



Jump on the Cyber Bandwagon

**A 2001 Australian National Training Authority
Adult Literacy National Project**

Final Report

**For
The Department of Education, Training and Youth
Affairs**

**From
The Research and Development Division
West Coast College of TAFE**

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Contents

0.1 Background to the project.....	4
0.2 Objectives.....	4
0.3 Achievements.....	5
0.4 Challenges.....	6
0.5 Promotion and Dissemination.....	6
1. Background to the project.....	7
1.1 Introduction.....	7
1.2. Project objectives.....	7
1.2.1 Major objectives.....	7
1.2.2 Other objectives.....	7
2. Achievements.....	8
2.1 Achievement of project objectives.....	8
2.2 Additional achievements.....	8
3. The Program.....	9
3.1 Introduction.....	9
3.2 Recruitment and retention.....	9
3.2.1 Introduction.....	9
3.2.2 Student recruitment and retention.....	9
3.2.3 Volunteer recruitment and retention.....	10
3.2.3.1 Computer literate young people (IT volunteers).....	10
3.2.3.2 Senior volunteers.....	11
3.3 Session planning and delivery.....	11
3.3.1 Planning.....	11
3.3.2 Delivery.....	12
4. Evaluation of Phase I.....	13
4.1 Methodology for evaluation of Phase I.....	13
4.1.1 Introduction to evaluation methodology (Phase I).....	13
4.1.2 Methodology (Phase I) – surveys.....	13
4.1.3 Methodology (Phase I) – mid-course focus session.....	13
4.1.4 Methodology (Phase I) – reflective journals.....	13
4.1.5 Methodology (Phase I) – investigator observation/feedback.....	14
4.1.6 Methodology (Phase I) – student products including stories.....	14
4.2 Results from evaluation of Phase I.....	14
4.2.1 Results (Phase I) – initial, mid-course and final surveys.....	14
4.2.1.1 Survey questions for students only.....	14
4.2.1.2 Survey questions for Seniors only.....	17
4.2.1.3 Survey questions for computer volunteers only.....	20
4.2.2 Results (Phase I) – mid-course focus session.....	22
4.2.2.1 Questions and responses.....	23
4.2.2.2 Attitudinal Survey.....	25
4.2.3 Results (Phase I) – reflective notes.....	28
4.2.4 Results (Phase I) – observations of the investigators.....	29
4.2.5 Results (Phase I) – student products including stories.....	30
4.3. Results (Phase I) – session planning and materials development.....	31
5. Possible Modifications for Phase II.....	32
5.1 Introduction.....	32
5.2 Pre-planned modification.....	32
5.3 Other potential modifications and strategies.....	32
5.4 Implementation of modifications and strategies.....	32

6. Results and evaluation – Phase II	33
6.1 Introduction to Phase II evaluation	33
6.2 Results of Phase II evaluation	33
6.2.1 Opportunity to comment throughout	33
6.2.2 Opportunity to comment at the mid-point.....	34
6.2.3 Attitudinal survey – Phase II	36
6.2.4 Final reflective piece of writing from all participants.....	36
6.2.5 Progressive student work	39
7. Conclusions	40
7.1 Challenges and solutions.....	40
7.1.1 Sociological interactions	40
7.1.2 Recruitment	41
7.1.3 Participant retention.....	41
7.2 Achievements	42
7.3 Future potential.....	43
7.4 Key success factors.....	43

0. Report Executive Summary

0.1 Background to the project

This report discusses “Jump on the Cyber Bandwagon” an action research project involving migrants and people of English Speaking Background (ESB) who need to increase their English literacy/language skills, Senior volunteers and computer aware young adults. The groups were drawn together in an educational setting to conduct and complete an introductory computer course. A web site of the project is being developed to communicate project activities and concept and to post stories and themes compiled by the participants. The project has generated a model which may be applied to future programmes and replicated within the community.

0.2 Objectives

- ◆ enhance language, literacy, numeracy, computer literacy and job prospects of adult migrants and people of ESB
- ◆ improve computer literacy of Senior volunteers and facilitate their better communication with the younger computer literate generation
- ◆ prepare young people for a possible future contribution in use of online technology in adult literacy and enable them to interact with adult migrants and Senior residents
- ◆ build a model of a self-sustaining three-way relationship between the adult Non English Speaking Background (NESB) migrants/English Speaking Background (ESB) residents, Senior volunteers and computer literate youth
- ◆ produce stories written by the students
- ◆ develop a project web-site
- ◆ Powerpoint presentations
- ◆ dissemination of information on the project

The project was in two phases. The first phase was developmental with the second phase being used to consolidate the model and trial a more flexible approach to utilising the materials developed. Successful recruitment of students for both phases was mostly through the local library at Joondalup. For Phase I, ten computer literate young people were recruited. Recruitment of Senior volunteers was the most difficult, with only four Senior volunteers at the beginning, this rose to six by the third week of phase I. Phase II used continuing Information Technology (IT) volunteers (3) plus two newly recruited and continuing Seniors (4). Students for Phase II were a mixture of continuing migrants from Phase I, with additional new migrant participants and two participants from English Speaking Backgrounds.

The literacy and IT literacy aims of the project were stated in the form of competence statements developed by the investigators/facilitators. In Phase I individual sessions were planned on a weekly basis by the investigators/facilitators to better accommodate learner needs. The session plans were designed to assist the IT and, also to some extent the Senior, volunteers by including suggested tasks and strategies as well as student objectives. Learner support materials were developed by a developer experienced in working with students of NESB and in IT with some

input from one of the investigator/facilitators. The theme of writing a story was woven throughout to be used as the basis for many of the word processing and image manipulation exercises. In Phase II the materials developed during Phase I were used on a flexible basis allowing each participant to progress at their own pace and to make more individual choices about what they wanted to address.

The social interaction between group members leading to the formation of a socially cohesive group was perceived both in the project brief and by the investigators/facilitators as a very significant contributory factor to the success or otherwise of the program. As a consequence each session included time allocated for such interaction through a morning tea.

Surveys were carried out at the beginning, at the mid-course point and at the end of the first phase. Data from these indicates increased confidence in the students and a high degree of satisfaction with the project. Focus questions in mid-course gave rise to qualitative information on how all three streams of participants felt about the course. Responses from all three streams were generally very positive with references to learning, friendliness, patience and interest. An attitudinal survey was also carried out at the mid-point in the first pilot in order to generate some semi-quantitative data. Print-outs of student work at intervals throughout show progressive improvement, culminating in the Powerpoint presentation of all of the stories. The students also wrote a final short piece about the course using their newly acquired skills. This data indicated that the model was performing as anticipated. Thus the second phase was used to extend the delivery model into a more flexible mode. This facilitated some evaluation of the potential for use of the model and materials on a self-paced and or "drop in" basis which might be appropriate for a community organisation with limited computer resources and volunteers available at different times. Evaluation of phase II was through: an attitude survey (as for Phase I) in mid-course; a short written evaluation at the end of the course by all Phase II participants (students and volunteers); print-outs of student work demonstrating progressive improvement; and the final completed stories of the students.

0.3 Achievements

The course developed demonstrably increased confidence levels and hence job prospects in the students. There was also a demonstrated increase in both IT and English literacy skills for this group.

The volunteers have shown increased confidence. In the case of the IT volunteers this has been in interaction with both the students and the Senior volunteers. Senior volunteers have shown increased confidence and also in some cases increased computer literacy.

Committed volunteers, three IT and three Senior volunteers continued through the second phase. Logistical reasons prevented several other IT volunteers from continuing. A number of Phase I students were confident enough to offer moral support for Phase II students although not confident enough, or indeed skilled enough at this stage to train others.

A delivery model and support materials for learners and volunteers to enhance English literacy and IT skills in a diverse group of learners using volunteer support, have been developed and have been successfully trialled.

Stories have been written by the students, and converted by them to Powerpoint presentation which were then combined into a single presentation. This will form the basis of the project web-site material.

All participant streams demonstrated satisfaction with the project and evaluation and feedback from the first phase was used to inform further refinement of the model for the second phase. Each student was allowed to progress at their own pace with the support of an IT volunteer, and access to a "floating" Senior volunteer. This reduced the prescriptive nature of the delivery, allowing individuals to spend more or less time on a topic as appropriate to their individual needs.

0.4 Challenges

The potentially volatile mix of cultures, ages, range of technological experience and language, was perceived in the planning stage as a challenge. In fact there was little friction at all. The main difficulties encountered centred around recruitment. This was particularly true with recruitment of Seniors. There was some attrition although less than in conventional learning situations. Widening the target group to include students of ESB as well as NESB background was addressed to some extent by the move to self-paced delivery to meet the differing needs.

0.5 Promotion and Dissemination

Information on the project has thus far been disseminated through: a presentation/paper delivered at the AVETRA conference in March 2002; submission of an abstract to the WA Institute of Educational Research (currently under consideration for inclusion in their August 2002 forum); a presentation on the project to be made to the AGM of the WA Adult Literacy Council in July 2002; article in *Literacy Link* the Australia Council for Adult Literacy's (ACAL) national newsletter. It is proposed that the WA Adult Literacy Council will host the project web site.

Jump on the Cyber Bandwagon Report

1. Background to the project

1.1 Introduction

“Jump on the Cyber Bandwagon” was an action research project in two phases involving migrants and people of English Speaking Background who needed to increase their English literacy/language skills, Senior volunteers and computer aware young adults. These three groups were drawn together in an educational setting to conduct and complete an introductory computer course. Throughout the first phase of the project support materials for the students and volunteers were developed and these have been compiled into booklets for self-paced learning. The project resulted in a rich and positive interaction of participants and volunteers. Their activities and experiences were analysed to generate semi quantitative as well as qualitative data. This has informed the development of a model (evaluated and refined throughout) for future programs that can be applied and replicated within the community. A web site of the project is being finalised which will communicate the project activities and concept. Stories and themes compiled by the participants will also be posted and the materials will be available in downloadable pdf format. This web-site will be hosted by the site of the WA Adult Literacy Council.

1.2. Project objectives

1.2.1 Major objectives

- ◆ Enhance language, literacy, numeracy and computer literacy of adult migrants and participants of English Speaking Background and their job prospects.
- ◆ Enhance and refresh computer literacy of Senior volunteers and help them for better communication with the younger computer literate generation.
- ◆ Prepare the youth for a possible future contribution in use of online technology in adult literacy and provide an opportunity to them to interact with adult migrants and senior residents.
- ◆ To build a model of a self-sustaining three-way relationship between adult NESB migrants/ESB residents, Senior volunteers and computer literate youth.

1.2.2 Other objectives

- ◆ Stories written and converted by the students into Powerpoint presentations
- ◆ Project web-site (needing further development and a host site)
- ◆ Dissemination of information

The project brief has provided the framework for the program. As with all action research there have been continuous fine adjustments and minor changes to proposed methodology throughout.

2. Achievements

2.1 Achievement of project objectives

The following project objectives have been fully or partially achieved:

- ◆ a demonstrated increase in English literacy/language levels, IT skills and confidence and thus job prospects in the students
- ◆ increased computer literacy levels for Senior volunteers
- ◆ a group of committed volunteers from the first phase several of whom participated in the second phase pilot, and are keen to continue if the programme is taken up by community organisations
- ◆ first phase students who continued to attend the second phase, increasing their own knowledge and also providing moral support/mentoring for second phase students
- ◆ model for the delivery of a range of English literacy and IT skills to a diverse group of learners
- ◆ stories written by the students
- ◆ a Powerpoint presentation consisting of a combination of all the individual stories – each student developed their own presentation with assistance from IT volunteers. These were then combined by one of the investigators.
- ◆ a project web-site (still under development and to be hosted by the WA Adult Literacy Council)
- ◆ dissemination of information through: a presentation/paper delivered at the AVETRA conference in March 2002; submission of an abstract to the WA Institute of Educational Research (currently under consideration for inclusion in their August 2002 forum); article in *Literacy Link* the Australia Council for Adult Literacy's (ACAL) national newsletter; a presentation to the WA Adult Literacy Council Annual General Meeting (July 2002); articles in a local newspaper and the college newsletter. Information will also be available through the WA Adult Literacy Council web site.

