

Does Gender Matter in Online Learning?

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1. ABSTRACT

It is generally noted that computing is gendered, with women opting out of IT. Will the impact of online learning change this? Some researchers claim that women are disadvantaged in online courses. Others argue that we need a "women friendly cyber-classroom". Yet our experience is that the women achieve better results than the men; it is loner males that are disadvantaged by distance learning. We argue that online courses need to be people friendly so that no learners are disadvantaged.

Internet and Web Design is a popular first year introductory course in the Bachelor of Computing Systems degree. Since 1999 it has been taught flexibly. As well as traditional classroom sessions, we offered our students the choice of working remotely. Students could access the self-assessment questions and course notes and exercises in the classroom sessions or offsite at any time of day or night. The option of online learning proved to be very popular with the students, particularly those with work and family commitments.

Our research uses pre- and post- course questionnaires and focus groups, and includes the assessment results and behaviour of the different demographic groups of students. We considered such issues as student motivation, preferred study methods, personal commitments, access to technology and support methods.

We found that our course favours women and older students, who seem to be more motivated, better at communicating online and at scheduling their learning. In contrast, male students and younger participants need the discipline that classroom sessions provide. Interestingly our course has a larger proportion of female students than the degree programme as a whole. The challenge now perhaps is to design courses within an environment that satisfies and suits all learners.

2. INTRODUCTION

Gender based differences in performance and learning have long been recognised as an important focus for research, (Herring 1997, Weinman and Cain 1999, Richardson and French 2000). And if, as many researchers have reported, women are disadvantaged in, and males dominate the, computing classroom, (Spender, 1995, Cole *et al*, 1994), it is important to find out how we can avoid this in the online classroom.

In the first half of the 1990's researchers reported that the "locker room" atmosphere in the computing classroom extended to online discussions with males behaving aggressively and hogging conversational space (Currie 1993, Spender 1995, Kramarae and Taylor, 1993, Bell and de La Rue, 1995). However this may be because in the early 1990's the Internet population was predominately male, and the software tools needed to access the Internet usually required the use of arcane text-only commands.

Some researchers claim that this situation continues. Blum (1999) describes males dominating an online educational discussion forum, abusing women with negative comments about their computing and technical knowledge, causing the women to stop using the discussion forum and leave the cyber-classroom. Others argue that we need "women friendly cyber-classrooms" (Richardson and French,

2000 Cohoon 2001). However now the online population is more gender-balanced.¹ Indeed in January 1999, women made up half of all US adult Internet users. (Charny, 2000). With more women online, resulting in more women using online learning, perhaps male voices will no longer dominate.

There is also disagreement whether the net is suitable to the learning styles of female students. Anderson (1997) suggests that female learners have a marked preference for face to face communication. Belanger (1999) emphasised that the Net may prove more suitable to the learning style of females **once there is no longer a lower rate of female participation** on the Internet. The Canadian study of the use of computer communications for learning, reported that 81% of the women expressed a positive experience compared to 77% of the men.(ibid.)

Now that so many tertiary institutions are experimenting with online learning (Bates, 1995b), and with the trend towards "life-long learning" there is a consequential increase in self-study online. Much effort has gone into writing about the problems that faculty face in this new learning environment, but few have considered how students adapt. Should we be concerned which groups of students the computer-supported learning community best suits? Who learns best on line? Should we profile which students engage cognitively with online learning and which do not? Another relevant questions such as: Is online delivery best used for discussion and a communication rich course rather than practical subjects? Or " Will the trend to online learning have the side effect of benefiting learners who feel intimidated in the classroom?. Our experience on our course is that the women achieve better results than men do; it is the loner males who are disadvantaged by distance learning (e.g. Young *et al* 1999). We will argue that online courses need to be people friendly so that no learners are disadvantaged.

3. ABOUT THE COURSE

Internet and Web Design (IWD) is a popular first year introductory course in the Bachelor of Computing Systems degree. Students with a wide range of ages, ethnic backgrounds, life and work experiences study it. At first it was taught by traditional means of lectures and practical classroom sessions. Then in the first Semester of 1999 we changed to a more flexible method of teaching (Young *et al* 1999). As well as classroom sessions, we offered our students the choice of working remotely; that is, working through the lecture notes, practical exercises and weekly formative self-assessment questions online. Students could access the website in the practical sessions or offsite at any time of day or night. If they had a problem they could attend a classroom session or use electronic communication to seek specific help. The option of this flexible learning format proved to be very popular with the students.

