, and that it was taking its toll in terms of time and energy.

Throughout the module, I was aware of the fact that the learners had not stuck to our agreement that they would use *only* the online communication tools for their discussions about the module. It was only when I read the focus group transcriptions that I realised the extent to which this had been going on. Because the learners had been desperate for synchronous communication, they had used quite a number of alternative methods of communication apart from those that were available online. It became clear to me that they telephoned each other regularly, that they discussed points relating to the module at length at the contact sessions that they were engaged in for the other unit, that they visited each other's homes, and that they were even organising internal workshops and work sessions on Saturdays in

order to support one another in the technical activities.

This type of communication happened so often that one learner reported the following at the focus group discussion:

I think my wife thought [that] Jasmine and I were having an affair!
[Translated]

It was also clear from their comments that the need for synchronous communication was overwhelming and that learners who rigidly conformed to the original agreement about the channels of communication were relegated to the status of outcasts. Warren, for example, made it a point of honour not to break the rules. His inflexibility in this regard caused major conflict for him in both his first and his second tribe. On Wednesday, 21 August 2002, 07:29, Warren stated his case in an e-mail message addressed to me personally:

It came to my attention that the other members of my tribe hold meetings, in person, with the aim to complete Tribal Assignment 4 (amongst other). I was also approached earlier to join them this weekend. However I declined as it is directly opposed to the purpose of the exercise. These get-together sessions did however happen.

Catherine (Thursday, 22 August 2002) discussed the same matter with me in a *Yahoo Messenger* conversation. She commented that the new tribe worked well together

apart from one member who already threw in his towel. [...] It's a pity, but he only worked during office hours, and then the rest of us is busy elsewhere.

This complaint was similar to the one another learner expressed in the survey:

The only other person that was more or less active – only when it suited him – refused to work at his own cost at night and during weekends with the result that he only worked during office hours from his office at the university while I tried to run a business during the day and only worked at night – like most of the other students.

It was clear that these learners, being adults with a will of their own, decided that it was more important for them to meet in person and to be able to complete the assignments satisfactorily than to comply with the *rules* of the game. I personally had no a problem with them seeking closer contact. In fact, I appreciated the commitment that they brought to their assignments. I was also convinced by that

time that they were fully experiencing the realities of being online learners, which was after all one of the main aims of this module. Because I could see that the learners desperately needed this kind of officially illicit contact and the technical support that it provided, I only reprimanded them jokingly (when at all) and never banned other kinds of communication with any degree of vehemence.

The fact that they were – for the bulk of the module – not physically in contact with the other learners constituted quite an adjustment for some of the more sociable personalities in the group. The following extract is from the Focus Group (8 May 2003):

I think the main thing is you're alone.

Ja, isolation. The isolation is tremendous.

Especially late at night.

You want to work together with someone else in every task. Just to do it with someone else. To talk to them.

In order to alleviate these feelings of isolation, I introduced *Yahoo Messenger* (YM) in Week 2. In the original design, this assignment was only due to be included at

a later stage. But when I saw how desperate the learners were for contact with each other, I changed my initial plan and introduced YM earlier. YM allows learners to send instant and offline messages to each other. It also indicates to you which of your friends are online at any given time. This feature proved to be extremely helpful because, since learners were logged onto the Internet at the same time, they were now able to see who else was online. They then began to cross tribal boundaries and share their feelings with those who were available at the same time. The support network thus established by learners who accessed the Internet at similar times became an effective means of ameliorating the isolation that learners experienced, especially late at night.

The implementation of *Yahoo Messenger* meant that I became more easily available to learners at the times when they needed me. Often, in the middle of the night, I would receive an instant message from a learner asking me to take a quick look at their work-in-progress so that I could tell them whether they were on the right track or not. More often, though, these *Yahoo Messenger* discussions were of a personal nature, with learners sharing their own experiences in the tribes or even in their personal lives.

The module was also designed to give learners regular opportunities to work together and to interact with each other.

Tribal assignments encouraged learners to make contact with and support each other. The design of the module was intended to bring learners together by assigning tribal assignments to regular periods.

Isolation was counteracted not only by the efforts of the facilitator and the design of the learning experience. Gabrielle (Response to Question 3, Test 3) stated that she experienced the

clear intention to prevent students from feeling isolated. In practice it could not be avoided. Certain group members purposefully avoided contact with other members – sometimes because of the money constraints involved and sometimes working someone out meant not talking to them.

Kochery (1997) suggests that cooperative learning models such as cohort groups can increase learner-to-learner and learner-to-facilitator interactions and that this type of interaction may combat feelings of isolation. In this study, I found that learners were less comfortable in their assigned tribal contacts than they were in the contacts they could make with learners who were not their tribes but who were online at the same time that they were. Geronimo, for example, responded in a *Yahoo Groups* e-mail to a message posted by Dan a couple of

minutes earlier (Sunday, 28 July 2002, 01:27):

Still awake? Glad I'm not the only fool still working at this time on a Sunday morning!!

The learners all had their own ideas about how to combat the feelings of isolation that arise in the elearning environment. I had included many reflective exercises as part of the design of the module. These exercises were designed to give learners an experience of what it was like to be an online learner, and their reflections on such an experience would affect the way in which they would teach online at some point in the future. Some responded with valuable insights about why learners felt isolated. Geronimo (Response to Question 1, Test 3) emphasised the importance of overcoming differential access to computers and the Internet

so that students don't feel left out.

Other learners suggested ways in which to avoid these feelings. Lisandra (Response to Question 1, Test 3) mentioned that it is important to create a supportive community of practice by

creating a climate that is conducive to forming a strong bond between the community members. [...] Communities of learning provide

emotional support in an otherwise very cold and isolated environment.

In his comments on the synchronous *InterWise* session, Warren (*WebCT* response, Wednesday, 14 August 2002, 11:00) suggested that an initial face-to-face contact session might be effective:

What about a live (face to face, in person) session before the testing phase?

Another learner also indicated the need for this type of contact in an anonymous focus group discussion:

People would like to have face-to-face stuff before they just go online.

In a web-based distance education situation in which learners do not see each other or their facilitators, the absence of physical cues can lead to a degree of frustration among learners (Hara & Kling 1999). Several learners referred to the fact that there are no body language cues in an online environment, and that it was difficult for them to communicate without these all-important visual signs.

Gabrielle (Response to Question 2, Test 3) mentioned that the elearning community had enriched her social skills because it had forced her to read "between the lines" rather than to rely on listening to the tone of a

spoken voice. She also mentioned that it had taught her to rely on verbal rather than body language and to be sensitive to innuendo in the choice of words and phrases. She saw this as a dimension of communication that it is not possible to explore in face-to-face situations.

In a *WebCT* posting dated Tuesday 13 August 2002, 00:02, Lisandra reflected on the *InterWise* synchronous session and the fact that one is *blind* in the online environment:

I must admit I wondered at some stage if everybody who was signed on really listened to the presentations, or where they sending text messages – maybe criticising everything that was said or the manner in which it was said. In a face-to-face situation you have the benefit of reading people's body language to determine their interest in the specific matter.

Catherine (*WebCT* posting, 14 August 2002, 02:40) also mentioned that she missed eye contact with others and identified this as one of the isolating factors in the online environment, especially during a synchronous online session:

The facilitator is unaware of social responses, if learners are still paying attention, if learning materials are

being understood and absorbed and if people are sending messages to one another "under the table".

In the *Survivor*© reality show on television, the camera often broke away to show private discussions taking place between certain members of a tribe. These talks usually reflected a conspiracy to vote a particular member off during the next round.

In this study, private discussions between the learners were not accessible – whether they were made telephonically, by means of instant messages, or in private e-mails to one another, and thus they were not captured for data-analysis purposes. That such behind-the-scenes discussions did indeed take place is undeniable, as Catherine's reference to the messages that were sent *under the table* confirms. Such messages were not designed to further conspiracies or create alliances among learners, but were rather more typical of fairly standard classroom behaviour in which learners gossip and discuss their fellow learners' teaching styles.

Geronimo characteristically admitted to enjoying this type of communication in his *WebCT* posting of Thursday, 15 August 2002, 11:04:

I loved being able to send messages "under the table".

