Sheffield University

School of Health & Related Research (ScHARR)

FOLIO Programme of courses for health care librarians

Managing Change for Health Information Professionals (MCHIP) Course June-July 2004 Interim Report

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1. Executive Summary

Managing Change for Health Information Professionals (MCHIP) was the second on-line interactive course in a series of twelve commissioned by the NeLH as part of the FOLIO Programme. The course team, comprising Andrew Booth (Programme Director), Alan O'Rourke (Programme Manager), Anthea Sutton (Learning Resource Co-ordinator), Lynda Ayiku (Learning Resource Coordinator) and Graham Walton (Module Tutor), has developed course content and delivery. The course was open to all librarians providing services to NHS staff in the UK. The course team facilitates a JISC e-mail list, which provides the main medium for teaching, with links to briefings and case study material on the FOLIO Web-pages. There is a subsidiary e-mail list for student support and administrative issues.

The workload for participants was originally described as roughly equivalent to attendance at a one-day workshop, although on reflection we feel that the level of activity and interaction required exceeds that for a typical one-day course. For this specific course, participation involved:

1. Receiving about thirty e-mail communications (approximately one per day over six working weeks) via the FOLIO JISC-mail discussion list.
2. Compiling a portfolio recording personal activity and participation for submission to the course facilitator.
3. Contributing to one group discussion thread on the JISC list and e-mail interaction with a "buddy" for four collaborative tasks.
4. Working on a case study based on the introduction of electronic journal access in a healthcare library, including analysis of the key stakeholders.
5. Reading eight short briefings.
6. Pursuing guided readings and reflective exercises.
7. Completing an on-line quiz and a vote.
8. Participating in a live telephone conference with a question and answer session, which is the main technical innovation in this course.
9. Completing a course evaluation form.

The NeLH has validated by the course and participants fulfilling these minimum requirements receive a certificate of attendance, classified as honours or distinction depending on the depth of learning demonstrated by their portfolio.

There was a good level of interest in this course. Although we were able to accommodate all students for whom this course was a priority training need, there remains a possible need to repeat this course, refined according to student feedback. Ten students from fifty-two who commenced the course failed to complete it. At the time of writing, thirty-two students have returned completed portfolios and we have granted extensions to a further seven to hand in by August 27th.

2. Course Details

Course title:	Managing Change for Health Information Professionals
Course Code:	MCHIP
Web pages:	*http://www.nelh.nhs.uk/folio/mchip/homepage.htm*
	Discussion list archive: *http://www.jiscmail.ac.uk/lists/FOLIO.html*
Module co-ordinator:	Dr Alan O'Rourke
Other staff involved:	Mr Andrew Booth, Ms Lynda Ayiku, Ms Anthea Sutton
External staff:	Dr Graham Walton (external tutor) and Ms Alison Turner (NeLH)

Course aims: to equip participants with the skills and knowledge required to understand the process of planned change and to manage its impact upon staff and services in their own working environments.

Course objectives: by the end of this course participants should be able to:

- Define the concept of change management as it relates to delivery of health information services.
- Rehearse several tools for the analysis and strategic management of change.
- Analyse the impact of change, relating to a common health information management scenario, by use of a case study.
- Practice techniques to identify the impact of change and develop solutions to minimise negative impacts and identify human aspects associated with change management.
- Describe what is required of a leader during organisational change and work with key stakeholders to facilitate the change process.
- Engage with fellow course participants in discussing issues arising from change management.

Content:

We designed the course around a "Story-Board" format, with a wide selection of student activities, including quizzes, developing themes from a case study and group debates. For some activities, students worked alone, developing written ideas for their portfolios based on instructions in e-mails and briefing on web-pages. Wider interactions included:

Group debates: we divided the students into Group A and Group B, and at different times in the course, each group was given a specific topic to discuss via the main e-mail group.