In the 1999-2000 Summer School, the course was offered completely remotely (Dewstow *et al* 2000). There were no face-to-face (F2F) sessions except an introductory session, the project presentations and final exam. If students had problems, they had to seek help electronically. They were requested to post their question on the bulletin board rather than use email. This avoided duplication of lecturer responses; attempted to mirror classroom communication by allowing students to answer each other's questions; provided students with experience of web-based discussions; and tested the suitability of bulletin boards for online courses.

¹ While in the developed world there is more parity in the genders, there is still inequality in the 3rd World. The many barriers to women's participation in on-line learning and communication are documented in a report by the Commonwealth of Learning at <http://www.col.org/barriers.htm>.

The IWD course is assessed by means of a group research report, an individual practical exercise (production of a 10 page website) and a written exam. Part of the group research report mark is attributed to electronic communication. Students are asked to communicate using email, bulletin board, and chat, and this is marked according to the timeliness, effectiveness, Netiquette and degree of topic-related discussion. The groups who study F2F prefer to hold F2F group meetings. These students tend to treat the electronic communication part of the assignment as an academic exercise rather than using it for meaningful group communication.

There have been no changes to the method of assessment across the semesters so we are able to compare results from students who studied in class with those who studied completely online and those who studied online but had the option of F2F contact.

4. STUDY METHODOLOGY

Data for the study was collected in three ways.

1. *Pre- and post-course surveys.* This study is part of an ongoing program of research using pre- and post- course questionnaires, copies of which are included in an appendix. These questionnaires seek both qualitative and quantitative answers. On the first day of the we gather information on the students ethnic background, age, gender, previous education and Internet experience, and ask them to choose whether they would study online, or in traditional classroom sessions. At the end of the course the students complete another survey which determined their actual method of course participation, and also gathered their comments about the experience of online learning. Students scored items on a five point Likert scale, ranging from 1 'strongly disagree' to 5 'strongly agree'. However for those questions that determined participation the students indicated one or more from: Always; Most weeks; Sometimes; Never; Only when I found the subject interesting; and Only when I found the subject difficult. For continuity, the Summer School questionnaires used the same questions as previous semesters, but additional questions relevant to the unique situation of the Summer School were added.
2. *Student assessment results:* There were student results from both formative and summative assessments completed during the course. The results from the different groups were compared.
3. *Focus groups:* In 1999 students who studied entirely online were invited to a post course focus group, where their thoughts and experiences of online learning were discovered. In Semester 1, 1999 this was conducted by Dr. Cathy Gunn of Auckland University, while in Semester 2, 1999 it was conducted by Claire Donald of UNITEC.

There is a difference between the total number of pre- and post- questionnaire responses for each semester. Reasons for this include student dropouts, non-attendance at the project presentation sessions when the post-questionnaire is filled out and students not filling in their names on the questionnaire

Year and Semester	First	Matched
1999/1	71	54
1999/2	90	63
1999/3	27	19
2000/1	88	68

5. RESULTS

5.1. Gender of students studying IWD

A higher percentage of women study IWD than the average for the degree as a whole as shown in Table 5.1. This discrepancy could result from students from other degree programmes studying our course, people working full time studying IWD as a Certificate of Proficiency (COP) or just that it is more popular with women within the degree **than for example programming or networking courses.**

Table 5.1. Gender of students studying IWD 1999-2000

Semester	Female		Male	
	no.	(%)	no.	(%)
Semester 1, 1999	21	29.6	50	70.4
Semester 2, 1999	32	36.0	57	64.0
Summer School, 1999-2000	7	28.0	18	72.0
Semester 1, 2000	23	26.1	65	73.9
BCS Degree average 1999	23.0		77.0	

The popularity of IWD among women is presumably due to the nature of the course - it involves a great deal of interpersonal and visual communication and it is currently a very popular and highly hyped subject. Anecdotal and focus group evidence points to the female students thinking ahead to the workplace. They see web-page design as an opportunity for home-based or part-time employment. Margolis *et al* (1999) describe this concept as "Computing for a purpose". Indeed the Australian Information Industry Association (1999) promote IT careers for women by stressing the possibility of contract and part time work, and working from home.