Geronimo also commented on his experience of feeling *blind* in cyberspace. He worried (*Yahoo Groups*, Tuesday 23 July 2002, 16:34) about whether his fellow Virtual Eve tribe members had received his messages and explicitly requested them to let him know if they had. This feeling of anxiety once again surfaced in his message on Wednesday, 24 July 2002, 10:39:

I really hope you are receiving this message!! ... Please let me hear from you soon.

It seems that it is not only the absence of body language that makes learners feel isolated; it is also the absence of interaction with their fellow learners. In *CyberSurviver*, the learners needed feedback to help them cope with their feelings of isolation, and they specifically asked for it if it was not forthcoming. Brenda (*Yahoo Groups*, Tuesday, 23 July 2002) commented in this regard:

Well, we are on the island and the only thing that we can do is to try to survive [...] One's sense of isolation is made worse when you do post to a discussion and receive no response.

She also responded (*Yahoo Groups*, Tuesday 23 July 2002, 06:43) as follows to a message from myself that encouraged the learners and praised them for their progress:

Thanks for this feedback. It makes me feel a bit less lonely on the island.

Working on the Internet and having it as the only means of communication is a very lonely experience.

Being connected by means of e-mail was extremely important to those learners who were actively taking part in the module. So much so that Mabel (WebCT posting, Saturday, 17 August 2002, 11:46) warned the rest of the group when her service provider announced that it was not going to be available during one particular weekend. She promptly provided them with an alternative e-mail address because she did not want to miss anything that happened over the weekend.

But it was not only isolation that learners experienced in the online environment. They also experienced the power of the Web as learning environment – as Jasmine's response to Question 4, Test 2, makes clear:

Resources and ideas are shared (in tribes and out of tribes as well!), and continuous synergy is generated through the learning process as each individual contributes to the course discussions and comments on the work of others. The synergy that exists in the student-centred

Virtual Classroom is one of the most unique and vital traits that the online learning format possess. Definitely true – Survivers was great!

Lindner et al (2002) state that if online courses are to be successful, facilitators must permit learner-to-learner interaction to take place with a minimum of facilitator intervention. Because I felt that this was an important point, I intentionally stepped back at times and waited before responding to a particular question or a comment. At some points, I wanted to create a space in which the dynamics between learners could play out. At other times, I wanted to give them opportunities to support one another. I realised also that some learners enjoyed showing off their knowledge and became more confident when they were allowed to share what information they had with others.

Lindner *et al.* (2002) also argue that isolation can be reduced if one gives special attention to learners with low levels of self-directedness, and if one encourages learners to become more self-directed. In the original version of *CyberSurviver*, this did not happen, for reasons discussed elsewhere in this thesis. We knew very little about those learners' feelings of isolation because they did not respond to the test questions that would have given us this information, and their limited number of e-mails did not overtly indicate such feelings.

Larissa, who admitted that she had not officially enrolled for the module because she was only interested in learning more about elearning in preparation for the following year, summarised her view on the *Survivor*® metaphor and her feelings of isolation as follows (Response to Question 1, Test 3):

I could really identify with the metaphor, as I felt like a castaway on a remote island most of the time. I was, however, determined to make the most of the learning opportunity. [...] On the positive side, there came bottles with messages floating by every now and again, just enough to keep going.

On the negative side, I felt quite abandoned, as everybody else was competing for better and cleverer stuff in their shelters and for the prize, and I were still learning to swim, which I was my own doing for getting on unprepared and halfway through.

But even that had a positive side to it: I have experienced first-hand the drowning bit, being out in the cold and not really part of the learning community.

Apart from experiencing such feelings of isolation and helplessness (that were mostly self-imposed because she had participated

actively right from the start), Larissa managed to obtain something worthwhile from the experience, and one assumes that she will be able to build on that knowledge when she starts teaching online some day. She left the module with some understanding of the steps that have to be taken if one wants to establish a sense among online learners of a belonging to a learning community.

For learners in an online environment, social interaction with peers and a facilitator can often be an exercise in frustration (McInerney & Roberts 2004). Isolation or feelings of loneliness are thus not the only consequence of geographical isolation (Palloff & Pratt 1999). The section above shows that even though we are more connected than ever before, our connectedness does not eliminate our feelings of being isolated in the elearning environment.

Tribal assignments

Literature (Twigg 1997; Galusha n.d.; Wegerif 1998; Lindner *et al.* 2002) agrees that one of the most successful ways to eliminate isolation in the elearning environment is to ensure that the learners work together on a group project that has an explicit artefact or product as its outcome. Moore (2001) also states that it is important to engage learners in regular assignments so as to monitor

progress and be able to intervene when needed.

CyberSurviver was therefore designed to include weekly assignments. These weekly assignments typically included a Tribal Assignment that required the tribe members actively to collaborate and cooperate with one another over the Internet. John Myers (1991) points out that the dictionary definitions of *collaboration*, derived from its Latin root, focus on the process of working together and that the root word for *cooperation* stresses the product of such work. In *CyberSurviver*, both were equally important.

A response from an anonymous learner in the focus group discussions indicated that a “staggered” approach (meaning that only the assignments for a particular week were given out), was appreciated:

I liked the fact that it was on a weekly basis and that we didn't receive it all at once in the beginning.

Dan (Response to Question 1, Test 2) mentioned that self-discipline is one of the main characteristics that learners should possess in an online environment. He felt that the weekly deadlines for the individual assignments provided a suitable stimulus in this regard

...by requiring that work be submitted at regular intervals, e.g. every week.

In the Survey that was completed during the last week of the module, learners were asked which of the following options they preferred:

- To work on their own
- To work in a group
- To work both individually and as part of a team

Ten learners indicated that they preferred the latter, with 5 others indicating their preference for working alone. None of the learners preferred to work only in a group context.

In the same Survey, 5 out of the 15 respondents indicated that they found the tribal assignment in which they had to create their own virtual classroom and virtual learning event the most useful. Creating a concept map of elearning was the second most popular tribal assignment (with 4 out of 15 learners indicating it as their favourite). The other assignments (creating a website that presents free, shareware and/or demo applications, investigating the educational value of tools such as *Yahoo Messenger* and *NetMeeting*, creating learning activities, and setting up games using free services online) were all mentioned by various individuals as their favourites.

It was in these tribal assignments that groups either found or began to lose their sense of cohesion and group identity. Those tribes who survived without competing internally and without serious conflicts among their members, managed to create a strong sense of group cohesion and they worked well together towards specified outcomes. The levels of peer-support grew as inexperienced learners became more relaxed and began to feel secure enough to acknowledge their own limitations.

More often than not, those with superior technical skills accepted leadership positions as they began to perform most of the functions of a Webmaster. They not only provided their own academic inputs; they also had to tie up any loose ends after others had completed their contributions – with sometimes only minutes to spare before deadlines fell due. Deadlines were usually indicated by a date and a day and time specification, such as: Thursday, 29 August 2002 at 17:00.

What also happened (scarcely a desirable situation) is that these Webmasters often did all the work needed to create a final product for presentation for assessment. This happened not only because the tribes were desperately pressed for time or because there was no desire on the part of tribal members to participate, but more often simply because these Webmasters had unchallenged power. An anonymous

response to a question about conflict in the Survey revealed the following:

I was quite put off after I had spent considerable time preparing information to be added to the concept map, and was told that an existing map would be used, as there was no time to do otherwise. I did not react to this.

Another response also indicated that work that had been prepared for a specific tribal assignment had not been used:

I did not actively take part in any tribal assignment, except by writing stuff for the map (which could not be used as we consolidated two maps).

Another learner reported on his/her participation in the tribal assignments by stating:

I was too slow for the clever guys – they did all the work.

[Anonymous survey response]

Gabrielle also commented on how tribal assignments were approached in her response to Question 3, Test 3:

Sufficient collaborative assignments were given to ensure that collaborative learning took place.

However, in practice, it often happened that the fastest and fittest in the group did most of the work before anyone else could contribute. It was more often than not the case that the fast ones did not even consult the slower ones, and took it for granted that their answers would be presented as the answer.

Another learner (Response to Anonymous Survey) contended that

the asynchronicity of the communication with the rest of my group and the sometimes deliberate unavailability of contact with certain members, made me do more on my own – even if my contributions weren't submitted by them.