2.2 Additional achievements

In addition to the above project objectives further achievements include:

- ◆ support materials for learners and volunteers developed into booklets
- ◆ refinement of the model for self-paced learning
- ◆ demonstrated satisfaction, of all participant streams, with the program
- ◆ evaluation and feedback from all participants which was used to inform further refinement of the model for the second pilot run.

3. The Program

3.1 Introduction

The first phase pilot run of the program started on 29/08/01 (finishing date 1/12/01). The lead time from grant approval to the proposed first pilot was very short, thus a further week was proposed to allow some additional time for recruitment of both students and volunteers. The second phase run was from 28/02/02 to 20/6/02.

3.2 Recruitment and retention

3.2.1 Introduction

Initial approaches to recruitment for the first phase involved close targeting of individual participant streams using a different nomination form for each stream. However as recruitment strategies were refined a broader approach was adopted. This included placing flyers on notice boards (particularly in local libraries and community centres) and the inclusion of an article about the project in a local community newspaper – the Wanneroo Times, and in the College Newsletter.

Recruitment for the second phase involved the distribution of flyers and application forms to a wide range of organisations including local migrant groups, leisure centres, retirement villages, community centres, City of Wanneroo, Centrelink, Mission Employment, local Joblink centres and Centrecare.

3.2.2 Student recruitment and retention

The planned target group of students for the first phase were migrants of Non-English Speaking Background (NESB). Information in the form of flyers and application forms was made available through a range of migrant organisations and through personal contacts as well as local libraries. Successful recruitment of students for both phases was mostly through the local library at Joondalup (adjacent to the West Coast College of TAFE campus) where there was a positive commitment from a staff member involved in migrant conversation classes. Possible reasons for the less successful recruitment elsewhere include:-

- ◆ the lack of a strongly interested contact
- ◆ English literacy difficulties in reading the flyer and application and completing the application
- ◆ the distance involved in attending the classes
- ◆ lack of familiarity with the area near the college for more distant prospective students.

Provision of information to a number of local migrant community organisations generated no students. This approach could potentially be more effective if information was provided in the first language of the target group.

The initial Phase I group was of 13 students (for countries of origin see Appendix A). One of these attended alternate weeks for the first few weeks and then stopped coming. His wife (also attending) felt that this was because he had missed two early

sessions. Two other students (Afghani in origin) stopped attending very soon after the September 11th terrorist attacks in the USA. All three were invited to attend the second run of the program – one took up the invitation. The remaining 10 students attended throughout – most missed one or two sessions due to other commitments and one missed several sessions to attend an Aged Care course.

Recruitment for the second phase resulted in a total of 17 students although several of these were unable to join until some weeks into the course (for countries of origin see Appendix A). Four of these 17 were phase I students who were keen to attend the second phase and further develop their skills while providing moral support to the new students. A further three were of ESB, one dyslexic, one hearing impaired and one with unspecified difficulties. The remaining 11 were of NESB with countries of origin in the Middle and Far East and Eastern Europe. Attendance was less consistent than in the first phase. There were several reasons for this: the logistics of completing the course by late June necessitated running sessions in the weeks before and after Easter and during the mid-semester break (these did not coincide); the more flexible approach allowed students to feel that they could miss a week without feeling “left behind”. Retention was less good than in the first course with only 10 of the 17 students attending most of the sessions after they joined the course. Examination of the reasons for fluctuations of attendance and non-completion shows that these were personal rather than due to any aspect of the course: childcare issues affected attendance during the holiday period; two participants found work, one of these attributes his success in part to increased confidence in English and IT gained through participation in the program (he was a continuing first phase student); a further two underwent operations curtailing their attendance; another two returned to their countries of origin for extended visits; one person (a shift worker) had a change in shift pattern which prevented attendance; and one suffered a bereavement.

3.2.3 Volunteer recruitment and retention

3.2.3.1 Computer literate young people (IT volunteers)

Recruitment of computer literate young people for phase I was through contact with lecturers at West Coast College of TAFE, and once the contacts were made it proved relatively straightforward to reach the target of 10 volunteers. Most of these volunteers continued to participate throughout although one stopped coming after 3 sessions and a further two after 7 sessions. An additional volunteer was recruited as a replacement but this person only attended once. By this time the group was well established with a very positive group dynamic and had several computer volunteers who were working effectively on a one-to-two basis with the students, thus no further attempts were made to introduce additional IT volunteers.

For phase II a number of IT volunteers from phase I expressed an interest in continuing, however due to college class timings only three were able to do so. College timetabling of IT classes for the semester combined with student commitments to work placements meant that no further IT volunteers were recruited from within the college. Two additional IT volunteers were recruited through the flyers and forms distributed to organisations. One of these (unemployed at the start of the course) gained employment and was unable to continue. By this time (as in

the first phase) the group was cohesive. The increasing ability of the remaining IT volunteers to provide one-to-two (or more) support and the increased IT capability of the Senior volunteers was such that it was deemed preferable not to risk the group dynamic by attempting further recruitment of IT volunteers at this stage.

3.2.3.2 Senior volunteers

This was the most difficult aspect of recruiting for Phase I. A variety of contacts were made and flyers distributed to senior citizens organisations/groups with local branches, however recruitment was slow. Possible factors impacting on Senior recruitment include: Seniors interested in volunteering were already involved in other volunteer activities; some reluctance/nervousness because of the computing context. The Phase I course began with only four Senior volunteers, increasing to six by the third week. All of these volunteers continued to participate throughout the pilot. They adopted a “floating” role and found this satisfying as they were each involved with all the students as the need arose. The group became established and cohesive very quickly and there is a strong possibility that this was in part due to the “floating” role of the Seniors who thus provided both a communications “bridge” and the “glue” to hold the group together. As the system of Senior volunteers “floating” as needed was so effective no further Seniors were recruited in Phase I.

Three of the Phase I Seniors were able to continue into Phase II and a further one Senior was recruited. Again recruitment of Seniors was difficult, possible reasons remain the same as those for Phase I. These may be overcome in a community organisation context by the availability of pre-existing volunteers.

3.3 Session planning and delivery

3.3.1 Planning

The broad objectives of the program in terms of English literacy and information technology were derived from the requirements in the project brief. They were stated in the form of competence statements developed by the investigators/facilitators (Appendix B). Individual sessions were planned on a weekly basis by one of the investigators/facilitators to better accommodate learner needs. The session plans were designed to assist the IT and, also to some extent the Senior, volunteers by including suggested tasks and strategies as well as student objectives. Learner support materials were developed by a developer experienced in working with students of NESB and in IT with some input from one of the investigator/facilitators.

The social interaction between group members leading to the formation of a socially cohesive group was perceived both in the project brief and by the investigators/facilitators as a very significant contributory factor to the success or otherwise of the program. As a consequence, each session included time (varying from 15 to 35 minutes) allocated for such interaction through a morning tea.

The general structure of the program for Phase I was as follows:

- ◆ Introduction to the computer (including some useful words)
- ◆ File management

- ◆ Mouse manipulation and keyboarding
- ◆ Basic use of Word - writing, simple editing and formatting Word documents
- ◆ Inserting images and graphics
- ◆ Handling simple numeric data and producing a simple bar chart with Excel
- ◆ English literacy exercises (completed on the computer)
- ◆ Accessing the internet for information
- ◆ Setting up and using an e-mail account
- ◆ Integrating information/images from the internet into documents
- ◆ Adapting a Word document for a Powerpoint presentation

These were each delivered over one or two sessions and the theme of writing a story was woven throughout and used as the basis for many of the word processing and image manipulation exercises.

The pattern for Phase II was similar in that the topics were available in the same order. However the support materials were provided progressively at need, so that each student could work at their own pace and concentrate on the areas of greatest individual interest. As a result of this some stories were less fully developed into presentations because some students spent more time on internet skills or image manipulation than on writing the story.

3.3.2 Delivery

The first session of Phase I briefly addressed one formal objective from the competencies – learning the names of some of the parts of the computer. Planning focused mainly on introductions, and on familiarisation with the college environment and the computers. Initial ice-breaking consisted of encouraging participants to write their names on the board. This was followed by a “find your partners” exercise. In this, each participant was given a piece of paper with either the name or picture of a piece of computer equipment (the students received a picture). Finding people with the same picture and the name of the piece of equipment provided a means of forming small groupings for initial familiarisation with the computers. The session was used by the facilitators as an informal assessment of the range of participant skills and experience. For this session only, each IT volunteer was allocated to a computer with one or more students. This was to ensure that no student was left sitting in front of a computer becoming less and less confident while waiting for help to access Word. All other sessions were carried out with one student per computer to minimise the frustration generated by computer sharing.

The second and subsequent sessions of Phase I were more structured than the first. Moving to this more structured approach had been anticipated, and the need to adopt this strategy was confirmed in feedback from the volunteers. The IT volunteers, in particular, felt the need for a structure to work within. This need probably arose because they had no training as trainers, and no experience in training delivery. The sessions were planned on a weekly basis, making the delivery highly responsive to need. For example, one series of English literacy exercises proved particularly demanding and most students required a second session to complete them. Because delivery was not rigidly prescribed it was possible to allocate a further session to these exercises and also provide other exercises in using the computers for students who completed the literacy exercises more quickly.

4. Evaluation of Phase I

4.1 Methodology for evaluation of Phase I

4.1.1 Introduction to evaluation methodology (Phase I)

The methodology used was basically as identified in the project proposal. The action research nature of the project inevitably resulted in some modifications in methodology throughout Phase I. Methods proposed and finally adopted, are described below. Any changes from the original proposal are discussed with the associated rationale in the relevant results section.

4.1.2 Methodology (Phase I) – surveys

Three surveys were carried out on each participant stream during the First Phase pilot (for blank surveys see Appendix C), one in the early stages, one at the mid-point and one in the penultimate session. The surveys essentially asked similar questions of each stream and the same questions at each stage in the course to enable comparison both within streams and over time. The structure and language of the surveys were modified in order to facilitate completion by the students, and to reflect the stage in the course at which the survey was being carried out. The question regarding ranking of statements was not well understood and many participants awarded the same rank to several statements thus making analysis impractical.

4.1.3 Methodology (Phase I) – mid-course focus session

Originally the strategy was for each working group to provide feedback using focus questions, but this was not feasible because the initial concept of 10 separate groups of 3-4 did not develop. This was partly due to the disparity in numbers of each participating stream, and also because the whole group quickly developed a high degree of mutual trust and security. A consequence of this was that students were not always helped by the same IT volunteer each week and thus did not form exclusive sub-groups within the main group. Because the number of participants was high (over 25 in total) the strategy adopted was to provide opportunities for comment by the individuals in each stream (Senior volunteers, IT volunteers, Students) on several different focus questions. Also, in order to supply some semi-quantitative data, attitudes to the course were sought by providing a variety of words and phrases both positive and negative for participants to select all that they felt were applicable to them.

4.1.4 Methodology (Phase I) – reflective journals

The original concept provided for students to complete written reflective journal pages at the end of each session. This was modified to some extent. Journal pages with different prompting questions were designed for each participating stream and for each session, with the intention of initiating reflection. These were used each week for the first part of the course and then at a reduced rate for the remainder. At

the end of the pilot the students were asked to use their computer to write a “short story” (effectively a reflective piece) about their feelings in relation to the course.

4.1.5 Methodology (Phase I) – investigator observation/feedback

The investigators/facilitators involved in delivering the program are qualified and experienced in teaching/training and facilitation. They have skills and experience in communications, IT and research. After each session the investigators logged any general impressions, specific interactions of significance and feedback from participants. These were then used to inform further development and modifications including planning for the next session and advice for the learning materials developer on the preparation of the necessary materials.

4.1.6 Methodology (Phase I) – student products including stories

All students were provided with a floppy disc on which to save their work. The saved documents, charts and presentations form a record of progress and increased skill levels through the course. As part of the familiarisation with the internet all the students were coached through the process of registering a Hotmail account. They were encouraged to send e-mails to one of the investigators.