5.2. Gender differences in the choice of working remotely or in class

There was a consistent difference between the genders as shown in Table 5.2. Between 52-62% of the women taking IWD chose to work in class compared with 63-80% of the men. In the first year of the study the men were also more uncertain, whereas the women were more definite that they wanted to work online.

Table 5.2: Gender differences in the choice of working remotely or in class

Semester	Female (%)			Male (%)		
	Class	Remote	Unsure	Class	Remote	Unsure
Semester 1, 1999	57.1	38.1	4.8	80.0	10.0	10.0
Semester 2, 1999	62.5	31.3	6.3	63.2	26.3	10.5
Summer School, 1999-2000	-	100.0	-	-	100.0	-
Semester 1, 2000	52.2	39.1	8.7	64.6	27.7	7.7

As stated above the higher popularity of studying remotely among women could be due to a number of factors. The women may have family and work commitments making travelling to campus more costly in time as well as finance. Typical of the favourable student comments was: "its available anywhere even from home. It's very handy to study at your own speed."

5.3. Gender differences in the assessment results

There are differences in the mean assessment results between the genders as shown in Table 5.3. An interesting result, but perhaps outside the scope of this paper to explain, is that on average the women scored higher than the men. This is consistent with the BCS degree as a whole (Joyce et al

2000). Women consistently scored higher than the men in both assignments (except Summer School assignment two), while the final exams show mixed results.

We anticipated that the women might score more highly on the group “research project” which involves communication, report writing and teamwork. We anticipated that the “webpage project”, which is more technical would favour the males. This turned out not to be the case and in fact the females scored consistently better for both assignments (except for the Summer School results, which are less statistically relevant due to the low numbers of students).

We believe that this could be due to non-completion of some parts of the assignment by the males. This may be because the men are more likely to be over-confident, leave assignments to the last minute and therefore score less well. Some supporting evidence for this comes from the non-submission results. The women always submitted every assignment, whereas the men were more likely to not submit assignments. Further evidence comes from the self-assessment results (see Table 5.5.2)

Replace this with new data table

Table 5.3: Mean assessment results 1999-2000 by Gender

All	Semester	No. Students	Ass1		Ass2		Final		Total	
			Mean	NS	Mean	NS	Mean	NS	Mean	Pass Rate
	Semester 1, 1999	71	62.4	0	60.3	0	65.9	4	61.5	87.3
	Semester 2, 1999	83	58.1	2	59.7	5	63.8	8	56.8	83.1
	Summer School	25	59.1	0	59.1	1	61.1	4	54.7	76.0
	Semester 1, 2000	88	53.9	1	58.6	0	61.7	13	55.1	73.9
Female	Semester	No. Students	Ass1		Ass2		Final		Total	
			Mean	NS	Mean	NS	Mean	NS	Mean	Pass Rate
	Semester 1, 1999	21	70.4	0	65.5	0	68.4	0	67.6	95.2
	Semester 2, 1999	31	60.7	0	63.7	0	63.8	2	61.5	87.1
	Summer School	7	64.1	0	57.6	0	49.1	0	55.1	85.7
	Semester 1, 2000	22	64.0	0	60.0	0	60.7	4	56.7	72.7
Male	Semester	No. Students	Ass1		Ass2		Final		Total	
			Mean	NS	Mean	NS	Mean	NS	Mean	Pass Rate
	Semester 1, 1999	50	59.1	0	58.1	0	64.8	4	58.9	84.0
	Semester 2, 1999	52	56.4	2	57.0	5	63.8	6	54.0	80.8
	Summer School	18	57.2	0	59.7	1	67.2	4	54.6	72.2
	Semester 1, 2000	66	50.4	1	58.2	0	62.0	9	54.6	74.2

NS = Non-submission of any part of the assignment; Ass1 = Assignment 1 (group research report); Ass2 = Assignment 2 (website project); Final = Final Exam

5.4. Remote/Class differences in the assessment results

For both genders, who completed the course, the online learners did better than their classroom counterparts, although the differences are not significant. However we don't attribute this to students learning better online, instead it is more likely that the better students, with greater prior knowledge of the subject, or better developed work ethics, tend to choose to work online.

Belanger (1999) reports a study at York University, where students taking online courses achieved significantly higher grades. However there are just as many studies that report classroom students performing better. According to Kerlin, Hitz predicted in 1990 that "there will be no significant difference in scores measuring mastery of material taught in the virtual and traditional classrooms". And with the exception of "computer science courses" in which the virtual class (VC) grades were significantly better; his research showed no significant differences. In an online computer science course at the University of Ulster, Anderson (1997) noted some improvement and certainly no deterioration in academic grades achieved compared to previous groups who studied in class.