Samovar, Henman and King (1996) identified small group communication as a transactional process, a continuous and simultaneous interaction of persons, and not simply as a one-way sequence of events involving an active source and a passive receiver. They state that group members are mutually interdependent in that the success of the entire group is at least partly dependent upon the level of competence in communication of each participant. One learner admitted to experiencing mild levels of frustration as a result of this

interdependence. He/she explained the source in an anonymous survey response:

Tribal members who did not "play the game" caused some irritation as they affected the progress of the group negatively, but it was not too bad. Other members who just went ahead and did things without involving the other members or giving them a chance to participate were also a small stone in my shoe.

One of the Webmasters admitted to taking control in an anonymous response to a question about conflict in the Survey and provided a possible explanation:

People did not submit their tribal assignments on time. Did not influence my learning, though, as I just left their stuff out of the tribal website.

Another response stated:

Not everyone participated and at number 99 [at the last minute] you had to do all the work.

One of the learners indicated in a focus group conversation that he/she felt a strong sense of responsibility towards the tribe.

I don't like competing either, but I used more time on the group thing

because I didn't want to let the group down. So eventually I didn't have time to do the individual thing because I was now so trying to get the group, you know, trying to do my part for the group thing.

Roleen (Response on Question 1, Test 3) commented that

most of the students complained that they "had to do all the work".

Other learners saw things in a much more positive light. One learner explained how he/she felt that all the tribe members

contributed to the content together and in the end looked at it and said this is OUR product.

There were groups though in which there were clashes of personalities among tribal members, groups in which the skills that were brought to the module were too similar, and groups in which tribal members never managed to synchronise their online availability. These tribes were riddled with conflict and soon became dysfunctional. It happened more than once that the only two people who were active in the tribe would upload their version of the tribal assignment, and they would do it without consulting others about whether or not they had any ideas or whether they were working on a component. This turned out to be a

real problem because the success of the course (measured by how rich the learning experience had been for individual learners) was heavily predicated on the quality of collaboration between members.

The tribal assignments did however motivate learners to work together and to share information, often even beyond tribal boundaries. Lisandra (Response to Question 2, Test 3) mentioned that the elearning community extended her learning by creating a structure that allowed her to learn from the informal interactions that took place. She continued by saying that the elearning community made it possible for learners to

enhance and share practical know-how that would otherwise remain untapped. The community became a source of knowledge and relationships that can be used to increase individual effectiveness.

She also mentioned that

People doing similar work learn from each other how to do their work better.

A lot of the communication and interaction between the learners was not of an academic nature. Brenda, for example, mentioned in her response to Question 4, Test 2 that

Dialogue [...] often revolved around technical problems and administration of group activities.

Lisandra (Response to Question 3, Test 3) agreed:

Very little knowledge was really shared between the members. Threaded discussions were more concerned with technical and administrative issues rather than [with] discussing issues of academic value.

I agree that much of the communication centred on administrative, technical and peer support, and that an insufficient amount of real discourse of the kind that the design of the module had envisaged did not take place. But once WebCT was introduced, I got the distinct impression that more of the discussions of an academic kind were taking place. Such discussion and comments may indeed have been stimulated by one of the assignments that specifically required learners to evaluate an online learning session and to reply to at least one posting from another learner. This was the first time in the module that learners shared their ideas and impressions about elearning, and where the replies to each other's postings were not based on their need for peer support only but rather on a request for academic assessment and support.

I am not convinced that the design of the module encouraged a sufficient amount of collaboration among learners – other than what was absolutely necessary to produce assignments and meet deadlines. The fact that learners collaborated mostly in order to allocate roles and tasks, is disturbing. After that kind of initial role-defining discussion, they dispersed and completed their work individually without ever really getting back together to work collaboratively on the final product. Normally the compilation of all individual contributions was performed by the Webmaster, who, because of his/her advanced technical skills, made (by default) final judgements about what would appear on the site (sites that were created for assessment purposes). This problem needs to be addressed in future programmes of this nature. Among other important design principles, enough time should be allocated for an asynchronous interaction and collaboration component.

Most learners who were involved in tribes where positive collaboration took place, experienced such collaboration as a constructive element of the module. A response to the anonymous survey on a question relating to the influence of the Survivor© metaphor stated the positive element of the game to be

the positive collaborative interaction with some of the tribe members.

The same person also stated that

the negative elements [of the Survivor© metaphor] was the frustration with tribe members not working or having excuses for work not done.

A strong emphasis was placed on the importance of each of the members' contributions. Brian (Response to Question 4, Test 2) commented on the responsibility of participation in the group assignments:

Each week I had trouble with a group member who did not do their part and because you want good marks, you just do their work. They did not do anything but received good marks. Everyone must do their part!

His statement emphasises that it is of fundamental importance to have some channel or mechanism that will compel learners to report their own degree of collaboration – as well as that of their group members. The comment above is especially interesting because Brian's tribe (UNO) was throughout the exercise regarded as one of the best-functioning groups, one in which all the members (apart from the one learner who was voted off at the end of Week 1) participated actively.

Soon after the first peer assessment activity, I revisited the design of these assessment sessions. Initially I did not require learners to indicate who in the tribe had been responsible for what. However, as learners began to complain about lack of participation on the part of some learners, or "free riding" as they called it, I introduced the following measure. Each assignment had to be accompanied by a statement from the tribe that indicated their various responsibilities. Geronimo (Response to Question 4, Test 2) noted:

Not all group members put in the same effort. In most groups 2 / 3 members did almost everything. It worked well to indicate "who-did-what".

At one stage he complained in a Yahoo Messenger conversation (8 August 2002):

Struggling to get things for our tribal assignment!!!! Only Jasmine has given me anything!

Dan also reflected negatively on the collaborative component of the learning experience in Question 4, Test 2. He believed that certain learners were more suited to web-based learning than others. He experienced the tribal assignments as a weakness, stating:

Perhaps it was because of the relative inexperience of most of the learners with the medium and the technology. In group assignments, many learners just disappeared or gave up. It must perhaps be borne in mind that this may not have been strictly a function of Internet learning, but perhaps because the learners were not suited to Internet learning for some reason.

In contrast to these views, some learners experienced a high level of positive collaboration between the tribal members. According to her response on Question 4, Test 2, Gabrielle experienced the high level of interactivity and the tribal assignments in the module as a distinct advantage:

It activated students to become very involved in each other's efforts. [...] It enabled students to communicate in open and closed systems, which contributed to the establishment of social and academic relationships which would otherwise, because of a lack of time, would not have taken place.

Catherine (Response to Question 4, Test 2) also commented that because of the tribal assignments

communication between students took place synchronously and

asynchronously and more feelings of group cohesion resulted.

Roleen commented on the *InterWise* session in which she had been the representative from Tribe 1 (UNO), the tribe that had to present the mini-lesson:

It was a worthwhile experience. Felt quite good about it. Roleen from UNO (We are number ONE!!!!)

Not only is it clear from this posting that Roleen enjoyed the session. The fact that she signed her name and made a specific reference to her tribe and their slogan, is also significant. This was one of the rare pieces of evidence that indicated tribal coherence and a sense of belonging.

I would like to give the reader some insight into the dynamics of at least one of the Tribal Assignments. The very first Tribal Assignment did not go according to plan. The majority of the learners neither realised that they should go to the web-based version of *Yahoo Groups* in order to access their assignments for the week, nor did they allocate enough time in their tribal planning to complete this activity. When the first activity on the electronic mailing list indicating an awareness of the assignments surfaced, around Monday, 22 July 2002, there was already too little time left for the tribes to work together effectively before the stated deadline. This time limitation added

more stress to a situation that was already volatile.

As the majority of the interaction between learners took place asynchronously, everything took longer than usual. Learners did not have each other's e-mail addresses because they did not realise that the addresses were listed in the *Yahoo Groups* Members List. As I, the facilitator, was still under the impression that the learners all had access to the web-based version of *Yahoo Groups*, I did not foresee that this would be an important issue to address right at the start. With hindsight, I think that it would have solved quite a number of problems during the first week if I had collected all the learners' e-mail addresses during the first contact session, and then posted them in an e-mail message to all the learners who were taking part the module. This would certainly have made a big difference, as much of the first week's chaos can be explained by the fact that learners had difficulty in making contact with one another.