4.2 Results from evaluation of Phase I

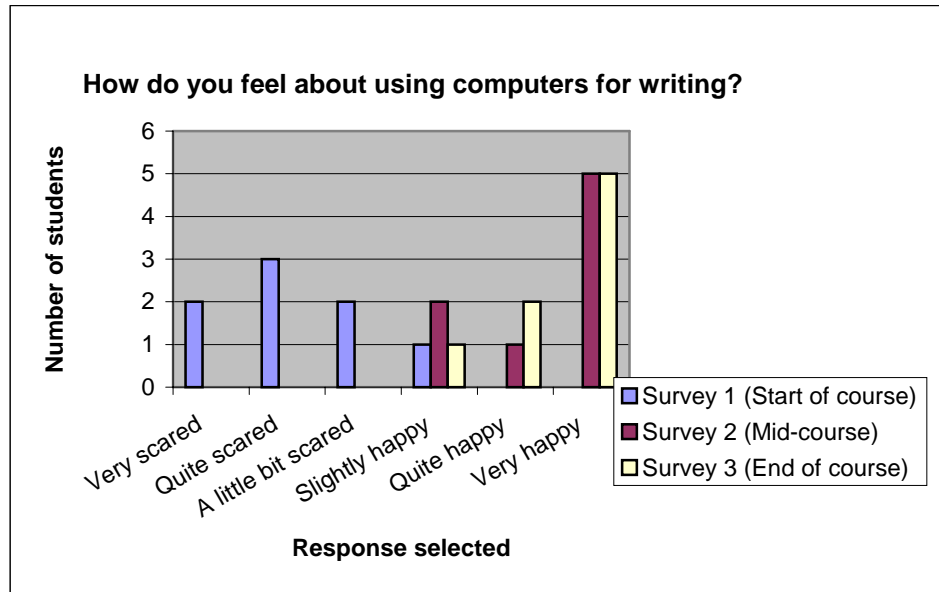
4.2.1 Results (Phase I) – initial, mid-course and final surveys

Surveys of all three streams were carried out at the beginning, middle and end of the Phase I course. Responses were sought from all participants attending in the week of the survey, not all surveys were completed and returned despite reminders, this gave rise to differing numbers of responses on each occasion. Each stream of participants was given a survey which addressed similar questions but was phrased appropriately for the target stream. For comparative purposes the same questions were asked at the beginning, middle and end of the pilot. The surveys were split into two sections, the first section in each survey sought information regarding the feelings of the participants towards various aspects of the project. The second part of the survey asked participants to rank aspects of the project in order of importance. This second section was not well understood by any of the participants. The results from the first sections of the surveys were very informative and, although there are insufficient numbers for statistical treatment, graphical displays show clear trends of increased confidence in the parameters addressed.

4.2.1.1 Survey questions for students only

The students were asked five questions regarding their feelings about aspects of the course. All of these questions used a scale described in words and ranging from a response of “very scared” to “very happy” in order to minimise the potential for misunderstanding. The questions and the responses obtained are presented in Figures 1, 2, 3, 4, and 5.

Figure 1
Student's
feelings about
writing using
computers



As can be seen from Figure 1, feelings about using computers for writing changed over the 15 weeks of the pilot. Initially the feelings of the respondents were negative, ranging from those who were “Very scared” at the prospect of using computers for writing to those who were “Slightly happy”. None of the students were either “Quite happy” or “Very happy”. By the middle of the pilot there were no longer any respondents who were negative about writing with computers, and the majority were “Very happy” this reflected the growing skills and confidence of the students. This positive attitude was maintained for the rest of the course.

Figure 2
Student's
feelings about
working with
the young
people

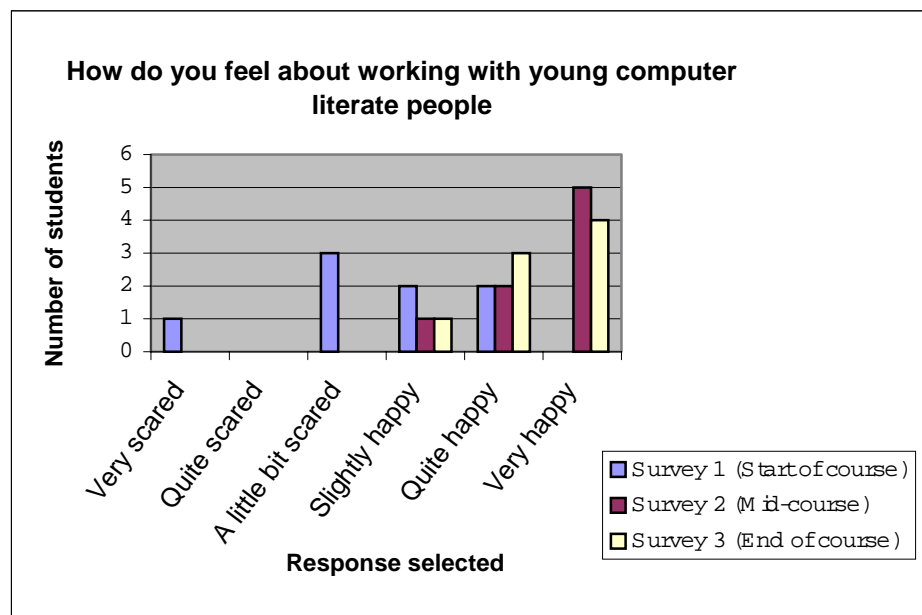
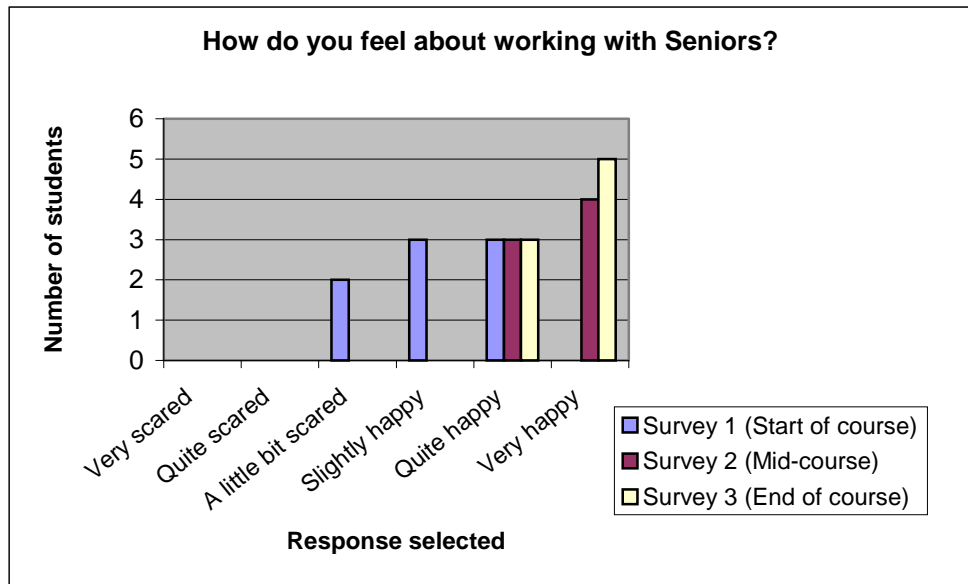


Figure 2 addresses the students’ feelings about working with the young computer literate people. Initial responses indicated that the students were less apprehensive about working with young people than they were about the technology. Only one respondent was “Very scared” at the beginning with the others clustered slightly to the “happy” side of the middle of the continuum. Over time (as friendships and group

identity developed) the respondents became increasingly happy about working with the young people.

Figure 3
Student's
feelings about
working with
Seniors



From figure 3 it can be seen that the respondents were slightly less concerned initially about working with the Seniors than with the young people. This may be in part due to the fact that the age range of the students was much closer to that of the Seniors than to the young volunteers. By the mid-course survey all of the students were either “Quite happy” or “Very happy” about working with the Seniors, this attitude was maintained.

Figure 4
Student's
feelings about
writing a story

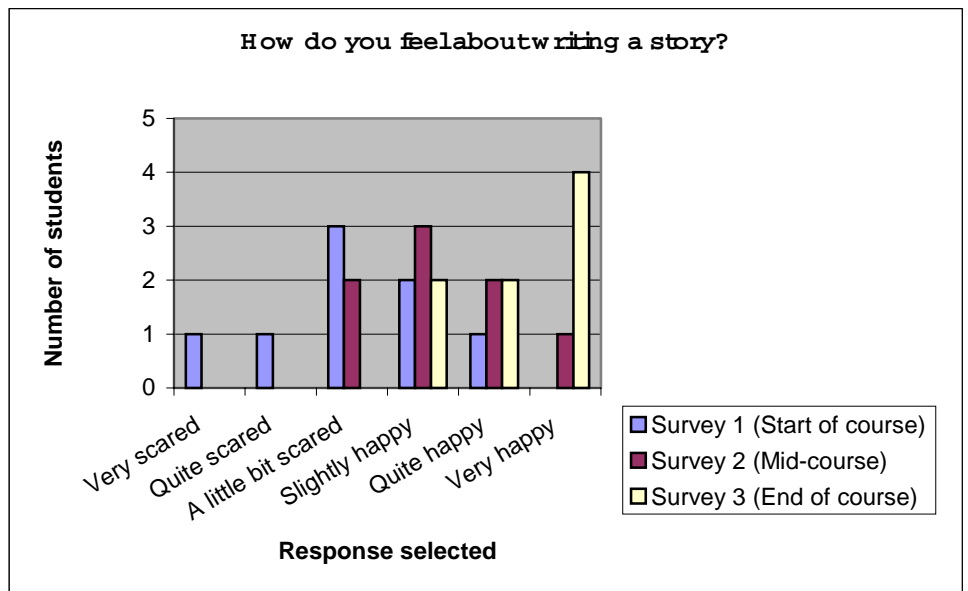


Figure 4 shows the change in student feelings with respect to writing a story. Initial feelings were mixed with the whole range of responses except “Very happy” being selected. This reflects the varying levels of confidence shown by the students in their English literacy skills at the beginning of the program. Differences by mid-course are not as marked for this question as for others, however the development of stories was only in the early stages by mid-course. By the end of the course, once the

stories were complete, there was a further increase in positive response with the majority of the students being “Quite happy” or “Very happy” about writing a story.

Figure 5
Student’s
feelings about
using
computers for
working with
numbers

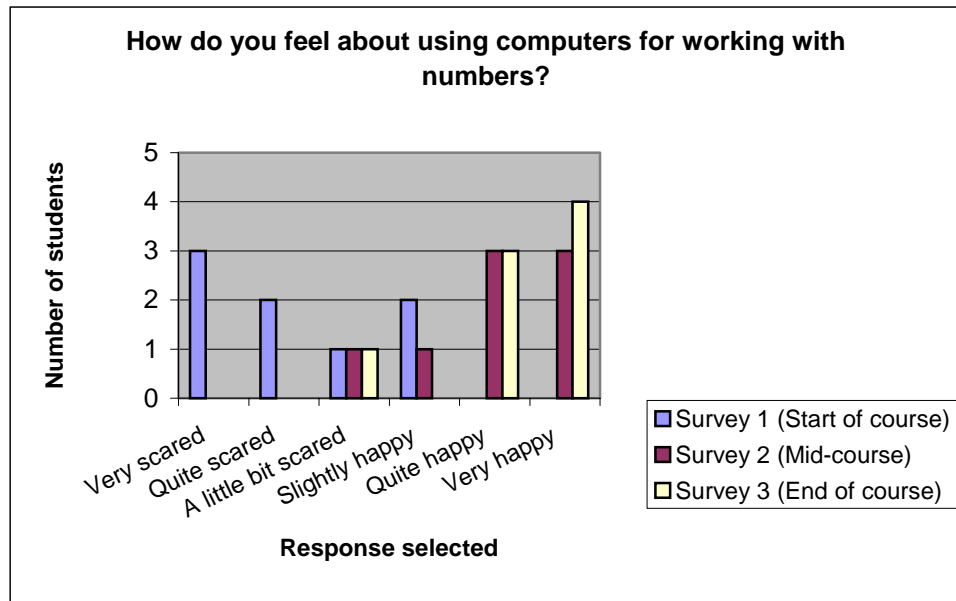


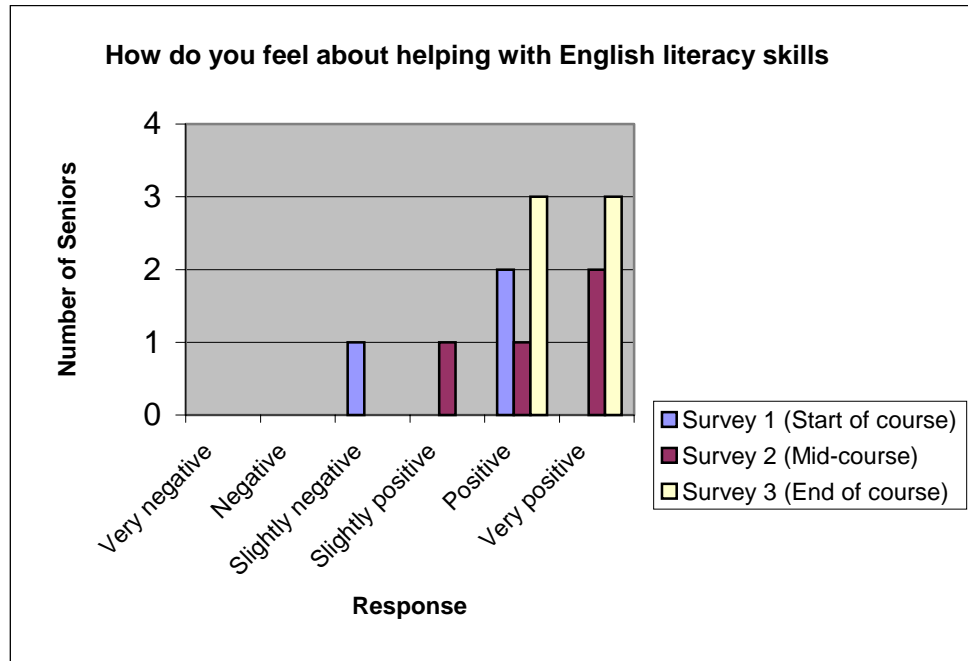
Figure 5 shows that at the beginning most of the students were negative or very negative about using computers for numerical applications. Again there was a clear change in feelings by the middle of the program (just after the numerical exercises had been completed) this was sustained to the end of the course with most of the students either being “Quite happy” or “Very happy” by that stage.