Buddy pairs: we allocated each student a "buddy," pairing each student from Group A with one from Group B. Specific exercises from the case study required that students collaborate with their buddy to produce material for their portfolio.

The most novel technique we applied to this course was a live telephone conference (see below). Appendix A shows the structure of the course. See also course timetable at: *http://www.nelh.nhs.uk/folio/mchip/timetable.htm*
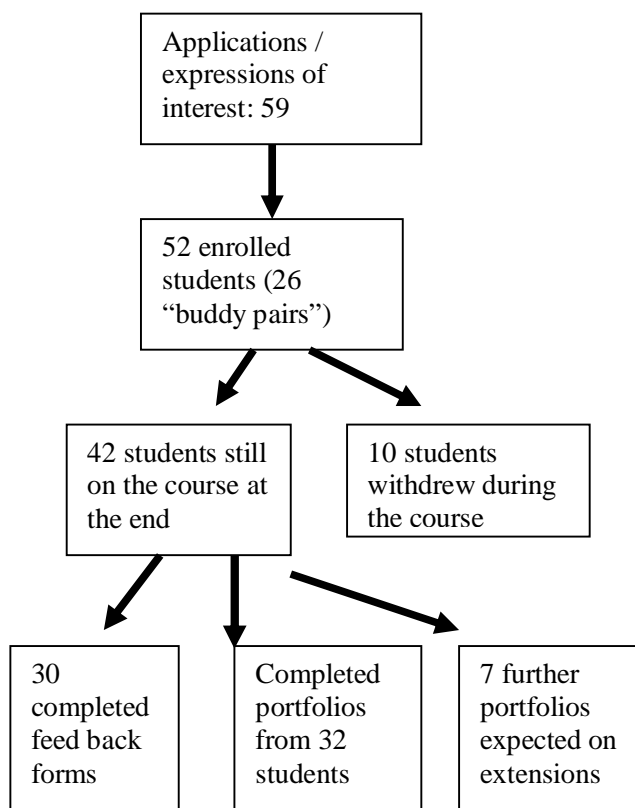
3. Analysis of participant and other stakeholder data

Applications: we received 59 applications for this course.

Enrollments: 52 participants enrolled. Ten participants withdrew from the course (reasons given included poor time management; "unforeseen circumstances;" failing to keep up with the course; lack of time or energy; under-estimate of workload; trying to balance two jobs; being on a "front line desk" with no office to retreat to).

Portfolio submission: At the time of writing, we have received 32 portfolios. We have granted seven students extensions for their portfolio submission, on grounds such as ill-health and problems accessing some course material.

Feedback: As at 17 August, we had completed feedback forms from thirty participants.

Applications / expressions of interest: 59

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52 enrolled students (26 "buddy pairs")

42 students still on the course at the end

10 students withdrew during the course

30 completed feed back forms

Completed portfolios from 32 students

7 further portfolios expected on extensions

Portfolio grading: Portfolios are being marked by the end of August: we will provide information on portfolio grades and quality in our final report.

4. Analysis of Course Evaluation Feedback
Enjoyment of the course: 25/30 respondents agreed or strongly agreed that the course was enjoyable; one disagreed and four had no opinions either way.

Knowledge of change management: 28/30 respondents agreed or strongly agreed that they knew more about change management after completing the course; none disagreed; and two had no opinions either way.

Future plans for use of what participants had learnt on the course: thirty participants responded, although three of these saw no immediate practical applications. Suggestions of specific application of course materials included:
- New library buildings
- A library move
- A multi-Trust document management system
- A family information centre

as illustrated by the following quotes:

The formal exercises and tools will be useful in future, to address change issues in a structured manner. I will take on board the need to provide a vision for my staff and to communicate to them the importance of a learning organisation and the need to put into practice what we have learned rather than just "filing" knowledge away.

I will use all the theory and knowledge gained from this course to enable me to plan and manage new projects methodologically and effectively. The knowledge gained from this course will also help me to best manage and deal with the negative aspects arising from the change process.