On Monday, 22 July, 23:17, Dan requested one of his fellow tribe members:

I have no one else's email addresses. Please send them to me!

By Wednesday, 24 July 2002, 17:43, he had still not made contact with all his tribal members:

Any Tribe 2's please post me your e-mail addresses. I have Lisandra's and Helen's.

On Wednesday 24 July 2002, 12:11, Geronimo wrote:

It seems that we need to collate it onto a website? I have volunteered to do this, but I struggle to get hold of my group! I received no response from them!

Samovar, Henman and King (1996) comment that a

shared commitment is one of the reasons that groups develop norms or standards of behaviour. These explicit or implied expectations are often unique to a given group and serve to unite the group members or to cause rejection when one of the members violates a group rule.

It therefore becomes clear why those learners who did not log on regularly or contribute to the discussions online, were in some cases ostracised.

None of the tribes were ready to post their websites by the time the deadline (17:30 on

Thursday, 25 July 2002) passed. A number of learners requested an extension of the due date that evening, online as well as during the emergency face-to-face tribal council. Jasmine officially requested an extension on the deadlines on Wednesday 24 July 2002, 05:52:

Please, isn't it possible to postpone all these assignments to next week – to give all "dof" people like me a chance to find my feet?

Later in the day (12:15), Geronimo was one of many who supported this request:

I support the plea for extra time – we really need more time to sort our groups out. It is absolute chaos on our little piece of paradise!!

It was also clear that the learners needed a face-to-face session during which issues that had unsettled the learning process could be discussed. During the emergency face-to-face tribal council on Thursday evening (25 July), quite a number of perplexing issues were addressed. Among these were:

- the fact that the course was considered to be prohibitively expensive because of the long periods during which learners were required to remain online
- my expectations about learner responsibility
- the location of the planning document with the Assignments for each week

- the fact that asynchronous learning takes a lot of hard work and commitment from each individual in the tribe.

At this tribal council at the start of Week 2, the majority of the tribe members managed to exchange their urgently-needed e-mail addresses. However, during week 2, many of the learners still had still not managed to access the web version of *Yahoo Groups*, and were still not reading and replying to E-Groups messages on a regular basis. A meaning of "regular basis" was described in an e-mail (Tuesday, 23 July 2002, 11:55) to all the learners in the following way:

This means that you have to visit the site AT THE VERY LEAST once every two days.

Because of their lack of participation, some learners were left behind. Some of the active learners tried their best to bring these invisible tribe members aboard. Lisandra wrote on Wednesday, 24 July 2002, 08:59:

Todd, Madeline and BA: We haven't heard anything from you guys. Are you experiencing some problems? I will appreciate it if you can send us your e-mail addresses so that we can get going with our web page.

Because of the stringent deadlines, those who were active could not wait for the

others, but had to do what they could, even if it meant that they had to work harder than learners in those tribes where all the members were active. Eventually all the tribes successfully completed Assignment 1, even though the standard of work varied greatly from tribe to tribe.

By making Tribal Assignments a part of the design of this module, *CyberSurviver* managed to teach learners in groups the importance of maintaining cooperative interaction. It also taught them that the success of the entire tribe was at least partly dependent upon the communication competence and the academic contributions of every one of the learners.

Individual assignments

Daniel and Marquis (1979) challenged distance educators to find the right mix between independent study and interactive learning strategies and activities. They pointed out that these two forms of education have different economic, pedagogical and social characteristics and that each educational scenario would require a different mix to meet all learner and institutional needs in terms of curriculum and content.

The aim of the Master's Degree in Computer Integrated Education is to combine the computer literacy abilities of the learners with

a solid foundation in educational principles. *CyberSurviver* was designed to include individual assignments that would strengthen learner's technical capabilities. In this thesis, *technical capabilities* refer to those computer and Internet skills that teachers and trainers who intend to work in an online environment will find helpful. Individual assignments focused on these technical skills, such as designing and ftp-ing a basic website, making screen dumps, and downloading free demo applications or products from the Internet. As the module progressed, the nature of the assignments gradually changed to include activities more directly related to the online teaching and learning process.

Most of the active learners experienced a increase in their skills and knowledge as the weeks went by. In a focus group discussion, one of the learners commented:

The first week was a big shock, and then after that, as we went along, we got used to the type of things that we had to do. It got easier for me.

Most of the learners enjoyed the Individual Assignments. Geronimo (Response to Question 4, Test 2), for example, mentioned that he loved the fact that the assignments forced him to search the Internet:

I found more exciting stuff in these 4 weeks than in 4 years of random internet surfing!!

He also commented on the fact that all the resources on the Internet had to be interpreted and applied in the activities:

Constructivist learning galore!

One question in the survey, scheduled for Week 6, asked the learners to identify which of the individual assignments they found most useful. Many of the responses echoed the response of one learner when he/she wrote:

All of them!

[Anonymous survey response]

One learner summed her/his experience with the individual assignments up with the following comment:

Painful but useful!!!

[Anonymous survey response]

Interestingly enough, the majority of the learners indicated that the assignments in which they firstly had to build their own web sites, and, secondly, add special features such as polls, sound clips, and puzzles, had been the most useful. This was surprising because these assignments were the most technically challenging and were indeed the very ones that had kept learners up into

the late hours of the night. The sense of accomplishment and self-worth that these assignments gave learners was of great value.

Many learners enjoyed the FTP exercise, and the Java Script assignment also high on the list of favourites. Only one learner indicated that he/she found it useful to write a publishable article, and two other learners enjoyed reading the materials that were provided to prepare learners for the formal online test. No one indicated that they enjoyed the online test.

The online test was also the individual assignment that generated the most negative feedback. Dan, for example, wrote the following in a *Yahoo Messenger* conversation (28 August 2002):

The worst exam I have EVER written!

He attributed this to the lack of time and the vast number of resources available to them. He also mentioned that he did not really know what to expect – despite careful briefings from my side. I had ensured that they would be familiar with the Quiz tool in *WebCT* by setting up the Immunity Challenge of the previous week as an online quiz. I also wrote fairly extensive notes on what they were expected to prepare, and how the logistics would work.

The nature of the Individual Assignments were designed to inspire learners to continue on the learning path that they had began to pursue in the module. As one learner reported:

I found the ongoing search for information most useful. I have a loooooong list of URL's that I want to go back and further investigate.

[Anonymous survey response]

Madeline commented in her response to Question 4, Test 2:

Within six weeks of this, a lot has been learned in the [CyberSurviver] module. Information has been accessed from different sources on the Internet and different tools have been used. Websites have been designed with all the features, from different sources. Different systems have been used and a lot of hands-on experiences gained.

As I have already explained, the module was undertaken by learners with varying degrees of knowledge and skill. The diversity of student needs was a consideration in the design of teaching strategies and curricula, and it was envisaged that advanced students would be able to move ahead while others continued to work on the basics. The *CyberSurviver* module was thus designed with the specific aim of allowing for

individual differences as some learners exceeded, and others fell short of, the module's expectations for entry-level skills. As it happened, learners with a strong Internet background used PHP to design their websites, while those learners who were not as advanced were able to set up their sites in one of the many free and WYSIWYG web-hosting services. Some learners felt critical of assignments that highlighted individual differences so clearly. Larissa (Response to Question 1, Test 3) suggested that

the first priority is to build a sense of community by starting with well-structured exercises that don't show up individual differences so much.

Lisandra (Wednesday, 31 July 2002, 07:38) found herself struggling with the assignment that required her to add a sound clip to her website that reflected her experience of the first week on CyberIsland. She cried for help:

Can anybody tell me how do I get voice onto a website – do I need to do it before I FTP it to Hagar, or after (I still need to figure out how to do this transfer as well.) HELP!

On 28 July 2002, 1:19, Catherine once again reiterated the fact that the assignment was regarded as highly challenging by stating:

I don't even want to think what my blood pressure is at this moment.

Catherine (Yahoo Groups, Sunday, 28 July 2002, 10:11) had experienced several technical difficulties the previous evening in setting up her own website. Nevertheless, she still gave her message the subject line: *Ah-h-h-h*. The body of her message stated:

My personal website is now more or less working! What a struggle. I am just happy to say that I learnt the most I could out of it, as I received no help from any outside party.

This message shows that even though many peer support incidents were reported, learners often acquired new skills by themselves. Catherine eventually did really well in this module, and has often commented on the growth that she has experienced as a result of doing this module.