The trends for all of the questions asked of the students are very marked. A strong increase in confidence as indicated by how “scared” or “happy” they felt about the parameters investigated. This increased confidence paralleled their developing skills in using computers as demonstrated by the exemplars later in these results.

4.2.1.2 Survey questions for Seniors only

The Seniors were asked four questions regarding their feelings about aspects of the course. All of these questions used a scale from 1 (very negative) to 6 (very positive). The questions and the results obtained are presented in Figures 6, 7, 8, and 9.

Figure 6
Seniors'
feelings
about
helping with
English
literacy skills



There is a trend towards increased confidence in helping others with English literacy skills, as might be anticipated from the greater life experience of the Seniors there were no “Very negative” or even “Negative” responses even at the beginning of the program, however neither were there any “Very positive” responses at that stage. Some increase is apparent by mid-course, with a further improvement by the end. At mid-course the skills of the Seniors were just beginning to be fully utilised because of the need for students to practise some basic computer techniques before focussing on literacy and story writing.

Figure 7
Senior's
feelings about
working with
young
computer
literate people

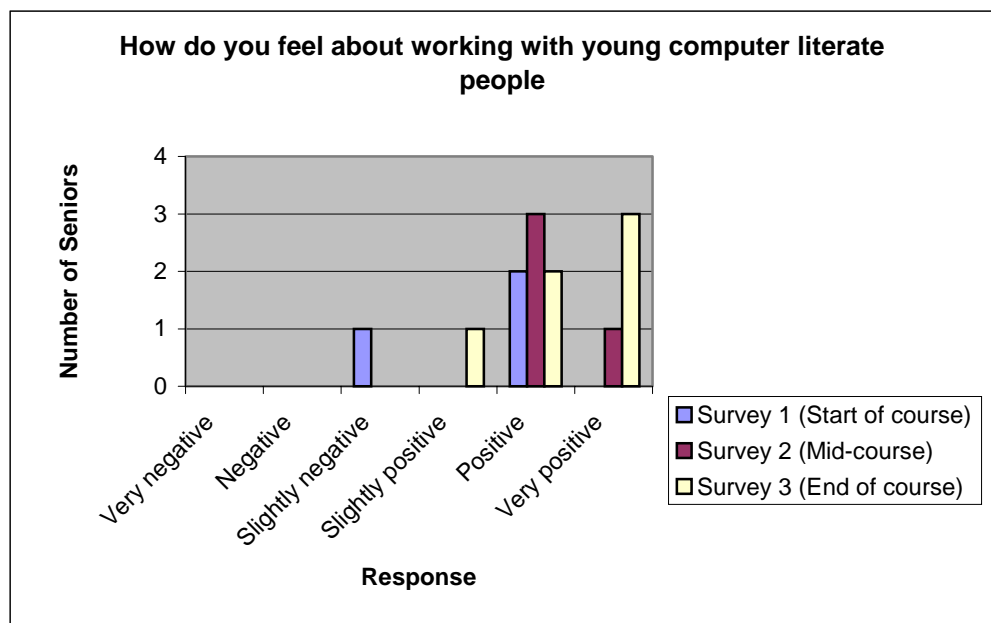
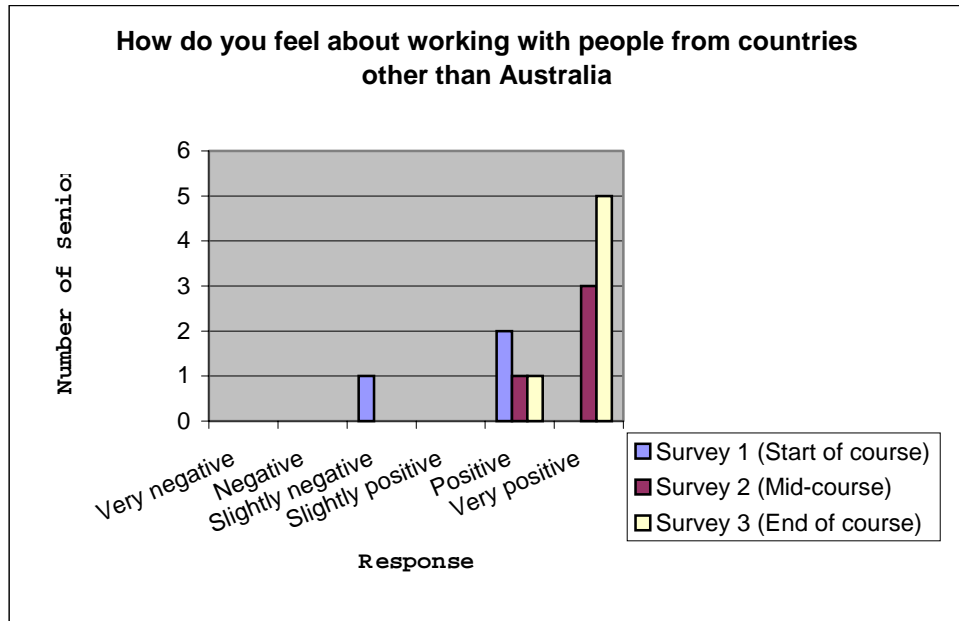


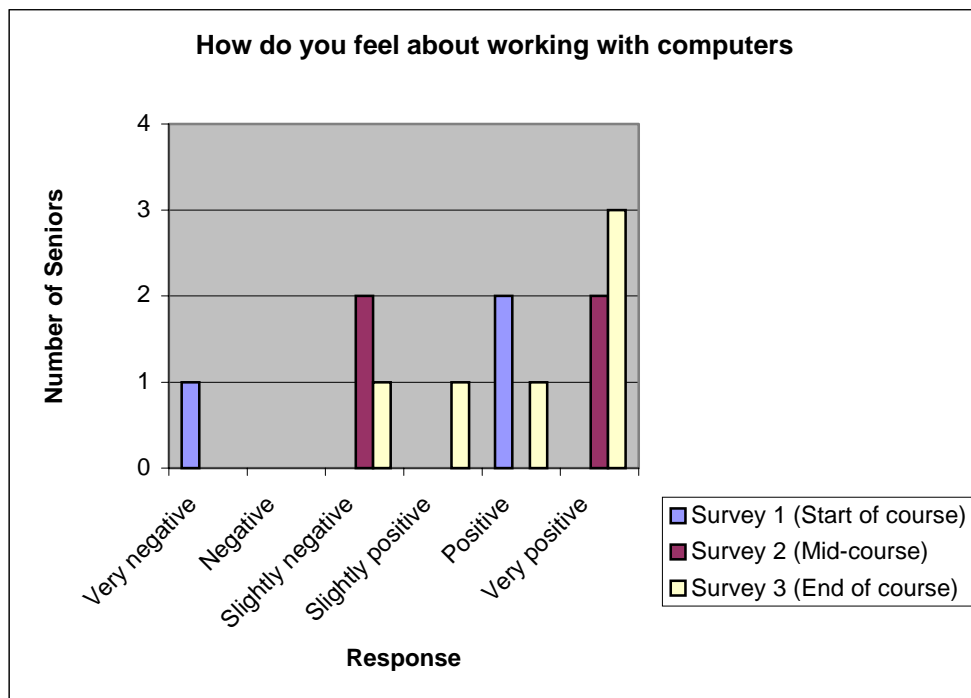
Figure 7 shows the response of Seniors to working with the young computer literate people. Again at no stage were the Seniors “Very negative” or “Negative”, however a trend towards a more positive response is still apparent as the program progresses.

Figure 8
Senior's
feelings about
working with
people from
countries
other than
Australia



The feelings of the Seniors regarding working with people from other countries became increasingly positive throughout such that all but one of them were “Very positive” by the end of the pilot.

Figure 9
Senior's
feelings about
working with
computers



Unsurprisingly, the area where Seniors felt least positive at the beginning of the program was that of working with computers – three of the Seniors came to the program with little or no computer experience. The increase in confidence by the end of the pilot is marked with only one Senior still feeling “slightly negative”.

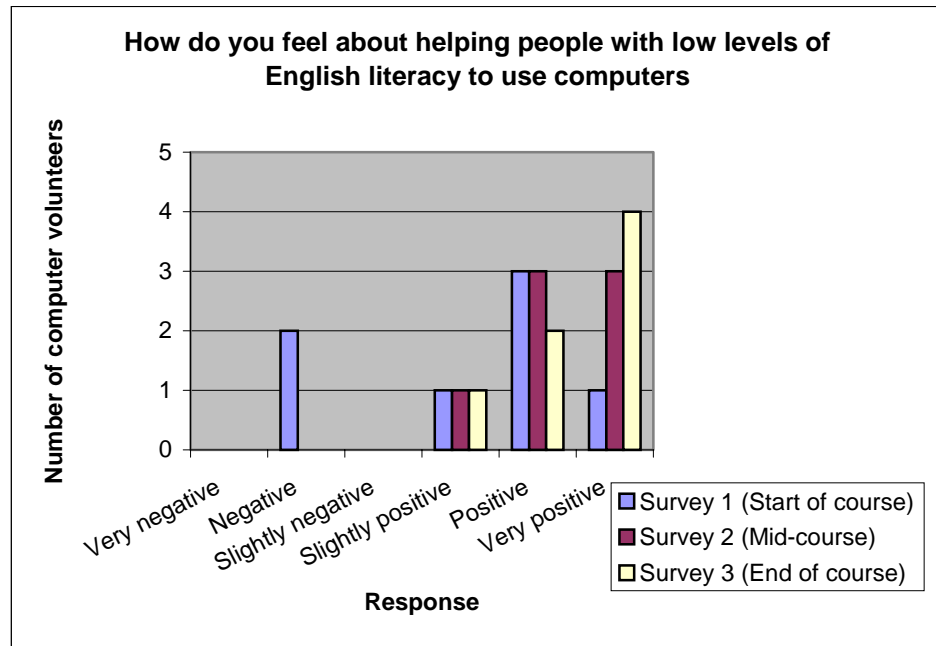
The responses of the Seniors to the survey questions demonstrated a trend of increasing confidence throughout the program. This trend was similar but generally less marked than that for the Students, except in the case of the question regarding computer use where some of the Seniors were also apprehensive in the earlier

stages of the pilot. This result is not unexpected because the Seniors came to the project with good literacy skills in English but in most cases with limited or no computer experience.