I will use what I've learnt during the next 12 months when the library will be moving to a new location which will mean a lot of change.

In a project to implement a new document management/ enterprise content management system across 6 Trusts (acute, mental health and learning disability, ambulance and primary care) in North Cumbria. I will also find what I have learned useful in planning and managing smaller scale incremental changes.

Apply the principles to my current project. I had a fairly clear understanding of the SWOT analysis and the importance of good communications, but I was stumped by the resistance problem. I now feel more confident about the strategies for anticipating and dealing with this resistance to new ideas.

Course objectives: 26/30 respondents agreed or strongly agreed that the course fulfilled its objectives; one disagreed; one disagreed strongly; and two had no opinions either way.

Quality of course material: 28/20 respondents rated the course material as good or very good; one said it was poor; one had no opinions either way.

Usefulness of course material:

Type of material:	Number of respondents ranking this material the **most** useful:	Number of respondents ranking this material the **least** useful:
Briefings	10	0
Self-reflective exercises	5	4
Group discussion	1	7
Buddy interactions	4	3
Guided readings	5	0
Inter-active PowerPoint	1	2
Quiz	1	5
Voting	0	7
Telephone conference	3	2

Enjoyment of course material:

Type of material:	Number of respondents ranking this material the **most** enjoyable:	Number of respondents ranking this material the **least** enjoyable:
Briefings	2	1
Self-reflective exercises	1	4
Group discussion	5	7
Buddy interactions	14	4
Guided readings	0	5
Inter-active PowerPoint	2	2
Quiz	1	1
Voting	0	4
Telephone conference	5	2

Use of the MCHIP website: eleven respondents accessed the site more than ten times during the course; ten between five and ten times; nine fewer than five times. No respondents said they had not used it.

Usefulness of the MCHIP website: 24/30 respondents said it was useful or very useful; four described it as average; two had no opinions either way.

Participation in group discussion: all respondents claimed to have contributed to their group's discussion except one. Two cited lack of time due to an unfilled staff vacancy and being out of the office during the debate as barriers to participation.

Buddy interaction: twenty-five respondents said they had at least some interactions with their designated buddy during the course. Five said they had not, and four cited buddy withdrawal. Two others said that they had some buddy contact, but that the interaction was not sustained throughout the course.

Course facilitation: 26/30 respondents said it was good or very good; three described it as average; one had no opinions either way.

Changes to the course: twenty nine respondents replied, but five felt the course structure and delivery did not require modification. Twenty-four others had specific suggestions, sometimes more than one per respondent including:

- Clearer labelling of the e-mails, to allow easier following of themes
- Interactive work in small groups rather than buddy pairs, to reduce disruption when a buddy left the course.
- Lengthening the course, with more "message-free" days, or providing a reading week to make task completion easier. However, one student felt that sustaining concentration over a six week course was hard, and expressed preference for a shorter more intense course.
- More detail in advance of the work-load and how much time students should devote to individual tasks,
- Reducing the number of tasks: some students felt the course involved more work than an "equivalent one-day course".
- Tying self-reflective exercises more closely to the course rather than utilize participants prior experience.
- Providing URLs for all assignments
- Making sure all course e-mails come from a recognized tutor, rather than inconsistent postings
- Earlier feedback on assignments, or access to model answers.
- More detail in the case study (a few students were unsure of what the case study required them to do, but on this course, we resolved such problems by e-mail)
- Limited time for each group discussion. One student said they received e-mails over several days. (However, such a limit would impair one strength of the course, its asynchronous nature, and the option for students taking breaks to catch up on their return and not miss out on generating material for their portfolios).
- Dropping specific tasks like voting or reflective exercises (from students who felt they gained little from these activities)

Further comments on the MCHIP course: twenty-three respondents offered other comments. Most of these were positive, although some commented on the workload, both in terms of volume and complexity, and some found some exercises less than useful:

I think this course has been excellent in terms of organisation, facilitation, readings, course materials & the online lecture was very good. My only quibble is with the group discussions, as it can get rather tedious reading through so many emails, although many did raise useful points.