Most learners felt a great sense of accomplishment when they successfully completed an individual assignment. For example, Mabel (WebCT posting, 5 September 2002, 22:54) posted the following message as she attached the final version of her article:

I feel GREAT!!!!!!!!!!!!!!

Geronimo (WebCT posting, 3 September 2002, 15:39) also expressed his emotions:

FINISHED AT LAST!!! Here is my article attached as a Word file. Please let me know what you think of it.

It often happened that learners manage successfully to complete an Individual Assignment in the middle of the night – after struggling for hours and sometimes even for days on end. If they then noticed that I was online at the time, they might send me an instant message in which they would ask me quickly to check whether or not they had got it right. Lisandra (Yahoo Messenger Instant Message, Saturday, 27 August 2002) was one of the learners who liked to get immediate feedback:

I made a number of changes to my Home Page – if you have time, will you please go and have a look and tell me what you think – does it look better than before? [Translated]

On another occasion, she asked me to go to her site and assess how she had managed to introduce some JavaScript. I went to have a look, and responded as follows (Yahoo Messenger, Tuesday, 20 August 2002):

Lisandra, your JavaScript is very cool! And I thought this was the first

time that you tried your hands on a website! [Translated]

Her obvious joy at having succeeded with this technical challenge was appreciated:

Thanks a lot! I must say I am quite chuffed with myself!! [Partially Translated]

Jasmine and I also discussed her experience with the Puzzle assignment in *Yahoo Messenger* (Tuesday, 20 August 2002). She said that she found it

extremely interesting – I enjoy every moment spent on doing these tasks – have never before learnt so much in such a little time! [Translated]

In her response to Question 4, Test 2, Mabel commented on the strength of the elearning module by stating:

I would say that I quite easily managed to upload any paper I have written and it was public for more than the “teacher” to read.

As learners with limited computer and Internet skills battled with some of the individual assignments, they turned to each other for help, assistance, and support. In line with the ethos of the entire degree and my injunction to “Ask three, then me”, learners were dependant on each other and

on external resources for answers to their questions. But the reality of the situation was that not all the members of any particular tribe were always able to connect to the Internet synchronously. Some members only had access during working hours, while others only connected after peak hours when the connectivity was much cheaper than in peak hours. This meant that tribal members’ access to the Internet often was uncoordinated and when individuals needed timely personal support or help, their partners were not necessarily available.

Learners found that *Yahoo Messenger* (introduced in Week 2) was extremely helpful because they could then see what other course members were online at the same time as they were. The introduction of *Yahoo Messenger* was a boon to those who were struggling in the late hours of the night with their individual assignments, when they needed a shoulder to cry on, or just a friendly response in a dark moment. Learners soon learned to look for support beyond the borders of their tribes, and they tended to connect with those with whom they could hook up synchronously. The community of learners grew stronger as the weeks progressed and this tended to release some of the pressure that had built in tribes where members were in conflict about contact times.

Most of the *CyberSurviver* learners who completed the module left after the six

weeks with a sense of accomplishment and with experiences of personal growth in many areas. Even though the Individual Assignments were by and large completed individually, it was good to see how supportive the elearning community that evolved during the six weeks had become. The assignments instilled a feeling of achievement, and learners ended the module enriched by what they had learned.

Immunity and Reward Challenges

Because some of the learners who had enrolled for the module had never watched the *Survivor*® reality game, I took great care in the first contact session to explain the different features of the game, including the role of the Immunity and Reward Challenges. But I assume that some learners must have experienced an information overload because not all of them understood the role of these challenges either in the context of the game or in their own learning process. I was therefore pleased to read Larissa's response to Question 3, Test 3, which noted that in *CyberSurviver*

games were played and constructed, not so much to learn educational content, but to familiarise ourselves with the web, downloading of files, and being creative.

The main purpose of these challenges was to include an element of fun and light-hearted competition. But not everyone enjoyed the gaming nature of the module. On Monday, 22 July 2002, 22:08, Roleen expressed her dislike of the game in a *Yahoo Groups* message:

I do NOT have the time or the money (remember, I am a teacher) to play an online computer game where eventually, after 30 minutes of being online, the board for the scores are not reachable or offline! Please count me out on this one – or vote me off.

Some learners sympathised with Roleen's difficulty and expressed similar views. Gabrielle (*Yahoo Groups*, Tuesday, 23 July 2002, 13:46) responded with:

If it will make you feel better – I don't really play either. Apparently I now need to start doing it at this ripe age.

Others, like Catherine (Tuesday, 23 July 2002, 6:41) disagreed rather vehemently:

Lighten up, Roleen. How will you be able to write games if you can't play games. Life is not all work and no play for you, I hope.

Surprisingly, when the time came for the winner of the Immunity Challenge to be announced, Roleen had posted the highest score. Brenda (24 July, 2002, 22:05) replied with some irony:

For someone who moaned and groaned about playing a game, you sure have a high score, if not the highest!

The survey that was completed during Week 6 asked the learners whether they ever took part in the challenges, and to provide me with their impressions about these competitions/games.

Since eleven out of the fifteen learners indicated that they were participating, most learners were actively taking part in the immunity and reward challenges. Six of these learners pointed out that the games were good fun and that they enjoyed taking part in them. As one learner put it:

I thought they were fun, appropriate and would have liked to see more on them.

[Anonymous survey response]

Another commented as follows:

I experienced it as having fun – I may even use some of these challenges for future online courses – as icebreakers maybe?! I am

competitive by nature, which could also be a reason for participating in these challenges.

[Asynchronous survey response]

Further comments included:

They are good mind teasers and are challenging, refreshing and encouraging.

[Asynchronous survey response]

One learner mentioned that he/she took part in the immunity and reward challenges, but only after overcoming his/her own insecurities about taking part.

That alone was quite an accomplishment for myself at that stage.

[Asynchronous survey response]

One learner commented that he/she did take part, but stated:

At the time that the question was put, I was offline. After a few people answered the question, I lost interest because everyone knew the answer by that time. [Asynchronous survey response]

One of the four learners indicating that he/she did not take part, and listed time constraints as the reason, while another asserted that he/she was not competitive by

nature and thus not motivated by this type of activity. Because of these time constraints, some learners *cheated* in the sense that they got external help in order to achieve high scores:

I also asked my kids to show me how to play the game and to play on my behalf when I realised that I did not have the time to keep on playing a game while I had a hundred other things to finish.

Another learner (a Focus group comment) also confessed to using her family as a support system:

I got – again – support from my daughter, but because she enjoyed it. What do you call it when you can get immunity? You had to download a game for example, and I didn't even want to do it, but because she was interested in it, she did it, and she showed me how to do it.

The Immunity Challenges in the television *Survivor*© show were held so that one player could obtain immunity (exemption) from the next round of votes. A person with "immunity" cannot be voted off, and thus remains in the running for the Grand Prize for yet another week. In *CyberSurviver*, the same principle applied. The immunity challenges were meant to be fun activities by means of which the learners could

acquire immunity. The challenges were not compulsory activities. They were meant to be enjoyable activities that might get one the coveted weekly exemption (immunity) from being voted off. They were also designed to be a break from the other more serious and demanding tasks. The Immunity Challenges were also designed to provide learners with a range of examples of various practical features that are available on the Internet (see also chapter 4).

Download a free Demo version of Typingmaster 2002. Type for 2 minutes. Make a screen dump of your results and e-mail it to ELearn2002.

With this challenge, for example, I hoped to gain an idea of each learner's ability to type on a keyboard because I had planned a written electronic test for the following week, in which a number of open-ended questions would be asked. I planned to use the results of this test to guide me in allocating time for the test. As it turned out, the results were unreliable because many learners did not take the test themselves but delegated members of their families to do it because they had better typing skills.

I also wanted to expose them to the ease with which a program such as *Typingmaster 2002* can be downloaded. Downloading seemed to be viewed as an advanced skill by some of the less experienced learners. I

also wanted those who had not succeeded in submitting evidence of their scores on the previous occasion to have another opportunity to practise this skill.

I furthermore wanted the learners to become aware of the importance of typing skills in an online course such as ours, as a lack of this type of skills may inhibit participation and limit performance (Distance Learning n.d.).