4.2.1.3 Survey questions for computer volunteers only

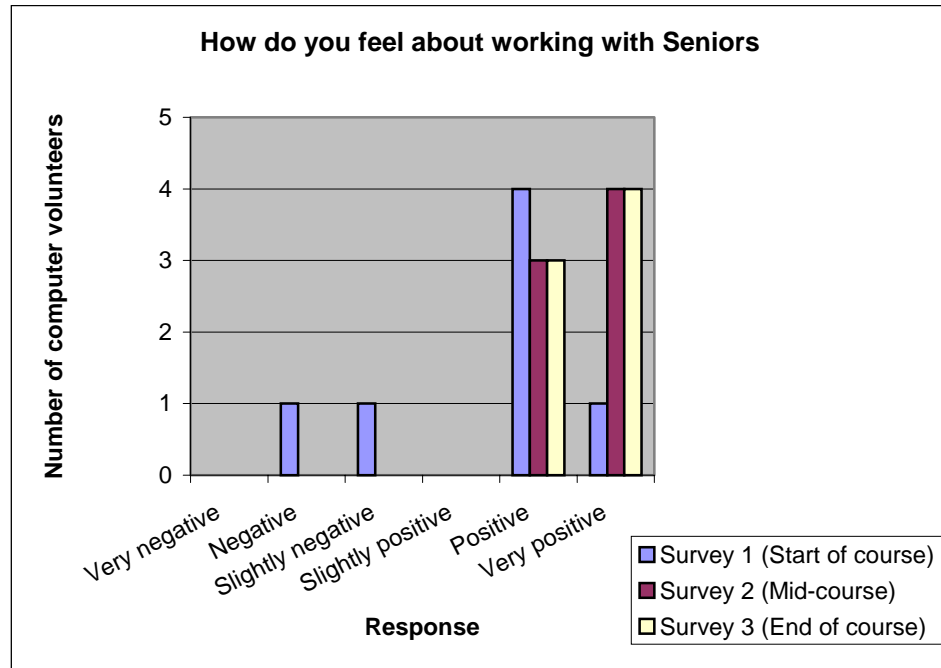
The computer volunteers were asked four questions regarding their feelings about aspects of the course. All of these questions used a scale from 1 (very negative) to 6 (very positive). The results obtained are presented graphically in Figures 10, 11, 12 and 13.

Figure 10
IT volunteer's
feelings about
helping people
with low levels
of English
literacy to use
computers



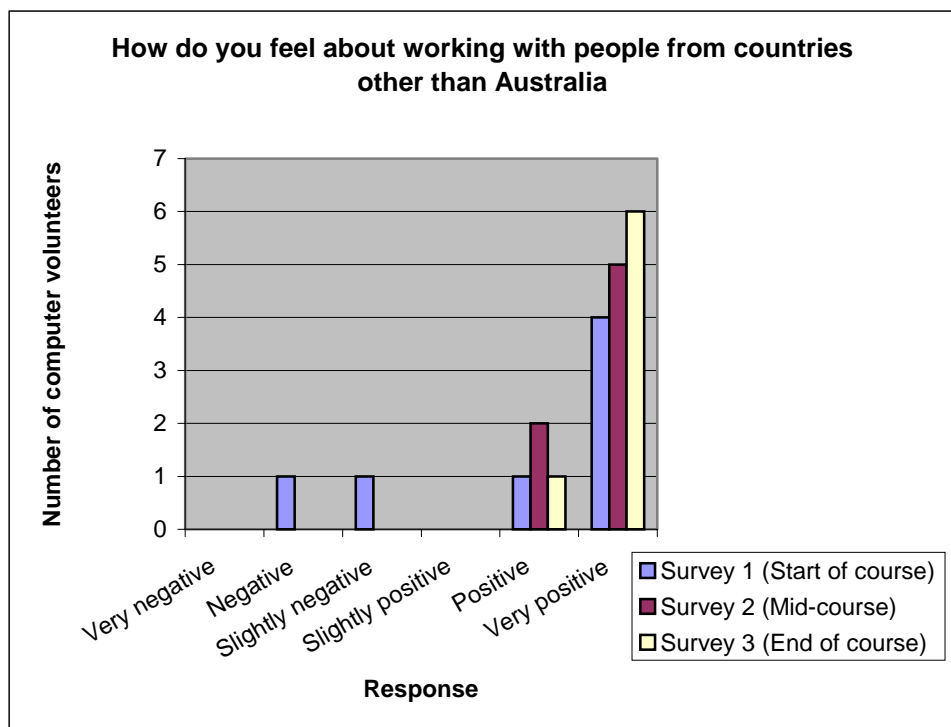
The feelings of the computer volunteers at the beginning of the program regarding working with the students were varied, they ranged from “Negative” to “Very positive”. As the course progressed they became more positive but still showed some apprehension regarding the task.

Figure 11
IT volunteer's
feelings about
working with
Seniors



Feelings about working with Seniors were mixed at the beginning of the pilot but by the middle of the course the computer volunteers were either “Positive” or “Very positive” about the experience, this feeling was maintained until the end.

Figure 12
IT volunteer's
feelings about
working with
people from
other
countries



The computer volunteers demonstrated some negativity initially about working with people from other countries but there is a trend of increasingly positive feelings until the end of the pilot where six of the seven respondents in the final survey felt “Very positive” about the experience.

Figure 13
IT volunteer's feelings about training others

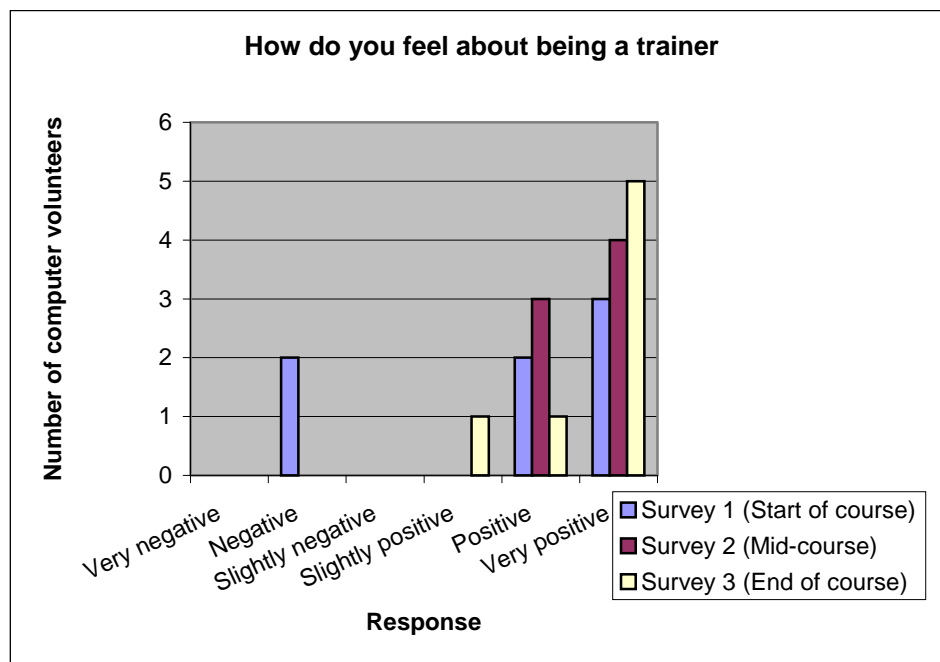


Figure 13 shows a trend of increasing confidence of the computer volunteers in their training role throughout the course.

4.2.2 Results (Phase I) – mid-course focus session

Because of the number of participants (over 25 in total) the approach used was to provide opportunities for comment by individuals in each group (Seniors, Computer Volunteers, Students) on several different focus questions. Also feelings regarding the course were sought by providing a variety of words and phrases both positive and negative for participants to select all that they felt were applicable.

A relaxed atmosphere was sought for response to the questions. Thus the morning tea time was chosen for the focus session and muffins and dips provided in addition to the usual tea, coffee and biscuits.

The questions were written on large pieces of paper placed around the walls. Participants were invited to write their opinions and comments on post-it notes and attach these under the relevant question. This approach was adopted for several reasons:- to increase the reliability of responses due to anonymity of respondent; increase number of responses (the student group find speaking out in public difficult because they lack confidence in their spoken English and the IT volunteers are often not very articulate); allow thinking time before response; enable participants to either produce an individual response or respond as a pair or small group. The approach was successful in parts. The students still have some difficulty in finding appropriate words (both verbally and in writing), so responses from that group were limited and did not always address the questions fully. The attitudinal survey by selection of applicable words and phrases was more successful, probably because the students have a greater vocabulary and understanding than they can easily express either verbally or in writing.

The questions were split into 3 sets, one for each group of participants (the questions were similar in focus for each group but targeted to each group).

4.2.2.1 Questions and responses

The most articulate responses were from the seniors. Responses from the IT volunteers were less so, and those from the students were the least informative. This followed the anticipated pattern, because the English literacy levels of the students are less than those of the other groups and dealing verbally or in writing with abstract rather than concrete concepts demands higher literacy levels in the relevant language.

Seniors

Question:- *Please write some comments to tell us what you think about the project.*

Responses were generally very positive with the majority commenting on how positive and effective was the concept:

“The project is an excellent concept”

“Excellent project – would like it to be 3 or 4 hours per session to enable more learning time”

“Fascinating and a learning experience for all”

There were also concerns that the computer skills were too complex and that the English was more important:

“Needs to be more basic – concentration on written English and basic computer exercises”

Question: *Please give us some thoughts about how much the students are learning and why.*

The responses were fairly positive with comments referring to the effectiveness of one-to one as a training approach and the need for students to engage with the process is several ways:

“If they are prepared to participate fully 1 on 1 contact is really good for them”

“..., time, application and practice will overcome most hurdles”

Again concerns were expressed regarding the perceived relative importance of the computer skills and the English literacy skills:

“Course too ambitious English more important”

Question: *Please give some comments on how the computer people are helping.*

Most of the opinions expressed by the Seniors regarding the role of the IT volunteers were positive:

“Good for students and Seniors”

“Essential for the course”

“Very well with the techo stuff”

However sometimes the Seniors felt that the IT volunteers were progressing too quickly:

“Good computer knowledge but too fast – even for English speaking Seniors”

Opinions expressed by the Seniors in response to the questions were generally positive although there were some reservations regarding the perceived weighting of IT in comparison to English literacy.

Information technology volunteers

Question:- *Please write some comments to tell us what you think about the project.*

The IT volunteers who were present on the day of the focus session were entirely positive about the project with a number of comments expressing the opinion that it is “good experience”, other equally positive comments:

“Learning a lot myself about teaching”

Question: *Please give us some thoughts about how much the students are learning and why.*

Again the response from the IT volunteers was entirely positive with variations around the theme of students learning a lot, and one very focused comment that:

“Help for each person makes learning quicker”

Question: *Please give some comments on how the Seniors are helping.*

Comments from IT volunteers were also positive in that they found the Seniors helpful in increasing understanding and they also felt that the Seniors were themselves learning a considerable amount:

“The seniors are very helpful”

“good they learn too!”

Students

Question:- *Please write some words or a phrase to tell us what you think about the project.*

A number of comments were made, all were favourable and most were variations on the theme of “interesting” or “good” one of the respondents wrote:

“... and I would like to continue to another course as well”

another very positive comment made reference to:

“Learning many things”

Question: *Please tell us about how the computer people are helping you.*

All the responses were positive and generally picked up the theme of the question by emphasising the helpfulness of the IT volunteers rather than saying how they were helping, although one comment did say:

“showing me how to use computer”

Question: *Please tell us about how the Seniors are helping you.*

Again the responses were all very favourable, mostly using the word “good” but also including the following:

“senior people are a must !”

“help me with english”

Use of the focus questions and individual responses gave rise to informative qualitative data on how all three streams of participants felt about the course. As expected the students found it more difficult to express themselves in written English than the other groups. However their responses consistently expressed interest and enjoyment. Responses from all three streams were generally very positive with references to learning, friendliness, patience and interest.