5.5. Gender differences in student access to the learning materials on the course website.

The logfiles from WebCT show that on average women attempt more of the weekly self-assessment quizzes, view more pages of the course Web site and read and post more bulletin board messages as shown in Tables 5.5.1 and 5.5.2. The females' page views are consistently higher across the semesters than the males by a factor of 1.5. The average number of bulletin board messages read by females is also more than the males by a factor of 1.7 in Summer School, 1999-2000, and a factor of 2.3 in Semester 1, 2000.

Table 5.5.1: Average total semester WebCT page views and bulletin board access by gender.

Semester	Female			Male		
	Hits	Read	Posted	Hits	Read	Posted
Semester 1, 1999	-	-	-	-	-	-
Semester 2, 1999	217.9	0.0	0.0	144.6	0.0	0.0
Summer School, 1999-2000	498.9	120.3	5.0	342.8	68.7	3.9
Semester 1, 2000	416.9	38.5	4.3	249.2	16.2	2.6

We tell the students they must attempt the self-assessment quizzes every week, but many of them never attempt any of the quizzes. There is a wide spread of numbers of attempts ranging from none to all possible quizzes (the actual total number of possible quizzes is gradually increasing as we improve the course web site). The average number of unique attempts shows a consistent difference between the genders. The females, on average attempt more quizzes than the males. The males are much more likely to never attempt any quizzes. **Perhaps the women follow our instructions, while the men felt the quizzes were unnecessary for them.**

Table 5.5.2: Average total weekly self-assessment question attempts by gender

Semester	Total Quizzes	Female		Male	
		Average	Never	Average	Never
Semester 1, 1999	16	-	1	-	11
Semester 2, 1999	18	11.8	5	8.7	10
Summer School, 1999-2000	18	12.7	1	11.6	1
Semester 1, 2000	20	11.4	4	7.4	20

Never = did not record any quiz attempts over the entire semester

Average = Average total number of unique quiz attempts over the entire semester

It seems as though the men are missing out on "practice and drill" and this is reflected in their assessment results (see 5.3). Do the men think they know better and tend to ignore our instructions and go off and do their own thing, whereas women work methodically through our instructions and do everything asked of them?

5.6. End of course Questionnaire

In the end of course question one of the questions is: “How useful was online learning for you?” It is hard to make any statistically viable conclusion from the results beyond the fact that on average the students rated their experiences of online learning very highly. However there are two points to make. In Semester 1, 1999 the male students who studied remotely gave a much lower score than either their remote female counterparts, or the males who studied in class suggesting they had a less positive experience. However this trend did not continue in the following semesters. One reason for this may be that in Semester 1, 1999, the males had no experience of what online learning was about, whereas in later semesters they could draw on the experiences of the network of previous students. Furthermore based on the results of the previous semester, from Semester 2, 1999 onwards we have explicitly warned the over-confident young males of the pitfalls of online learning, and sent out regular emails to remind them. Perhaps this group decided to study in class, or maybe they just have a more realistic attitude towards online learning.

Table 5.6. How useful was online learning for you?

Semester	Female Average Rating			Male Average Rating		
	Class	Remote	Maybe	Class	Remote	Maybe
Semester 1, 1999	4.4	4.6	5.0	4.2	3.4	4.8
Semester 2, 1999	3.9	4.4	5.0	4.2	4.3	5.0
Summer School, 1999-2000	-	3.8	-	-	3.9	-
Semester 1, 2000	4.6	4.3	4.0	4.0	4.6	5.0

6. DISCUSSION

Many authors note that limited computer resources can widen the gender gap in the classroom, as men literally push women off the computers (Spender, 1995, p.187). In our practical sessions there is one computer for every student so this is a non-issue. However we do notice that women tend to sit together in the practical sessions, so perhaps women are choosing to work remotely because they do find the environment of the male-dominated computer classroom unsavoury.

So what about the boys? According to Bob Lingard (1998), of the University of Queensland, this refrain is an attempt to argue that masculinity is under siege and men are disadvantaged. Peter Zohrab (1999) echoes his concerns in New Zealand and claims that men are already being scared away from some professions. We feel that if there is to be a debate about recuperative men's movement for learning or that girls are being short-changed (Kleinfeld, 1998), it should focus on adjusting antisocial behaviour in the real or virtual classroom thereby arresting the underachievement of a few of our youth.