Having done several of the FOLIO courses I think it is worth stressing to potential participants that it is a significant commitment. Last time my buddy dropped out and this

time my buddy commented that it was a surprise how demanding it was. I was out of the office a lot midway through this course and REALLY had to make a effort to catch up. The courses have all been very rewarding (in fact I think this year's have been even better than last) but they certainly demand time and effort on the part of the participants.

One provided further insight into the "buddy" pairings:
The buddy relationship is a complex one and - like managing change - potentially quite demanding. We would have benefited from slightly longer gaps between the early tasks around the stakeholder analysis. At one point we were 2 weeks behind, and it grew more and more difficult to follow the plot.

One Scottish participant felt that an alternative case study, to take account of differences in the organisation of healthcare north of the border, would be useful:
It would be useful in future to make reference to the fact that in Scotland the NHS is set up differently. We no longer have any Trusts and I found the scenario a little difficult to follow as I have very little knowledge of the system down south. For example, we do not provide services to GP's and we are very much a multidisciplinary service. Having a scenario based on the Scottish system would be of advantage to Scottish librarians in the future, for example mentioning the NHS Scotland E-Library as we don't use your Core content. A scenario which drew on commonalities [sic] across the United Kingdom would be welcome.

Future courses: 24/30 participants would do another FOLIO course; five were uncertain; one would not. Twenty-five would recommend FOLIO course to colleagues; one would not and four were uncertain.

Summary: overall, the feedback is very positive, although a small minority of more critical responses to most questions suggests that there were three or four students for whom the content or the delivery (distance learning) of this course was inappropriate. Some activities (such as buddy work and briefings) were more popular; others (like voting and group discussions) were less favoured. The main student concern centers on tasks which generate material for their portfolios, in terms of how much time they should devote to these and reducing the overall workload.

5. Educational Innovations and Issues

We have employed tried and trusted technologies of distance learning, specifically a facilitated e-mail discussion list, with a readily accessible on-line archive of postings, with links to web-pages to provide briefing and background information. We have however exploited on-line facilities offered by our e-mail provider (JISC) to allow controlled access to quiz, questionnaire and feedback functions, with appropriately-timed release of model answers and results.

We have used one experimental technique, a telephone conference, with "dial in" to a short talk by Dr Walton, with simultaneous access to a PowerPoint presentation of the key issues covered in this presentation, and after the option to ask questions and receive answers live. We repeated this 'phone in twice to maximize student opportunity to participate, and for those who already had commitments that day, provided subsequent access to PowerPoint slides from Dr Walton's speech. We also hoped to provide a link to an on-line recording of Dr Walton's presentation, but that has not been forthcoming.

A few students had problems following the threads, so we introduced more informative message subject headings, referring to the content of the message as well as the day of the course, and will use such headings for all future postings.

Where activities produced outputs for portfolios, we highlighted these in the relevant e-mail postings: "WHAT YOU NEED TO DO…." Some portfolio sections showed a low rate of completion, specifically the quiz, where students may have felt that their on-line submission via the JISC list was sufficient, notwithstanding the fact that the portfolio template contained a dedicated space for their answers. Unfortunately, having submitted their quiz answers online, they neither they nor the course team was able to retrieve their answers. In future, we should make students aware of this and perhaps suggest that students type the quiz answers into the portfolio and then copy and paste to the JISC on-line form.