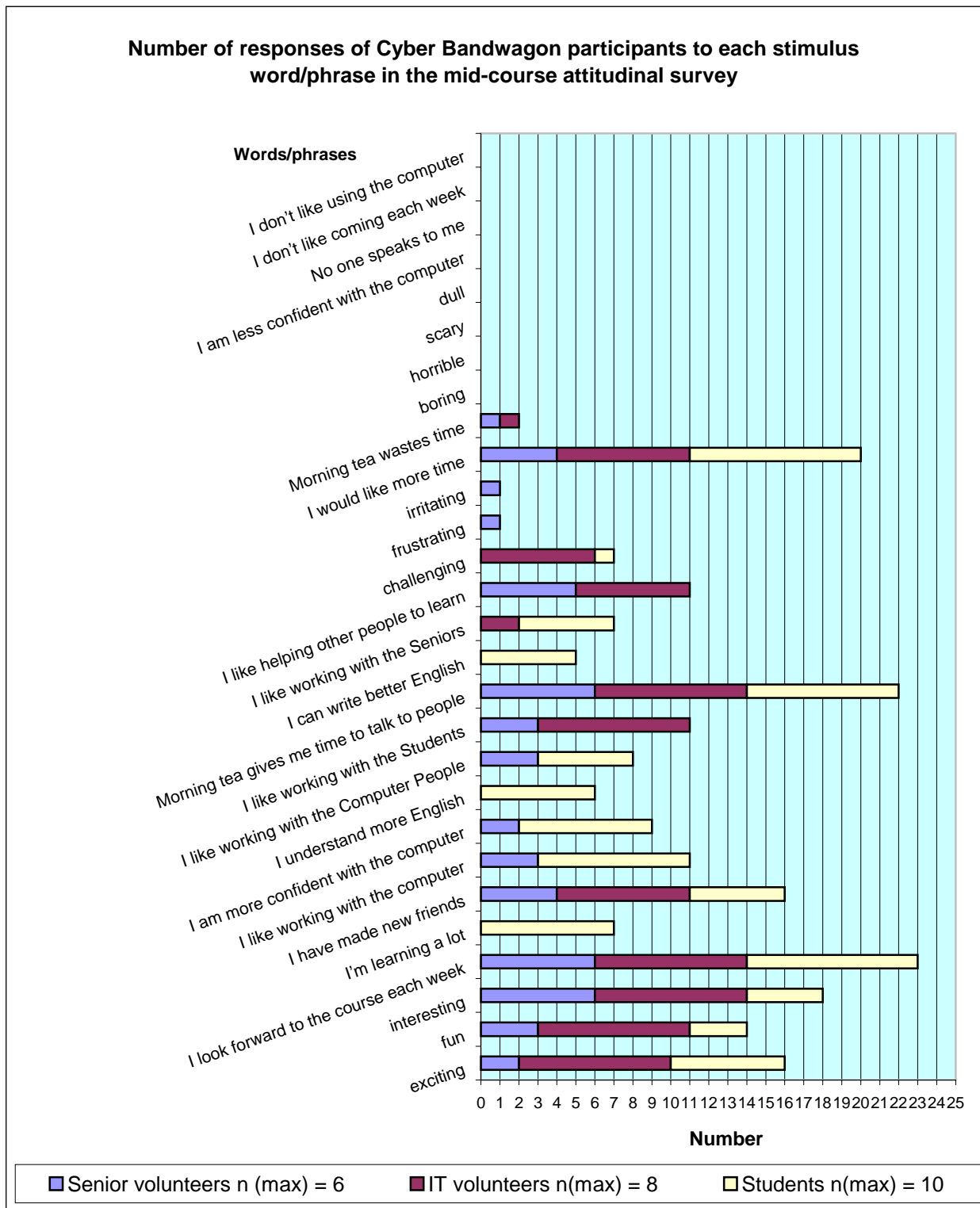
4.2.2.2 Attitudinal Survey

An attitudinal survey was also carried out at the halfway point in the first pilot in order to generate some semi-quantitative data. Table 1 shows the tabulated results, and Figure 14 a graphical representation of the results.

Table 1 Attitudinal survey

Words and phrases	Number of ticks		
	Seniors	IT volunteers	Students
exciting	2	8	6
fun	3	8	3
interesting	6	8	4
I look forward to the course each week	6	8	9
I'm learning a lot	Not asked	Not asked	7
I have made new friends	4	7	5
I like working with the computer	3	Not asked	8
I am more confident with the computer	2	Not asked	7
I understand more English	Not asked	Not asked	6
I like working with the Computer People	3	Not asked	5
I like working with the Students	3	8	Not asked
Morning tea gives me time to talk to people	6	8	8
I can write better English	Not asked	Not asked	5
I like working with the Seniors	Not asked	2	5
I like helping other people to learn	5	6	Not asked
challenging	0	6	1
frustrating	1	0	0
irritating	1	0	0
I would like more time	4	7	9
Morning tea wastes time	1	1	0
boring	0	0	0
horrible	0	0	0
scary	0	0	0
dull	0	0	0
I am less confident with the computer	0	Not asked	0
No one speaks to me	0	0	0
I don't like coming each week	0	0	0
I don't like using the computer	0	Not asked	0

Figure 14 Results of Mid-course Attitudinal Survey



Key points established from this survey include the following:

- ◆ no-one selected any of the negative words and phrases
- ◆ all Senior volunteers present, all IT volunteers present and 9 out of the 10 students present selected "I look forward to the course each week"

- ◆ of the 10 students present 6 felt that they understood more English and 5 that they could write better English as a result of the course so far
- ◆ eight of the 10 students liked working with the computer and 7 out of the 10 felt more confident in using computers
- ◆ all of the Senior and IT volunteers and 8 of the 10 students present found the morning tea break valuable in providing opportunities to talk with people.

4.2.3 Results (Phase I) – reflective notes

Initially regular weekly reflective notes were completed – all participants were given a journal page with prompt questions designed to encourage reflection. This posed some challenges in execution for the following reasons:

- ◆ Low literacy levels are often associated with poor abstract conceptualisation such as reflective skills. When the literacy difficulty is in a language which is not the first, as with the target group of students for the first phase, there may be difficulties in understanding and translating the concept and then in expressing the resulting reflections in the second language.
- ◆ Students often find it difficult to understand what is sought in a reflective journal, and also cannot see any need to complete one (unless they are in an area which encourages reflective practice such as education or psychology).
- ◆ If a course is going well for a student not trained in reflective thinking and there are few critical incidents, then the reflective journal is likely to become repetitious and uninformative. Students are also likely to find completing it increasingly tedious and will thus adopt a more and more minimal approach.

This difficulty was to some extent anticipated and the following strategies were adopted initially in an attempt to overcome the potential problems:

- ◆ All participants were asked to complete a reflective journal – to prevent the students feeling singled out.
- ◆ Journal pages with different prompting questions were designed for each participating stream and for each session, with the intention of initiating reflection.
- ◆ Participants were initially asked to complete their pages at the end of the session – this generally resulted in minimal responses. After the third week they were invited to take the pages home and complete them for the following session, however this did not lead to more detailed reflection and pages were often not returned, despite reminders.

None of these strategies were wholly successful and all streams began to produce repetitious journal pages very early in the pilot. This was exacerbated by the fact that the prompt questions on the journal pages needed to be very open, thus it was not possible to develop sufficiently different ones each week to stimulate reflection. Because of the action research nature of the project it was possible to amend the methodology during execution, thus after the 9th session the journal pages were only used once more, for the 12th session. During the 14th session the students were asked to use their computer to write a “short story” (effectively a reflective piece) about their feelings in relation to the course. This produced a much more reflective response, but would not have been feasible for every session due to time constraints and because of the initial low levels of both written English and computer skills. The students’ increased confidence and skill levels were well demonstrated by these pieces of writing, as were their very positive reactions to the project.

4.2.4 Results (Phase I) – observations of the investigators

The investigators provided feedback from most sessions. This addressed the level of interaction among the groups and recorded any critical incidents. Significant items recorded from the first session by the facilitators include:

“... the migrant students felt good about themselves and gained some beginners knowledge of computers.”

“There was an immediate rapport established by all parties.”

“Computer volunteers were very positive in their role – most not tending to take over from the migrants.”

Later sessions prompted further positive comment from the facilitators, it was particularly noted that there was interaction across as well as within individual groupings:

“There was a lot of learning occurring across the groups.”

“In the group there is great emphasis on consolidating, maintaining and developing helping skills between all participants.”

Of particular interest are facilitator comments from the session which took place on the morning after the World Trade Centre bombing, approximately half of the students were of Middle Eastern origin and all attended on that day:

“The news acted to some extent as a catalyst bringing the entire group (students and volunteers) closer together in their mutual horror at the attacks. A number of students expressed their feelings through their writing.”

As the course progressed enthusiasm from both students and volunteers was maintained and learning continued to be effective:

“Computer jargon can be complicated but the students are comprehending above expectation.”

“A highly flexible and engaging session for all. The computer lab was lively which provided the right setting for the students to use their new computer skills to start writing their stories.”

“They expressed delight when they accessed their email.”

“They are very reluctant to go home which shows their drive and enthusiasm towards the course.”

The extracts above illustrate the positive approach adopted by all participants throughout the pilot course. It is interesting to note that this positive attitude towards the project was present from the beginning even though the surveys revealed some

misgivings from participants in the early stages regarding their own ability to fulfil their role.

4.2.5 Results (Phase I) – student products including stories

Throughout the program the students have produced a range of documents including a spreadsheet, bar chart and presentation. Levels of achievement vary but the work of all students demonstrates improvement both in English literacy level and in use of computers, and parallels the trend of increasing confidence shown in the survey results. All of the students successfully sent e-mails to one of the investigators, as did two of the Seniors who had previously had no e-mail experience.

The example below demonstrates progression of one individual (a female of Middle Eastern origin – and therefore with a written language using different characters from English) through from initial introduction of word processing to the final product – the story.

This piece of text was written by a student during the 2nd week of the program – it took most of the session for the student to produce and save these two lines of text.

“Cyber bandwagon project
This is the first time I have used computer.”

Throughout the next 5 sessions the students developed their computer skills, including inserting pictures and being introduced to using the computer for numerical applications. They also completed some literacy exercises. During this time students were encouraged to begin thinking about their own stories and during the 8th session to begin writing.

By the tenth session the student’s story was beginning to take shape.

“I was born in a small town in Iran where grew up and finished my primary school. I have nice memories of my time there, especially the very cold winters when I had to go to school through very deep snow but I enjoyed it.

When I was 12 years old my parents moved to Tehran because our house was burnt by some who wanted us to change our religion from Bahai to Muslim and we didn’t agree with the idea. They decided to get us out so one night they attacked our house and set fire to it. We run out without anything. I was so scared in the darkness.

My mother, my younger sister and I sneaked out, wearing only pyjamas and no shoes. We walked for about 5 hours until we reached the next town. We had no money and we didn’t know any one but we had to move on. We tried to stop the cars but no one would stop for us.”

The next few sessions were split between continuing story development and accessing the internet to enable students to download information or pictures for insertion in their stories. By the end of the program the student had: added pictures (from ClipArt and the internet); completed and partially edited the story; and (with support from a computer volunteer) developed it into a Powerpoint presentation – a slide from the presentation is shown in Figure 15.

Figure 15
Powerpoint slide –
extract from student
presentation (Phase
I)



When I was 12 years old my parents moved to Tehran because our house was burnt by some who wanted us to change our religion from Bahai to Muslim.

The Baha'i faith was founded a century and a half ago and is today among the fastest growing of world religions. The main theme of the faith is unity. Baha'is believe that there is only one God, that all the world's religions represent one changeless and eternal faith of God and that all humanity is one race destined to live in peace and harmony.

We could not agree with the idea, so they decided to get us out. One night they attacked our house and set fire to it. We run out without anything. I was so scared in the darkness.

The progress made by all the students is considerable. There are inevitably variations, and all of these students would have benefited from more opportunities to practice outside the sessions. Levels of necessary support from the computer volunteers decreased towards the end of the pilot, but most of the students still needed some guidance. Several of the students have been motivated to acquire computers by their involvement in the course and others have expressed an interest in attending other courses to continue developing their skills.

4.3. Results (Phase I) – session planning and materials development

Session planning and material development were carried out on a weekly basis in order to be as responsive as possible to the needs of the students. For example this allowed for the inclusion of a second session continuing the same topic on two occasions in particular, both of these occurrences were linked to the mid-semester break. Some participants were unable to attend on either one or both of the weeks, so the topic of the preceding week was continued in the first week of the break and the topic introduced in the second week was continued for a further week. An example of the session planning/trainer support and of the learner support materials used in Phase I can be found in Appendix D.