Another reason why women may be more successful with online learning is that they set aside a weekly time to learn when interruptions will be kept to a minimum. When asked in focus groups "when is the best time to be working on line", our mature students tell us, "late at night" or "early in the morning" i.e. when the family are not around and/or chores are completed. Conversely younger male students tell us they study "any time". In other words they do not plan quiet times, their login pattern is irregular with a shorter time-span and scattered frequency. Again even in our in-class experience in this and other courses we note that women tend to quietly progress through a set of linear instructions whilst the men jump ahead and are frequently in trouble.

Together with self-regulated task focused learning, according to Corno and Mandinach (reported by Kohe) is another attribute called "Resource Management". This is more relevant to the life experience of mature women, who, in their day to day organisation of family matters, become adept at short-term management of events, which do not require extended mental effort. This type of management depends on family co-operation and the ability to juggle several smaller tasks within the same time frame.² Could it be that women advantaged by this skill have the ability to develop cognitive flexibility in their learning styles? Has this "training", necessary for dealing with small family crises equipped them and some of our mature men to adapt to a piecemeal, event interrupted regime of self regulated learning? If mature people are more adept at resource management with background and foreground task swapping, how can we transfer these skills to our younger male students who have not yet had the opportunity to develop such skills? As Campbell (1997) found, focus, motivation and time management skills displayed by a number of her students equated with success for learning online, whereas a lack of educational focus led to side-tracking.

We have found that the attributes for successful online learning include "self regulated learning" and being able to multitask - dealing with interruptions and events then rescheduling as necessary. The student must then be able to re-focus quickly and continue working. The home environment as a learning space may not be conducive to this kind of scheduling. Self-regulated learning can be difficult when minor family emergencies occur.

A final reason that may also be influential on our course is the student's belief in their own performance. We record the student's belief about their ability to perform the tasks ahead online. The genders present a disparate picture regarding their perceived abilities to learn online. More young men believe that they have Internet and HTML experience than the women. In our first session we give everyone the opportunity to take part in the online only course. Of the younger males (18 - 20) who choose this manner of learning the majority are confident of their success. Like Selby *et al* (1997) we have found the mature women, who choose learning online do not exhibit the same confidence. We counsel the class to reflect on their learning styles and time management skills whilst reminding them that they can always contact us, or if they change their mind, attend on campus sessions. The mature group is more self-effacing about their perceived skill-set and as Kerlin suggests this can be predicated by a large range of competencies or personal attributes that might include age, gender and ethnic background.

Most of our ethnic women and the majority of the mature ethnic males choose campus based learning, whilst a number of mature New Zealand women choose online off campus learning because of family commitments. The research of Margolis *et al* (1998) indicates that although the ethnic group they studied in Canada may suffer from dismay and loss of confidence about their perceived skills compared to the males in the class, they overcame this by tenacity and stayed in Computing. Another theory could be that they do not display the English language-skill, which allows their locally born female classmates to transfer to other disciplines. So they simply stay in IT through lack of choice as we have observed in the New Zealand environment.³

² Ellen Ullman (1997) describes this as a human way to echo the computer's time slice model – one task in the foreground the others in the background.

³ In the past 3 years New Zealand has experienced a huge increase in the number of Chinese, Taiwanese and Indian immigrants most of whom end up in Tertiary education whilst trying to gain employment.

Should we filter out the over confident students, take them aside and tell them that "in our experience" their group has been less than successful as their cohorts who are less confident but work harder? Should we insist that they become F2F learners? Or, do we supply extra tuition on how to "learn successfully online". In our opinion the first option is flawed because not all of the young men need the extra help to become self regulated learners. As we constantly strive to allow choice, we will keep a wary eye out for evidence of non-performance and attempt to motivate and enthuse via feedback whilst offering extra tuition to prepare all our students for this new technology assisted delivery.

7. CONCLUSION

Mature women studying our course have the study skills necessary for learning online. The basic skills of self-regulation and time management would appear to be under-developed within the group of young males learning online. This is evidenced by non-performance in our online self-assessment quizzes, assessment results and site usage. The mature women who have these skills choose to work on line because of convenience, flexibility and "Computing for a Purpose". There is evidence that for some learners the online system is complimentary rather than replacement (Anderson 1997, Richie 1997).