Where students were left "orphaned" by the withdrawal of buddies, we explained that they could complete buddy exercises solo, providing "cribs" of materials that they might otherwise have received via interaction with their buddy. One assessment criterion is "Interaction with buddy," although participants are not penalized for losing buddies through no fault of their own. Inspection of the portfolios reveals that it is difficult to assess this criteria in this limited format. Although the output of the buddy exercise is clear, the process by which the pair reached it and the degree of interaction remains unclear i.e. the output could be fine in quality but be "all my own work" rather than reflecting genuine interaction between the buddies. A few buddy pairs did include copies of e-mails to show how they reached a collaborative answer. In future assessments, we may need to revise the portfolio to better reflect the degree of collaboration. Where there was confusion about the clarity of tasks, we addressed common concerns by sending a message to all students via JISCmail, or individual concerns on a one-to-one basis via the *folio@sheffield.ac.uk* address.

Explicit instructions covered portfolio submission, deadlines and how to arrange extensions at the end of the formal teaching, with two reminders during the week of the deadline for portfolio submission. A criteria-based mark sheet is used to assess portfolios, covering completeness, buddy interaction, participation, creativity, use of resources, critical analysis, application and presentation. Each criterion is assessed against three standards: fail, honours pass or distinction. Overall assessment is arrived at holistically according to the overall pattern of the student's portfolio. This allows a relatively objective and internally consistent decision about award of an appropriate certificate. The template for students to complete to develop their portfolios is available at: *http://www.nelh.nhs.uk/folio/mchip/portfolio.doc*

6. Technical Innovations and Issues

The technology used (a facilitated e-mail list with links to web-pages) is tried and tested and occasioned few technical problems. We chose to exploit added functions of the JISC lists to provide a quiz and a vote, which students could complete from the list homepage, with timed release of these functions and answers. The same option was used to provide access to the post-course questionnaire. A few students had problems accessing these functions, and where these could not be resolved we had to e-mail the students word versions of these documents as e-mail attachments to allow them to complete course tasks. Without detailed knowledge of student software configurations it is not possible to explain why some students were unable to access these JISC-functions. One student used a computer without PowerPoint, but was able to access a machine that did provide subsequent access. We continue to prefer to use a low spec approach to delivery of materials for these and related reasons. Most technical problems were handled via the administrative list (*folio@sheffield.ac.uk*). In future, we could detail required software applications needed in opening messages to ensure that students use appropriately equipped machines to access the course.

One of the strengths of this type of course is that it is asynchronous, not requiring students to attend at specific times, but allowing them to pick up e-mails, access web-pages and post responses any time of the day. The main innovation was the telephone conference for Dr Walton's lecture, which did require students to call in at a specific time. To maximise uptake, we

ran this twice (9.30am and 3.0pm) on one day. However, some students already had other commitments that day. We thus provided access to the PowerPoint slides which accompanied the presentation.

Early postings to the list often included odd formatting and HTML tags: the solution here was to save materials copied from other documents (Word, Web-pages etc) as plain text before pasting.

7. Administrative Innovations and Issues

We advertised the course widely through the healthcare LIS network and via suitable e-mail lists (e.g. Evidence-based libraries). Students were asked to register their interest ranking their preference from our next three courses. This allowed us to guarantee places on the MCHIP course and facilitated our administrative operations. A corresponding drawback was, having asked for preferences rather than firm commitment to specific courses, several who expressed an interest chose not to take up their places. For this course, the administrator collated the application forms to produce an audit trail of registration, dropout rates etc.

In addition to the JISC-mail list used for teaching the course, a separate e-mail list (*folio@sheffield.ac.uk)*, is used to handle administrative rather than educational issues. All the course team are members of this list and can reply to student queries while copying their reply to the course team to ensure a co-ordinated response. We notify students about this list and encourage them to use it for matters such as absences, difficulty contacting buddies, and problems accessing course web-pages. There is a page of Frequently Asked Questions (FAQs) for the course at: *http://www.nelh.nhs.uk/folio/mchip/faqs.htm* and a briefing (course over-view), including aims and objectives at: *http://www.nelh.nhs.uk/folio/mchip/briefing1.htm*

At the close of the course, we specifically inform students that completed portfolios must be returned to the course administrator, and that students should include their preferred postal address, to which we later send certificates of completion according to the assessed quality of the portfolio.