5. Possible Modifications for Phase II

5.1 Introduction

There was a pre-planned variation in the project for Phase II. The target student group was widened to include people of English Speaking Background (ESB) as well as those of Non-English Speaking Background (NESB). The modifications to the draft delivery model used in Phase II are based both on the evaluation of Phase I and on the potential needs of an even more diverse group of students than those in Phase I.

5.2 Pre-planned modification

Widening the target group to include students of ESB could have a significant impact on the way the students are able to respond to the material. The Phase I students all had relatively low levels of English literacy, but they were all literate in their own languages and understood the underlying principles of literacy. People of ESB with low levels of English literacy may find it easier to understand their IT volunteers than the NESB students but more difficult to write their stories. This modification required a broadening of recruitment strategy to target potential students of ESB.

5.3 Other potential modifications and strategies

Feedback and investigator evaluation suggested some strategies for increasing the potential utilisation of the model in a community context and also increasing the effectiveness of course delivery to a very diverse group of students:

- ◆ Integrate literacy exercises into Word exercises from an earlier stage
- ◆ Provide all learner support materials as a booklet to students, and both Senior and IT volunteers at the beginning of the course
- ◆ Provide session plans and trainer support materials linked to learner support materials for both Senior and IT volunteers and develop these into written materials to support the roles of the volunteers
- ◆ Allow students to progress at their own pace with the support of an IT volunteer, and access to a “floating” Senior volunteer (less prescriptive delivery).
- ◆ Introduce the internet at the beginning of the program. This has the advantage of providing access for the students to additional stimulus material for developing stories. Disadvantages are: that of placing an exciting (to most students) aspect of the course at the beginning rather than at an educationally strategic point of between $\frac{1}{2}$ and $\frac{3}{4}$ of the way through the course as a fillip to possibly lagging enthusiasm; the potentially negative effect of too much stimulus material leading to the “I can never do that” response.
- ◆ Avoid sessions during school/TAFE holidays – it was hoped to avoid scheduling sessions during these times (in response to child-care and holiday issues).

5.4 Implementation of modifications and strategies

Some of the above modifications were adopted for Phase II although the available timeframe and logistical considerations did not allow for full implementation of all of them.

Flexibility enabling self-paced learning was introduced by providing support materials at need ie on completion of one topic the next was available to the learner. All support materials were available to the volunteers so that they could utilise the materials relevant to the student(s) with whom they were working at any one time. The student booklets (Appendix E) and parallel volunteer support booklets (Appendix F) were developed during the second phase. Due to time constraints it was not possible to complete these before the beginning of the phase.

On balance it was decided to keep the internet sessions at the $\frac{1}{2}$ to $\frac{3}{4}$ point as the advantages educationally outweigh the disadvantages. Scheduling sessions during holidays was also unavoidable due to a combination of: the lack of co-incidence of the mid-semester break with Easter in 2002; the constraints of allowing sufficient time for recruitment; the availability of a suitable room; to ensure completion of Phase II and reporting on the project by the specified project completion date. Insufficient time was available to develop and integrate language exercises into the earlier stages of the course materials.

6. Results and evaluation – Phase II

6.1 Introduction to Phase II evaluation

Evaluation of responses to Phase II was less formal than that for Phase I. This was for a combination of reasons:

- ◆ the Phase I evaluation indicated that the project was a positive experience for all participants
- ◆ examination of progressive student work from Phase I suggested that there was an observable increase in competence
- ◆ the continuing participation of volunteers and students meant that the surveys used in Phase I could not be validly applied to all participants, thus these were not administered.

The evaluation strategies adopted included:

- ◆ offering participants the opportunity to comment at any point using post-it notes if they felt there was anything they would like to say – this was adopted as a potential strategy for capturing critical incidents and was unsuccessful
- ◆ an opportunity to comment on post-its (at the mid-point of Phase II)
- ◆ a final written reflective comment from all participants (students and volunteers) capturing feelings about the project overall
- ◆ monitoring progress through periodic examination of student work.

6.2 Results of Phase II evaluation

6.2.1 Opportunity to comment throughout

The response to this was generally disappointing. The participants were reminded at intervals throughout the course that their comments were welcomed, and post-its were made available. However participants were unwilling to spend time making written comments on the course – they preferred to work with the computers.

6.2.2 Opportunity to comment at the mid-point

As with Phase I the comments were very positive. The responses from the students were more articulate than those given in Phase I. This was to some extent due to adopting a strategy of encouraging the students to seek help from the volunteers in writing their comments.

Comments from students centred around feelings of increased confidence and self-esteem and included:

“I am very confident with the computer. It’s very helpful. I look forward to my class each week.”

“I thought I would never be able to touch the computer, but since coming to these classes I am 100% sure I can run and enjoy the computer, and I can become successful in my job.”

“For once in my life I don’t feel like a dyslexic.”

“All of a sudden I am actually able to use a computer.

“I learn a lot (esp.) my English. I have a little confident now to talk to people.”

“I am 53 years old and have had a computer at home for over 2 years and was convinced I would never be able to learn a thing. This class has proved me wrong.”

The comments above suggest that, in addition to increased levels of English and IT literacy, a significant outcome from the course has been a general growth in confidence of the students.

Only 3 Seniors were present at the focus session and all were also Phase I participants. Their comments address a number of different aspects of the project and are particularly valuable because of their participation in both phases. The feedback was generally very positive and showed an appreciation of the difficulties engendered by the diversity of the group:

“The course has increased our cultural awareness as well as improving our computer skills. We all just wish it would go on forever.”

“The course is useful and works as it was set up.”

“It is difficult to structure with people of different backgrounds and experience.”

“A valuable aid to students in learning to use a computer, with some experience in use of English rubbing off.”

“Students sometimes seem uncertain what to do next – perhaps more vetting of progress through the prepared guides.”

“The students are gaining more confidence every week.”

“The computer people have learned to slow down”

“Computer people have benefited from last year’s experience in the teaching role.”

As with the Seniors, only 3 of the IT volunteers were present at the focus section, and again they had all participated in Phase I. The comments are much more articulate than those made by IT volunteers (including these three) at the focus session for Phase I. All the comments show a high level of commitment and a great deal of satisfaction with their involvement:

“I think it great, because it gives the opportunity to meet people from different backgrounds. Also its a great idea to teach people computers.”

“I look forward to coming here every Thursday morning. Particularly enjoy the students’ interaction with each other.”

“Enjoy seeing results of my input.”

“I love the project and being a part of it each week. I love teaching the students computers and I think it is a great chance to meet new people and make new friends and to interact with people of all ages and different cultural backgrounds.”

“They [the Seniors] put a lot of time and effort into their teaching and are always willing to help anyone that needs a hand. I think they are great.”

“Project is a great opportunity for people to learn the basics of the computer. One-and-a-half hours of tuition would be better. Time goes too quickly.”

There were also a number of specific comments on the effectiveness of the learning experience for the students:

“Learning well. Great course structure.”

“They are learning quite well. It’s a great course.”

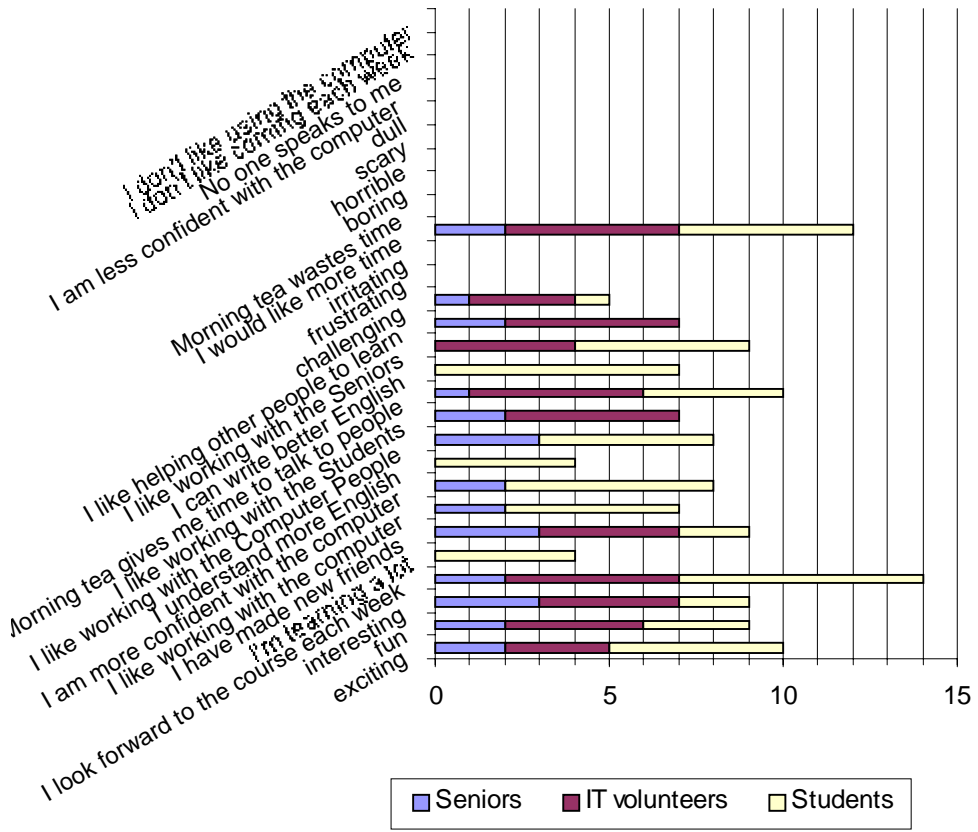
“I think the students are learning a lot and learning very well. I feel the students are putting a lot of effort and time into their learning. It is a great course with great opportunities for all.”

6.2.3 Attitudinal survey – Phase II

An attitudinal survey was also carried out at the halfway point in the second phase in order to generate some semi-quantitative data. Figure 16 is a graphical representation of the results.

Figure 16 Results of Mid-course Attitudinal Survey

Number of responses of Cyber Bandwagon participants to each stimulusword/phrase in the mid-course attitudinal survey



Responses were very similar to those for the first phase with no negatives selected. However it is interesting to note an ambivalent attitude to morning tea with people feeling that it wasted time but also that it gave them time to talk to one-another.

6.2.4 Final reflective piece of writing from all participants

The response to this was very positive with all three participant streams generating a variety of positive reflections.

The written material from the students illustrated: their high degree of satisfaction; their level of literacy (particularly with respect to the 'jargon'); and their awareness of their own learning. Extracts from the writings included:

“The computer course helps us to overcome fear of the unknown. We started to use Microsoft Word and Internet. It is much easier to learn computer with help than just at home. If you have got some problem and stuck our tutor always comes to our assistance.”

“Since I’ve known this computer lesson I’m so happy to learn and interested. It’s lots of fun especially with the people around me. It is so nice to communicate with people like this especially from different countries.”

“Our tutors as well, encourage us to improve our English. We wrote the story about some interesting events in our life and we could communicate during the morning tea.”

“I’m very happy to be taking part in this course and I have learned many new and interesting things that I didn’t know before.”

“This computer is a big help for writing the right grammar and spoken English. I’m looking forward to buying my own computer one day so I can learn at home.”

“When I started the first lesson, I was very anxious. Computer is a new experience for me. The most difficult part is to understand the language and all the new vocabulary.”

“Slowly, I learn new words like: floppy disc, file, insert, etc. “

“I was very pleased to be able to converse with my son about computers. My husband, who was very sceptical at the beginning has also become very interested.”

“I would like to say that because the students, volunteers and lecturers were so enthusiastic that it made every thing easier and pleasant. It became a game not work.”

“My husband bought a computer 2 years ago mainly for my children. I tried to use it with help but found it too hard to comprehend.”

“I heard about this course and thought of giving it a go with much apprehension. I was pleasantly surprised to find how much easier it was with pleasant patient volunteers who did not make you feel dyslexic.”

“I learnt how to use some of the functions of the computer. Instead of been happy with my new knowledge, I discovered there is much more to learn about using the computer.”

“Now I will have to struggle along by myself. I will often reflect on the Cyber Bandwagon group which helped me with a lot of

patience and kindness. I will also missed my classmates who are now new friends !”

“One thing is sure, TAFE gave me the taste to learn more about my computer.”