Lund et al, (1997) concluded that their evidence suggested that a well-designed online unit may assist in overcoming gender-related differences in confidence in both studying online and using the Internet in general.

This paper is a platform for discussion of the implications of online learning for both genders. There is a need for more research on who is more successful learning online not only for marketing purposes but so that we, as online instructors, can facilitate the transfer of the necessary skills to all participants whatever their gender, age or ethnicity. The investment in hardware, software and time by both institution and learner is high enough to warrant research on who learns best and how everyone can benefit from this new teaching and learning approach.

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10. APPENDIX: IWD QUESTIONNAIRES

10.1. IWD Pre-Course Questionnaire

(A confidential survey which will help us develop the on-line material)

Your Name

1. **Gender** Male Female
2. **Age** Under 20 20 – 25 26 – 35 >35
3. **Ethnic Group** Maori/ Polynesian European Asian Indian Other..
4. What is the highest **education qualification** you have gained?:
School Certificate Bursary University Degree Other
5. Do you intend to **study this course by distance?** (home/work) Yes No
6. Do you have Internet access offsite? (i.e. home or work) Yes No
7. If **Yes** to the above please **supply e_mail address**
8. Have you used an **INTERNET browser?** Yes No
9. If Yes to above which one? Netscape Internet Explorer Other
10. If you have used a browser please state where:
Library Classroom Home Cyber Café Work Other
11. If you **have access** how often do you use Internet?
0 – 5 hours per week 6 – 10 hours per week > 10 hours per week
12. Have you **created any web pages?** Yes No
If **Yes** to the above please give URL.....
13. Have you **written HTML** code? Yes No
If **Yes** to above please indicate your level of expertise:
Beginner Intermediate confident Advanced
14. Why are you doing this course?

IWD Post-Course Questionnaire

(A confidential survey which will help us develop the on-line material for future classes)

Your Name

Part A: Studying by distance

- 1. How often did you attend the theory sessions?
 Always Most weeks Sometimes Never
 Only when I found the subject interesting Only when I found the subject difficult
- 2. How often did you attend the practical sessions?
 Always Most weeks Sometimes Never
 Only when I found the subject interesting Only when I found the subject difficult
- 3. How **useful** was the option of on-line learning for you? Please indicate on a scale of 1-5.

Not useful					Very Useful
1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	
- 4. Please explain why you found on-line learning useful or not.

- 5. Would you recommend to other students they should do the course on-line? Yes No
- 6. Would you like to see more courses on-line? Yes No Which ones:

Part B: On-line Course Materials

Further Readings

- 7. How often did you read the “further reading” web pages, given at the end of each week’s course notes?
 Always Most weeks Sometimes Never
 Only when I found the subject interesting Only when I found the subject difficult
- 8. What did you think of the pages you read?
 Please indicate on a scale of 1-5 how **interesting** you found them.

Boring					Very Interesting
1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	

 Please indicate on a scale of 1-5 how **useful** you found them.

Irrelevant					Very Useful
1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	
- 9. Do you have any other comments on the “further readings”?

.....
.....

Practical Exercises

10. What did you think of the practical exercises?

Please indicate on a scale of 1-5 how **easy** you found the instructions.

Difficult 2 3 4 **Very Easy**
1 2 3 4 5

Please indicate on a scale of 1-5 how **useful** you found the exercises.

Irrelevant 2 3 4 **Very Useful**
1 2 3 4 5

11. Do you have any other comments on the practical exercises?

.....
.....

Self-Test Questions

12. How **easy** did you find the self-test questions?

Very Difficult 2 3 4 **Very Easy**
1 2 3 4 5

13. How **useful** did you find the self-test questions?

Irrelevant 2 3 4 **Very Useful**
1 2 3 4 5

14. How **easy to use** did you find the WebCT system?

Very Difficult 2 3 4 **Very Easy**
1 2 3 4 5

15. Do you have any other comments on the self-test questions?

.....
.....

Frequently Asked Questions (FAQ)

16. How many of the “FAQ” answers on the course website did you read?

All Some None

Only the questions I found interesting Only when I had the same question

17. How useful did you find the “FAQ” answers?

Irrelevant 2 3 4 **Very Useful**
1 2 3 4 5

18. Do you have any other comments on the FAQ questions and answers?

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