8. Proposed future developments

Using the experience of this course, we have produced a "master" story-board, with all messages, URLs, activities etc, allowing us to revise the course by simply inserting specific dates for a future course should we choose to run it again. We have collated the messages so that the numbering is more logical and ensured that each message has a brief, descriptive title for future posting. Much of the material for this course was written during course delivery: for future runs, we will have all the briefings already up as web-sites, and can post all URLs in the relevant messages. At the moment, the FOLIO courses have a standard format and length: as we collect feedback, we may find that some require longer or shorter periods than the standard six week term or, a general preference for small group inter-action rather than "buddy-pair" work may emerge. Providing more feedback to students during the courses is possible, but would have resource implications for tutor-time. This could be managed by insisting on specific "hand in" dates followed by release of model answers. This would reduce the asynchronous nature of the course and limit opportunities for "catch up" after holidays.

9. Issues for consideration by Curriculum Development Group/NeLH team

Some students obviously found the workload excessive, and some would prefer more feedback from the tutor in helping them complete tasks. Doing so however would take up more tutor time. There are mixed feelings about some of the interactive exercises. Thus, the following questions arise:

Q: Given that this is an on-line course, with limited interaction for the students, should we keep both the group discussion and the buddy exercises, or drop one type of interaction? If keeping the "buddy exercises," should we expand from pairs to small groups to minimize the impact of one partner dropping out?

Q: How much time should we expect and advise students to spend on course tasks in order to merit certificates of completion?
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Q: Given student concern at the workload, should we:
      a. Reduce the overall number of tasks, or provide more choices (" Do either…or..")
      b. Simplify the level of detail required to complete existing tasks.

Q: Should we reduce the amount of tutor authorial and editorial input, and use the time freed up to provide each student with a one-to-one tutorial and feedback (e.g. mid course review of progress), either by e-mail or telephone?

Appendix A: details of course content

Message	Material provided:	Student activity	Portfolio output:
Introduction	Contact details for course; housekeeping; key web-pages		
1 Light relief	Quotations about change	Posting ideas about what is "change management" and brief personal introductions on the e-mail list.	
2. Ice-breaker	Introduction to portfolios and the buddy pairs; OSCAR (One Situation with Change And Results) award	Buddy inter-action	OSCAR acceptance speech and buddy's nomination
3. The LIS environment	Chapter from Graham Walton's book: *http://www.shef.ac.uk/scharr/mkhs/chapters/chap01.rtf*	Reading and reflection	Critique of the current accuracy and relevance of the chapter.
4. Defining change management	On-line resource: *http://rms.nelh.nhs.uk/healthmanagement/viewResource.asp?categoryID=4033&dg=59&uri=http%3A//libraries.nelh.nhs.uk/common/resources/%3Fid%3D29128*	Devising a working definition	Definition of change management.
5. An example of change management	The House Officer's Tale: *http://www.nelh.nhs.uk/folio/mchip/Story.htm*	Reading and reflection	Examples of organisational change from the student's own experience.
6. Reflection on change management	Key points for reflection	Reflective exercise	Reflection on experience of change management
7. Group A discussion	Arguments for being more pro-active in planning for change (summary and comments later posted by course facilitator)	Contribution to discussion on JISC-list (group A only)	Any postings the student makes as to the discussion
8. Introducing the case study	Background scenario to case study: *http://www.nelh.nhs.uk/folio/mchip/case.htm*	Reading and if desired annotating the scenario.	
9. Preparing for change	Checklists for preparation	Analysis of partially completed checklist	Identifying problems and solutions from the checklist.
10. STEP (or PEST) analysis	Summary of PEST / STEP analysis: *http://www.nelh.nhs.uk/folio/mchip/briefing2.htm*	Reading	
11. 7S analysis	Briefing at: *http://www.nelh.nhs.uk/folio/mchip/7s.htm*	7S or STEP analysis of case study	7S or STEP analysis of case study
12. Case study stakeholders	Stakeholder profiles: *http://www.nelh.nhs.uk/folio/mchip/stakeholder.htm*	Reading stakeholder profiles.	