Comments from the Senior volunteers were equally positive demonstrating a reflective approach to the outcomes of the project and their role within it:

“Initially I was not at all clear as to my role as a Senior (of 72 years), but as a one-time teacher and a late-developed computing enthusiast I looked forward to being of help. This came to fruition. Students with whom I worked seemed to appreciate my “teaching” style and I found this rewarding after so many years away from “the game”. But it didn’t stop there. There was mutual involvement and enjoyment in working together to get ideas down correctly and doing this electronically. The end result was a feeling of achievement and a great social environment.”

“This program has had the advantage of assisting these people in communicating skills, both verbally and through the medium of the computer. This, in turn, will enhance their ability to communicate with more confidence in the workplace, in their home, and encourage a greater socialisation within their social group. “

“The migrant students’ exposure to computing was very practical and wide-ranging in the skills covered. At first many found this a bit daunting but generally gained confidence and were pleased with the end products. Of course they need more practice and in depth exposure to computing but the fact that many of them have home access to a computer, or in fact bought one during the course, means that they have the opportunity to move on and become more proficient.”

“Obviously the progress made varied substantially between migrant students because of differences in background and familiarity with the English language. Those who benefited most had a better grasp of the language and could type faster (albeit often two-fingered); the slower ones would have benefited from more practice time. However I am sure that substantial gains were made by all of them, even if the results were along a continuum of levels of achievement. “

“This has been a most enjoyable experience and I sincerely hope that the project can continue in the future. It would be a valuable service for all concerned –IT students to develop skills in passing on their IT know how to novices, Migrant students in both helping with their English language usage as well as developing computing skills, and Senior volunteers in making use of their

experience and engendering a feeling of usefulness to the community in retirement.”

“The project is a great initiative and if further developed could have wide reaching benefits.”

Again the IT volunteers made very positive comments both about the impact of the project on the students and its impact on themselves

“I think Cyber Bandwagon project is a good course for the people who came from non-computer background. It is a good way to teach them computer skills.”

“This course has fulfilled my aspirations to help others in computer literacy. The unfolding of new ideas from week to week has been mutually beneficial.”

“Cyber Bandwagon project gave us an opportunity to meet people from other backgrounds. Also gave us the opportunity to talk to them and find out bit about their countries and cultural background.”

“The students often from diverse cultural backgrounds have added a perspective not usually found in conventional teaching. This ongoing interaction has enabled the diverse group to become more homogenised as the weeks passed.”

6.2.5 Progressive student work

As with Phase I, student work from Phase II shows improved skill with time, the example below is illustrative of the progress made.

These lines were written during the 2nd session:

“My name is Olga. I am from Russia. I have been in Australia for one year. I like this country very much, especially weather.”

Over the next few weeks computer skills were developed and stories were planned, by the 11th session this student’s story was well under way extending to some 350 words – about a third of this is given below:

“I was born and grew up in the Ukraine. I graduated from Kiev State University, Geological Faculty so I had a lot of opportunities to travel throughout the Soviet Union. I had my work-in-practice in Norelsk. This city is part of Krasnoirsksk region. I spent four months there. During this sort time I experienced Spring, Summer, Autumn and Winter. In Summer there is no night. The sun shines for twenty four hours. We could read our books all through the night without any artificial light. Everyone and every animal still sleep at the

correct time and the streets are silent even though it is still light. It is very strange experience to feel.

By the end of the course the story had grown to some 500 words and was converted into a Powerpoint presentation, two slides from this are shown below:

Figure 17 Extract from student Powerpoint presentation (Phase II)



Stories varied in length with the shortest being only a few lines. This was produced by a student who spent much of her time developing a cv, possible because of the greater delivery flexibility of the second phase. The longest stories were in excess of 1000 words.

7. Conclusions

7.1 Challenges and solutions

7.1.1 Sociological interactions

The potentially volatile mix of cultures, ages, range of technological experience and language, was perceived in the planning stage as a challenge. In fact there was little friction at all. This was due to a combination of factors:

- ◆ the positive attitude of all participants
- ◆ the creation of an open and friendly atmosphere, particularly during the first session of Phase I, (in part due to an excellent cultural interaction session based around morning tea)
- ◆ the past experience of both investigators in cross cultural facilitation and working with mixed age groups
- ◆ the rapidity with which the Seniors adopted the strategy of intervening immediately when communication difficulties seemed likely
- ◆ the presence of a core group of continuing volunteers and students at the beginning of Phase II – these provided a nucleus of social cohesion which acted as a catalyst in developing the positive group dynamics which contributed to the success of the project.

7.1.2 Recruitment

The main difficulties encountered centred around recruitment. This was particularly true with recruitment of Seniors. Three of the first phase Senior volunteers continued into the second phase. Further attempts were made to recruit Seniors from the local area for Phase II. This was done through providing information to local leisure facilities and retirement communities. However again these approaches were largely unsuccessful, with only one additional volunteer being recruited. From contacts with potential volunteer sources it seems likely that there are two possible reasons for the difficulty in recruiting Seniors: the majority of Seniors with an interest in volunteering are already committed to an organisation; lack of confidence with technology. The short time-scale throughout was one of the major obstacles to recruitment of Senior volunteers. If the model is adopted by community organisation this difficulty may be overcome to some extent if they already have Senior volunteers available – they need not be retired, but mature adults with life experience and preferably some past role with a communications bias. The shortage of Seniors was largely overcome by the rapidity with which they adopted a successful “floating” role. Although this shortfall was initially seen as a challenge it did in fact facilitate the development of a cohesive group.

In the case of IT volunteers, recruitment for the first phase was straightforward. However due to timetabling issues not all of the volunteers intending to continue were able to do so. The same issues and those of work placement commitments rendered it impossible to recruit further IT volunteers from within the college. Three were able to continue into the second phase and a further two were recruited through the flyers distributed for the second phase. The lower number of IT volunteers in the second phase did not pose a problem for several reasons:

- ◆ not all students were able to commence in the first week of the course, thus it was still possible for there to be a one-to-one ratio for each student in their first week of attendance
- ◆ the continuing IT volunteers developed their skills in Phase I so that they were able to work on a one-to-two or one-to-small group basis if necessary during Phase II
- ◆ the Senior volunteers either already had, or had developed sufficient IT skills to provide some IT support to the students

First phase students were recruited comparatively easily (although the time for recruitment was extended for an additional week by putting back the planned commencement of the Phase I course by one week). For the second phase recruitment was more difficult. Contact was made with adult basic education tutors to seek students of ESB. As with the first phase flyers were distributed to libraries and community organisation and additionally to Centrelink. Information was also made available to the Multicultural Radio and Television Service of WA which broadcasts in a variety of migrant languages.

7.1.3 Participant retention

There was some attrition in the first phase although this was less than in conventional learning situations. Three students (out of the original 13) stopped attending during Phase I. One stopped coming because he missed 2 of the first 4

sessions and felt (according to his partner who was also attending) that he could not catch up. This issue was addressed by enabling students to progress at their own pace in the 2nd phase. The other two students were both of Afghani origin and stopped attending once the US attacks on Afghanistan commenced in retaliation for September 11th – unfortunately we have no control over world events. All three were invited to attend Phase II and one of them did so. Inconsistent attendance was an issue in the second phase. This was due to other commitments and also paradoxically to the self-paced nature of delivery. Students did not stop attending entirely if they needed to miss some sessions because they were aware that they had not missed any content. This difficulty might be overcome in a community setting by using a “drop in” approach for participants to attend at a variety of times when volunteers are available.

7.2 Achievements

The first phase of the project achieved some project objectives in part or in full. This phase provided the basis for further development and refinement of both the model and the support materials for and during Phase II. Material for a web site has been collected through the development of the students’ stories into a Powerpoint presentation.

- ◆ Volunteer Seniors and computer literate young people provided support and training for migrants
- ◆ The volunteers almost all expressed a desire to participate in Phase II (this was not possible for all due to timetabling of their own classes – most of the IT volunteers were TAFE students)
- ◆ Some students (migrants) expressed an interest in participating in the 2nd phase as helpers/mentors for other participants but were aware that they did not have sufficient skills to train others – several of these students attended the second phase, providing moral support for the new students and continuing to develop their own skills
- ◆ Students have written stories and converted them to Powerpoint presentations
- ◆ Session plans combined with trainer support materials were developed
- ◆ Learner support materials were developed to a greater extent than originally anticipated partly in response to a need for additional support to compensate for the lower than expected recruitment of Senior volunteers
- ◆ The above materials were further developed into booklets including student activities during the second phase – this was perceived as being particularly significant for the potential future use of the model by community groups
- ◆ The effectiveness of the model in the first phase was evidenced through a range of qualitative and semi-quantitative data collection and analysis techniques. These provide validation for the model as used in Phase I, and were also used to inform improvements for Phase II
- ◆ One couple and two individuals gained sufficient confidence to acquire computers for personal use
- ◆ Several students have expressed interest in the availability of courses which they can attend to further develop their skills (they were supplied with information regarding locally available courses)

- ◆ One individual felt confident enough to apply for and be accepted on an aged care course thus enhancing his employment opportunities
- ◆ Two students and one IT volunteer gained employment and one of the students attributed this in part to increased confidence gained through participation in the project
- ◆ A range of student stories were combined into a presentation, providing the basis for the project web site
- ◆ Information on the model and materials has already been disseminated through:
 - a presentation at the AVETRA Conference in March 2002
 - an article to be published in *Literacy Link* (July 2002)
 - a presentation to the Annual General Meeting of the WA Adult Literacy Council (July 2002)
- ◆ The WA Adult Literacy Council will host the project web-site making available: information on the project, a range of student stories and the student and volunteer support booklets

7.3 Future potential

There are a number of possibilities and options for future utilisation of the model and materials;

- ◆ In a community context, the web site will make the concept and materials available to literacy focused community organisations
- ◆ possible regional accreditation as a bridging course to programs at Certificate I or II level such as those in
 - General Education for Adults (CGEA)
 - Migrant New Opportunities for Women
 - Certificate in Spoken and Written English (CSWE)
 - Information Technology
- ◆ Mapping the competencies which have been developed to similar competencies in existing programs thus providing opportunities for using the story theme as a mechanism for clustering assessment opportunities in programs
- ◆ In conjunction with other WA Department of Training Initiatives eg First Click a computer literacy program
- ◆ The WA Adult Literacy Council and Read,Write Now have both expressed an interest in utilising the model and materials
- ◆ The arm of West Coast College which provides Adult Migrant Education Service (AMES) programmes is considering using the model and materials during periods when their computer facilities are not timetabled for classes.

The self-paced materials and utilisation of volunteer support increase options for flexibility which may enhance the suitability for delivery in a community context. The approach could be used on a “roll-on-roll off” and/or “drop-in” basis depending on the availability of resources (both computers and volunteers).

7.4 Key success factors

The project has proved very successful in enhancing English language/literacy, IT literacy and also confidence and self esteem in the student stream. It has also had a positive impact on IT literacy, confidence and self-esteem in the Senior volunteers

and a similar impact on the confidence, self-esteem and training skills of the IT volunteers. It also proved very popular with all participants. The key factors which made a significant contribution to the success of the project were:

- ◆ Experienced facilitator (to minimise any risk of friction and to manage the initial sessions) – IT and adult literacy experience was helpful in this role
- ◆ On-to-one ratio of IT or IT experienced Senior volunteer to student for the first two sessions (this was to get the students over the initial “I might break the computer if I touch anything” phase)
- ◆ Senior (mature adults with lifeskills) volunteers to provide a communication bridge – these volunteers operated on a “floating” basis which enhanced the development of group cohesion
- ◆ Opportunities for social interaction generated a strong and positive group dynamic
- ◆ Computers with Microsoft Office programs and access to the internet
- ◆ Clear competency statements on which to base the delivery
- ◆ Learning materials which were initially developed on an ongoing basis and therefore meet the needs and literacy levels of the target groups
- ◆ Effective learning and support materials for the students
- ◆ Effective guidance and support materials for the volunteers

These factors should be considered by any organisations considering utilising the model and materials. The context of delivery will dictate the significance of the above factors. For example the social interaction may be less significant if the course is run on a “roll-on-roll-off” or “drop-in” basis. Both sets of support materials will be available in pdf format for downloading from the WA Adult Literacy Council web-site. The materials have been designed and developed to facilitate delivery if the IT volunteer to student ratio is lower than the desired one-to-one (as it was in the second phase). It is hoped that the model and materials will be utilised across a wide range of contexts to enhance adult English language/literacy and IT literacy.