Complete the Immunity quiz in WebCT. The person with the fastest completion time, and a 100 % score, will win Immunity this time round.

The aim of this Immunity Challenge was to provide learners with the opportunity to gain experience in completing a test online prior to the formal online assessment that was going to take place the following week. I wanted learners to become comfortable with the various types of questions available, and with the interface of the WebCT quiz tool. They also needed to realise that the test was only available for a limited period. I hoped that once they had been exposed to these skills as part of an Immunity Challenge, the anxiety they felt in anticipating the test might be mitigated.

The winner of the challenge would be the person with the best score in the shortest completion time. Warren (WebCT Posting,

Monday, 19 August 2002, 09:20) realised the importance of reading the instructions from his experience in this challenge:

It seems that the test allows for one attempt only. Only after I "Finished" my test I realized that time was a factor – my mistake (I must learn to read the instructions first!!)

In a Yahoo Messenger conversation (Wednesday, 21 August 2002), Dan asked about this challenge:

Just received some mail about a test that Lisandra completed in 2:47. What was this?

When I told him that it was the Immunity Challenge for Week 5, he stated:

Lisandra's making a habit of this ... I guess I missed this ... yep,, I forgot to check webCT [...] Don't think I've actually really tried one of your immunity thingies ... games aren't my strong point!

It is interesting though to note that Dan made every possible effort to partake in the Reward Challenges when the questions asked were of a more academic nature.

Play the Photo Shoot: Africa game online. Post evidence of your highest score to Yahoo Groups.

This particular Immunity Challenge was intended to expose learners to the type of games that are available online. As many of them were by their own admission not themselves game players, I wanted them to experience what it was like to play this type of game. Many younger people are addicted to playing electronic games, and I wanted them to understand the power that these games have over younger people by getting them to play with the intention of getting a high enough score to win the Immunity Challenge. As it turned out, many of them experienced the addictive effect rather strongly because they spent disproportionate amounts of time trying to improve their performances. Others did not become "hooked" and instead became rather frustrated because they are not by nature motivated by competitive games.

Another of my aims was to stimulate creative thinking patterns in learners. Because they were required to submit proof of their highest scores, they had to work out a way in which to capture the score on the screen and to share this evidence with the rest of us. While some learners displayed limited computer-user skills, they had no prior experience in, for example, making screen dumps. Even though this may seem to experienced computer users to be a simple task, those to whom this skill was unfamiliar found it to be extremely challenging. Learners devised the most elaborate ideas for achieving this end. One even hit upon the bizarre (but obviously

desperate) solution of borrowing a digital camera and photographing the screen.

Such opportunities for incidental learning were intentionally built into the module, mostly as part of the Immunity Challenges. As the facilitator, I felt that there are many simple skills, such as making screen dumps, or downloading a demo program from the web, that would eventually be useful to learners if they ever end up having to present online courses themselves.

The Photo Shoot: Africa Immunity Challenge was posted during the first chaotic week. As the learners had not yet grasped the nature of these challenges, and did not know that there were other far more important assignments waiting for them in *Yahoo Groups*, they spent a disproportionate amount of time on this activity. My intention was never for learners to spend more than an hour or two on the game. It was therefore disturbing for me to realise how much time learners had spent on this activity.

With hindsight it became clear to me that the fact that the majority of the learners did not know that the *real* assignments were posted in *Yahoo Groups* was the source of this error of judgement on their part. While I posted the assignments to the virtual classroom in *Yahoo Groups*, I deliberately kept the Reward and Immunity Challenges separate because although they were part

of the game, they were not integral to the explicit outcomes of the module on which learners were going to be assessed. Although I obviously placed a high value on incidental learning and the accompanying development of basic computer skills, I never intended these challenges to be graded for marks.

This misunderstanding was highlighted by Jasmine (*Yahoo Groups*, Wednesday, 24 July 2002, 05:52), who wrote:

I spend all the time trying to stay connected, playing the game, not realising there are other things to do.

Samantha (*Yahoo Groups*, Tuesday, 23 July 2002, 18:42) also focussed too much on the immunity challenge instead of the tribal and individual assignments:

I tried the photo-shoot game [Survivor©] and I'm still trying to figure out how to register @ least the decent score.

Samantha wrote 19 messages throughout the 7 weeks during which the module ran. Of these 19 messages, 7 were related to her frustrations in playing the game. It thus became clear to me that many of the learners had misunderstood the purpose of these challenges and, as a result, had spent far too much time on playing the game.

I was also interested to see how uninformed and inexperienced learners were when it came to playing electronic games. I added a comment to the challenge that stated that it would be nice if someone could get their name on the Top 20 scoreboard of the game. In most computer-based games, you get a score at the end of the game that indicates your position in relation to previous players. In most cases, people who make it among the Top 20 scorers are those with extensive experience in playing the game. After having played for hours on end, one may become skilled enough to achieve a high enough score to qualify for a position on the Top 20 list. But this seldom happens to first-time players whose scores (understandably) would usually be comparatively low.

The fact that I added the comment about wondering if anyone in the course would be able to get his or her name on the Top 20 list was therefore almost an aside of little importance, and I had absolutely no intention of persuading any learner to try to make this happen at all costs. I never really expected that any of the learners would have the necessary skill – or indeed the time to get up among the Top 20 scorers. But my comment unfortunately fired a number of learners with a burning desire to get their scores registered even though they did not really fully understand how these scores worked. Because they were playing the game for the first time, and were thus not

particularly skilled, they never attained a sufficiently high score. And so the computer never prompted them to enter their names or initials on the game's Top 20 scoreboard.

Brenda (Yahoo Groups, Monday, 22 July 2002, 22:16) was one of the first to complain about the Top 20 list:

I played the game – mainly because it was the easiest part. I struggle to get the game's Top 20 list "active". It seems as though the link is not working. Will someone please tell me how to do it. "Help" did not help!

Warren (Yahoo Groups, Tuesday, 23 July 2002, 14:13) soon followed with:

It does not seem possible to record a high score.

Samantha (Yahoo Groups, Wednesday, 24 July 2002, 08:28) also asked for help:

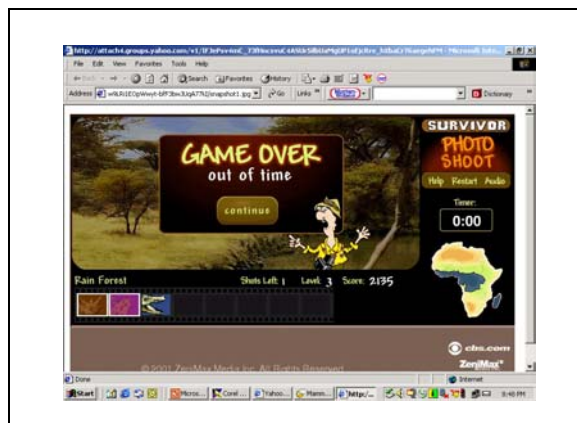
I tried to play the game photoshoot, but the problem is it's unable to register the highest score. It tells me reset/retry all the time and CONTINUE which restarts a game.... What could I BE DOING WRONG? What is the best & convenient way of sending the score?

Earlier that morning (at 07:07), she asked her Sotho friends in particular:

How did you guys find it with all those distracters running around confusing our hunting skills?

I deduced that she had played the game repeatedly between 07:07 and 08:28, and was trying to register her score as proof. Roleen was also perplexed by the task as she thought that one is not allowed to register a high score on the page that hosts the game. She eventually figured out a way to communicate her score and attached a screen dump in the form of a 'jpeg' picture (Figure 14).

Figure 14: Example of 'Evidence'



Mabel (*Yahoo Groups*, Wednesday, 24 July 2002, 22:01) was completely overwhelmed by the large number of unexpected e-mails, and missed the one that stated what the purpose of the photo shoot game was:

When I open my Outlook again this morning, I was shocked to see 150 mails!!! In short I need our help. Could you please tell me what is this game that I see in several e-mails? I went through the Planning document for this week, yet I didn't see this assignment.

Wegerif (1998) reports on students' comments on the "daunting prospect" of being left behind in reading messages. Learners seemed to prefer to ask for clarification, rather than to go through the mails in their inbox one by one.