13. Stakeholder analysis	Categories of stakeholders: *http://www.nelh.nhs.uk/folio/mchip/stakeholder_categories.doc*	Buddy exercise	Classification of stakeholders
14. Guided reading	*Organisational Change: a review for health care managers, professionals and researchers*, from the NHS Service Delivery and Organisation (SDO) pages at: *http://www.sdo.lshtm.ac.uk/publications.htm*	Analysis and application of one of nine tools from this to their own organisations	Section on the application of one of the tools in the guided reading
15. Total Quality Management (TQM)	TQM briefing: *http://www.nelh.nhs.uk/folio/mchip/tqm.htm*	Reading briefing	
16. Interactive PowerPoint	SWOT PowerPoint presentation: *http://www.nelh.nhs.uk/folio/mchip/swot.pps*	Study of presentation and completion of some self-assessment exercises in it.	
17. Quiz *	Ten question MCQ on change management: *http://www.jiscmail.ac.uk/cgi-bin/surveys.cgi?A=hp&LMGT1=FOLIO*	Completion of quiz and on-line submission.	Copy of answers to quiz.
18. SWOT analysis of case study	Students referred back to SWOT PowerPoint, stakeholder list and case study outline. Details of telephone conference on day 21	Group A students: strengths and opportunities (S-O); Group B students weaknesses and threats (W-T) analyses of case study	
19. Recreational break	Stakeholder profiles: *http://www.nelh.nhs.uk/folio/mchip/stakeholder.htm*	Identification of the stakeholder photographs (in reality a collection of actors and LIS personalities), with the opportunity to win a book token.	
20. Completion of SWOT analysis for case study	Instructions for combining SO / WT analyses and developing strategies	Buddy task to complete SWOT analysis	SWOT analyses and strategy
21. Telephone Conference	Telephone and PowerPoint presentation by Graham Walton (repeated AM and PM, with time for questions).	Call in; question and answer session.	Reflections on Graham's presentation
22. Voting on Barriers to Change *	On-line polling list of seven barriers to change: *http://www.jiscmail.ac.uk/cgi-bin/surveys.cgi?A=hp&LMGT1=FOLIO*	Selection and justification of the greatest barrier (or addition of others)	Choice of greatest barrier and justification
23. Group B discussion	Background to the relative merits of in-house and consultancy services in managing change (summary and comments later posted by course facilitator)	Contribution to discussion on JISC-list (group B only)	Any postings the student makes as to the discussion
24. Quiz answers	Release of quiz answers (from day 17)		
25. Human factors in change management	Briefing with scenarios at: *http://www.nelh.nhs.uk/folio/mchip/human_aspects.htm*	Analysis of one scenario and work on possible solutions.	Discussion of one scenario and solution

26. Guided reading	Annotated biography of key change management references: *http://www.nelh.nhs.uk/folio/mchip/bibliography.htm*	Study of summaries of relevant books and on-line reports.	Application of the main points of one report to the student's own organisation.
27. Critical Success Factors	Briefing: *http://www.nelh.nhs.uk/folio/mchip/csfs.htm*	Case study work	Critical success factors for the case study; potential to "celebrate success.
28. Implementing change	Brief description of how the e-journals case study develops	Buddy interaction	Implementing change strategy
29. Future developments and learning organisations. Release of vote results (day 22)	Briefing: *http://www.nelh.nhs.uk/folio/mchip/future_developments.htm*	Reading and reflection	Reflection on the concept of "learning organisations."
30. Course conclusion	Message about administrative tasks, portfolios, buddies and extension of submission dates.	Sending farewell message to buddy; completion of portfolio and post-course questionnaires.	
Post-course	Two reminders about completion of portfolios and feedback		

*On-line forms no longer active.