On the television show, the prize handed out to the winner of the Reward Challenge was usually quite substantial, given the context. After weeks without a home-cooked meal, seeing a loved one, or a hot shower, these rewards were extremely powerful motivational factors.

In our *CyberSurviver* game, the rewards were by comparison rather insignificant. They were in fact of such little value (being a somewhat inane and symbolic pictorial attachment) that I anticipated very little enthusiasm for the rewards. The reward for

this type of challenge was usually a picture attachment, depicting a mug of coffee, a slice of cake, or a bottle of beer. This proved to be an unfounded fear, as the learners seem to enjoy the silliness of the pictures, and competed fiercely in order to be in the running for this prize. As Geronimo's response (*WebCT* posting, Tuesday, 13 August 2002, 19:54) shows:

Could not resist the reward!!

He then continued to post an elaborate response to the reward question that was asked. Approximately an hour later (21:06), Dan demonstrated the value of intangible, intrinsic award and responded with his own explanation to the question, starting his posting with

Drat... Geronimo got to it before me!

Geronimo then promptly responded (*WebCT* posting, Wednesday, 15 August 2002, 11:03) with a tongue-in-cheek apology:

Sorry Dan! I have to try to win something after my dismal performance as a typer!!

He was obviously referring to the Immunity Challenge in which the learners had been required to download a typing tutor and complete a two-minute typing test.

The nature of the Reward Challenges was usually closely related to the topics addressed in the Tribal and Individual assignments. At times these challenges addressed issues that puzzled some of the learners. For example:

What is a bulletin board thread? How can one expand or collapse a thread in WebCT?

This challenge was intended to make learner aware of the terminology used in asynchronous communication, and its purpose was to make learners aware of the fact that they needed to click on the blue triangle next to a bulletin board message in WebCT in order to expand on or collapse the thread. As many of the learners were not familiar with WebCT's bulletin board features, I wanted to make them aware of its functionalities by using the reward challenge as a fun instrument.

Who can tell us what the word "cache" means? Why are files sometimes stored in the cache? Why would one sometimes wish to bypass the cache?

By this time I had become aware of the fact that some learners were not aware of new documentation that had been uploaded to WebCT. As I had posted it there myself, and had tested it from a learner's point of view, I was sure that it exhibited no technical problems of my making. But as learners

began to complain that they weren't able to see the new documents, I realised that their Internet settings had been up incorrectly. This reward challenge provided me with the opportunity to make them aware of the importance of setting up their browsers to check for newer versions of a page every time they try to access a page.

Explain the differences between synchronous and asynchronous communication.

Many learners requested additional information about the new terminology they were encountering as they progressed through the module. As I often referred to synchronous and asynchronous communication in my postings, I wanted be sure that everyone understood the two concepts in the same way.

Explain what an IP address is. How do you know what your IP address is at any given time?

One of the assignments required learners to communicate synchronously with each other by using NetMeeting. As we preferred not to have their contact details listed publicly on the Microsoft servers, learners would have to connect to each other by using the IP addresses of the computers concerned. As such, they needed to know what an IP address was, and how they could find out what their IP address was.

Some learners did not seem to grasp the purpose of these Reward challenges. They did not make the link between what they were learning and what they were asked in the challenges. One learner reported his/her experience in this regard in the focus group discussion:

I felt very stressed during that time period, so the moment Linda asked questions about – she just threw the question: what is asynchronous learning? I was just like quickly look it up and sending it through, so that I've done that part. I now need to carry on. That's maybe something negative, so, because I didn't really go into thinking about those types of questions, because of the time constraints that was placed on us.

Although these Immunity and Reward Challenges were mostly well received by the learners, many of them did not understand how they fitted into their learning about elearning. In future designs of this module, care will be taken to address this issue in particular.

Voting

In the *Survivor*© reality game on television, the players conferred among themselves and built alliances in order to get powerful opponents voted off. The focus in the reality

game was to get rid of any other member who was seen as a threat in the race towards the Grand Prize. In our game, the strongest learners all remained in the game until the very end. On CyberIsland, a high premise was placed on *active* participation and so learners tended to vote off those members who failed to communicate regularly and to produce their fair share of the work. It seems that a high level of commitment, good quality contributions, regular availability online, and/or strong computer/Internet skills were the criteria that ensured learners a safe place in their various tribes. As one learner summed it up:

Interesting to note that in the real game the strong ones fell first, and here the weaker ones got trodden on!

[Anonymous survey response]

Another person (Response to Anonymous Survey) stated:

I did not like voting people off who did their share of the work!

He/she continued nevertheless to say that it was

nice getting rid of people who did nothing!

When asked in the survey (Week 6) whether they had ever been voted off, nine learners

indicated that they had. In the follow-up question about the influence that being voted off had had on their learning process, three responded by saying that it had influenced them positively and another three said that it had influenced them negatively. The remaining three learners suggested that their learning had not been influenced in any way by the fact that they had been voted off. One of the comments in the Survey read:

I was voted off right in the beginning, which was no surprise, considering my lack of input. I did miss the sympathetic mail from one of my tribal mates from whom I had learned a great deal up to that point.

[Anonymous survey response]

One of the learners who indicated that he/she had been voted off indicated that it may have had a positive affect on his/her learning:

I felt much more relaxed and started to explore areas not previously done. I also had time to reflect on what I have really learned and what was lacking. [Anonymous survey response]

Another learner voted *herself* off and

asked the others to do so too due to challenges experience when I picked up problems with hardware and had to format my hard drive. I deserved to be voted off and it is not affecting me negatively at all.

One of the learners complained that being voted off had a negative influence on his/her learning process:

After being voted off, the tribe I was in was inactive [and] as a result it affected my learning process because all the remaining group tasks were not effectively done and I didn't gain much on them.

In another anonymous survey response, another learner made a similar comment:

The negative part [of the Survivor© game] was the voting out of members. The whole process affected my learning process as I was voted out and put in a tribe that did not function and the same time felt demotivated and rejected by my group. Since then I did not gain much whereas other members were learning and gaining more experiences.

I had to do some of the group tasks alone, not knowing whether I'm on the right track or not, not knowing how to get them evaluated and get feedback on them. This was a bit demoralizing. Maybe the Survivor metaphor was introduced too early in the module when everything was still new, and voting being done as early as the first week which left others out too early.

One learner commented that while the voting process as such did not influence his/her learning, he/she added:

I have been voted off in the last round. I knew that it was my turn to go with the result that it was not a problem or a blow to my very fragile ego. I did not participate as I was suppose to due to a heavy workload and flu and deserved to go.

She/she continued:

I think that the whole voting [process] was a stupid idea and very often I did not vote. Many of the people in my original tribe never even tried to participate. It was therefore a useless case from the start. During the first week I tried to vote myself off so that I could start a new tribe.

Initially most of the active members did make use of their voting rights on the last day of each CyberSurviver week. From Week 3 however there was a definite decline in the number of votes that were logged. In Week 5, I actively had to encourage the learners to go to the voting stations (WebCT posting, Tuesday, 20 August 2002, 22:55):

Could I ask you to please all use your votes this week?! And don't forget to assess your mates' collaboration efforts!

The next week I posted a similar reminder on the WebCT bulletin board (Tuesday, 27 August 2002, 21:48)

NB! This is your last opportunity to vote. [...] I recognise the fact that this week's voting is going to be really difficult for you guys. Just a reminder though: If no one votes, the computer will randomly select someone by midnight to throw off. It may be you!

I also reminded them of the following:

On Thursday (before 18:00), you need to vote for the one person you would like to become the SOLE SURFIVER of the game. Who do you think most deserves a weekend away with family/friends?

In a Yahoo Messenger discussion (Tuesday, 20 August 2002), Roleen expressed her feelings about being voted off (after the new tribes had been formed):

At the moment I feel like I won't really mind going off at this stage, and there are enough others who knows what to do. [Translated]

Not all learners regarded the voting activity favourably. While some disliked the idea right from the beginning, others indicated that they wanted to be voted off a particular tribe because they had begun to experience conflict in relationships with other tribal members as the game progressed. Other learners were often caught between the option to vote a favourite tribal partner off, or to refrain from voting and risk being voted off themselves.

It was like a competition. Because I'm one of those people: when there's something up for grabs, I really want to do well, and hope that maybe in the end, maybe you'll just soul survive and win the game. So, in the beginning I thought that the guys or people who know, or who don't know those things, are going to be voted off in the first week or two. But some way I survived, and in the end when there were only what four, five, six left,

then you – maybe it gets close – so maybe you can wait.

[Anonymous focus group comment]

On Thursday evening, 15 August 2002, 20:36, I reminded all learners of the importance of voting because the computer would randomly selected people to be voted off if there was no conclusive vote against one of the learners in a particular tribe. It was therefore rather important to vote for someone else if a learner hoped to remain in running for the Grand Prize.

On Thursday, 15 August 2002, 22:31, Geronimo and I had an interesting conversation via Yahoo Messenger. I initiated the conversation after I had noted that no one from his tribe had voted. Midnight was the cut-off time for voting, and as I wanted to shuffle the remaining Survivers on the following day, it was rather important that everyone vote in time. My concern was that they were perhaps experiencing technical difficulties.

Are you able to access the voting station, or are you having problems?

[Translated]

Geronimo responded by saying that there were only three members left in his tribe and that he did not want to vote either of the other two off. I reminded him that the computer would randomly select one of

them to vote off if he did not cast his own vote. After he agreed to go and vote, I requested him to remind the others to do so as well.

It was almost an hour later (23:18) that Geronimo initiated another discussion over *Yahoo Messenger* with the following message:

*I am really not sure about the voting!
I am going to be the only one that
votes!* [Translated]

We discussed the fact that because he now reminded the others to go and vote and that, by doing that, they would know that he was the only one who that voted, and that this had deprived him of the anonymity promised by the system. After reminding him of the Grand Prize, he said:

*Yes, maybe I owe this to my wife!:)
[...] I will flip a coin for the 2 girls to
see who needs to go!* [Translated]

Minutes before midnight, I received a short message from him, stating that he had actually taken the plunge and voted – just in time. Geronimo eventually went ahead to become the sole *CyberSurviver* at the end of Week 6, and took his wife and family on a lovely weekend to a nearby resort.

In a game such as *CyberSurviver* some things cannot be planned, anticipated or

controlled. I certainly expected the learners to strategise and vote off their strongest opponents first. It soon became clear however that this was not going to be the case. Because this unfortunately had not been anticipated, the game structure did not have a built-in support system for those weaker learners who, unexpectedly, found themselves huddled in Tribe 5. In one sense, the game turned out to be an exercise in the survival of the fittest, and it left the weaker learners adrift without any obvious means of participating meaningfully and getting ahead.

The Jury

In the *Survivor*® reality show, the members who were voted of in the latter part of the game were allowed to sit on a jury. The votes of the members of the jury also counted towards the selection of the final *Survivor*® who won the \$1-million dollar prize money.

In *CyberSurviver*, however, all learners who were still active were allowed to vote in the final round. On the last day of the module, all learners were invited to join the “jury” and to cast their vote for one of the remaining five *CyberSurvivers*.

Tribal councils

In the initial introductory letter (posted to Yahoo Groups, Thursday, 18 July 2002), I mentioned that I would like the groups to set up Tribal Councils who could reflect on their progress with regard to how things had turned out, on how it felt working together in cyberspace, on how they had experienced the group cohesion, and so forth, on a regular basis. I framed the following questions to guide reflection in these sessions:

- *How well did the tribe function this week?*
- *One positive comment and one negative one about your impression of the work done in the previous week.*
- *What things were done well?*
- *What can be improved?*

Each tribe was supposed to take responsibility for organising a synchronous tribal council session during the course of the week with myself included as part of the team. As soon as the module started, it became clear, however, that the ideal of a weekly tribal council meeting for each tribe individually would be difficult to realise. As one of the learners commented in the focus group discussion:

I think the work was a little bit too much, so there were things in the game that we were unable to do, for

instance, I don't know about the other tribes, but the tribal council that we were supposed to hold, nobody did that.

I revisited the design for the module and settled for three Tribal Council sessions with the group as a whole: one at the beginning, one in the middle, and, finally, one with which to close the module.

The first face-to-face tribal council was held at the end of Week 1 (Thursday evening, 25 July 2002). As the learners were at that time confused and uncertain about the realities of the game and how the module functioned, we needed a contact session in order to create an environment that would be conducive to learning.

The second tribal council was held in the middle of the module (Wednesday evening, 7 August 2002), and used the *InterWise* session to get everyone online synchronously. After the learners had had an opportunity to present their mini-lectures by means of the *InterWise* system, we started the tribal council meeting with a round-table discussion about the experiences of the learners up to that point.

Geronimo (Response to Question 3, Test 3) later remarked that these tribal councils allowed time for reflection and feedback, and he wrote:

Good, online "gripe" sessions and e-mails!

The final tribal council was held on Thursday evening, 29 August 2002, at the debriefing session where the Dean of the Faculty announced who the sole *CyberSurviver* was. The debriefing went well, and learners were elated because the module had been completed. The overall atmosphere was nevertheless constructive and friendly and learners were eager to be able to – at last – to share their experiences of the last six weeks in person with myself and with the rest of the groups.

Grand prize

After negotiating the agreement of the Dean of the Faculty, the leader of the course, Professor J.C. Cronjé managed to offer the *Sole CyberSurviver* a weekend away for six people at a nearby holiday resort as the Grand Prize. Although learners were informed that there would be a substantial prize for the sole surviving learner after the module had been completed, the nature of the Grand Prize was only announced halfway through the module. Because of this, the motivation of some learners was not influenced either positively or negatively. One learner reported that the

information was conveyed at a very late stage of the game. It therefore

didn't really influence my learning process – although it might have if I was informed earlier on!

[Anonymous survey response]

Another learner commented:

I do not know if it would have made any difference in any case. I am not the kind of person that works because there is some prize at the end of the game.

[Anonymous survey response]

Two comments struck me as particularly dismissive:

Maybe if it was a trip for two to France or Italy it would have had a significant influence.

[Anonymous survey response]

Not really – one gets phoned with such a prize quite often.

[Anonymous survey response]

Only three learners indicated that they had been motivated to work even harder after the announcement because of the nature of the Grand Prize. One of these learners wrote:

I worked harder because my wife wanted to divorce me several times and a good weekend will cheer her up.

Most of the learners indicated that the announcement of the Grand Prize during Week 4 did not really influence their learning processes.

It was announced too late to have any influence. I do not know if it would have made any difference in any case. I am not the kind of person that works because there is some prize at the end of the game

Some of the other comments made anonymously included the following:

I felt happy for the winner. Always may the best guy win.

It did not – by that time I was voted off, i.e. [I was] not in line for the prize anymore.

No effect, as I was definitely not in the running.

It made no difference at all.

More positive comments were also forthcoming:

Happy for the person who is going to win.

VERY good!

One learner, whose personal circumstances make it difficult for her/him to travel, commented:

I and mine are no good "weekend away people", so if anything, I rather feared winning.

In a Yahoo Messenger discussion (Tuesday, 20 August 2002), Roleen also expressed her feelings about the Grand Prize as follows:

I would like a weekend away, don't know when last that happened, but don't know where the time would come from!

Gabrielle and I discussed who she intended to vote off by the end of the week in a Yahoo Messenger conversation on Thursday, 15 August 2002. She mentioned how intense the competition was but how everyone

pretend[ed] they don't mind!

In conclusion, it may be said that the Grand Prize certainly had a motivating effect on some of the learners, and that this effect may have been much greater had the nature of the Grand Prize been known at the beginning of the module. It is also true that some learners were not at all motivated by the Grand Prize because their motivation to complete the module successfully had

already been firmly established by other internal drives.

Closure

This chapter explored the intricacies of the group dynamics that resulted from the introduction of the *Survivor*© game elements such as group composition and the effect of the shuffling or regrouping of tribal members into new tribes, the restrictions of isolation as experienced on CyberIsland, various tribal and individual assignments, reward and immunity challenges, the practice of voting, and the incentive provided by the offering of a Grand Prize.

The literature tells us very little about the way in which adults experience learning games in an online environment (Beach 1954; Callois 2001). This chapter explored the various types of interaction and group dynamics, and followed through by examining some of the complexities involved in presenting a learning module by means of a metaphor such as *Survivor*©.

Chapter 7 will explore how the *CyberSurviver* game elements affected the group dynamics, and the various types of interactions involved in this online module.