Our Students and Ourselves

Approaching course design

Generation 2 Project

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Our Students and Ourselves

Approaching course design

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Preface

For the last twenty-five years or more, ICCROM has been involved in educational and training activities.

One of the most intensive experiences in this area was offered by the PREMA 1990-2000 (Prevention in the Museums of Africa) programme. The challenges to be faced ranged from the difference in education systems, to the lack of opportunities for formal education in the heritage and conservation field, and the cultural, social and economic conditions in specific locations.

The strength of this experience evolved in three key ways:

- its long-term and intensive nature: 10 International University Courses, 9 National Courses, 8 seminars and 10 workshops were organized over 10 years
- in the systematic involvement of former teachers and students in the design and implementation of the future activities
- in regular programme reviews in consultation with partners and beneficiaries every two years

This long term and intensive process led the ICCROM-PREMA team into a challenging, productive and continuous questioning of its approaches, and in venturing everyday further into the exciting world of learning.

Our next challenge, arising from our work on the PREMA project, is to move to an emphasis on the ways in which it is possible for those engaged in teaching, to design and produce relevant materials and course structures.

Thanks to the Getty Grant Program, which funded the GENERATION 2 Project (2001-2003), ICCROM was able to start addressing this challenge. Generation 2, a joint project of EPA, ICCROM and PMDA had two main purposes:

One was to document the most successful course design processes developed during the PREMA programme. The course topics are: documentation of collections, deterioration of materials, pest control, mount and support, museum enlivening skills, partnership and fundraising, preventive conservation and storage of collections.

The documentation was organized into various components in order to be easily re-usable by future learners and teachers: a course map, an activities workbook describing the sequence of the course activities, information sheets and bibliographies, as background resources, worksheets, to support practical exercises.

The second purpose was to equip future teachers with the facilitating skills and attitudes which the use of material-based learning requires.

In developing the project, it became clear that beyond the building of educational and training resources, there needed to be an emphasis on the skills and knowledge to produce and develop such resources.

This book is one answer to this need.

As of today, any person who enters the heritage and conservation professions is likely to have, at some time, the responsibility of teaching her peers or newcomers in the field.

ICCROM wishes to provide a framework and points of focus for those professionals who are now involved in the stimulating task of course design. We wish to strengthen the ethos and the conceptual approach of those who already have some experience of teaching and who are willing to re-visit that experience with a view to enrichment

and development.

Our aim is to stimulate learning and teaching, and the provision of high quality training. The context is the ethos of ICCROM and its interface with colleagues around the world.

This publication is dedicated to Gaël de Guichen and to all those who have been involved in transforming their professional experience into teaching on PREMA courses. Special thanks also to the GAIA-Terra team, another ICCROM long term and intensive pedagogic adventure, for their thoughtful comments and the examples they contributed to this publication.

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Introduction

The production of courses in conservation and restoration of cultural heritage is something which requires more than the individual skills of practising professionals. There has to be an evolving educational strategy which informs and underlies the kinds of courses we wish to produce.

And the courses we produce are directly related to the kinds of professionals we wish to see evolve. This is not some abstract exercise. It involves living, breathing people who have to interact productively with their environments, their peers and the general public.

Developing appropriate educational strategies for this work is something which takes time and which requires constant reappraisal. This publication is a small step along the way. It is founded upon certain principles which are central to our work:

The need to bring together heritage professionals - those involved daily with conservation issues - from all disciplines and horizons. At ICCROM, freed for a period of time from their working context, some would become students, others teachers.

All would be involved in sharing their knowledge and experience, in advancing the field, in learning and teaching.

All would be challenged to explore, understand and respect our rich variety of cultures and societies, so essential when it is question of making decisions about heritage conservation.

All would discuss, review and develop conservation approaches and solutions in the light of specific cultural and economic realities.

Together, and over the years, different ways of learning and teaching have been experienced in a variety of contexts and situations. The aim was, and still is, to strengthen the knowledge and skills of professionals involved in conservation, but also their autonomy and confidence, their cultural sensitivity, their adaptability, and their enthusiasm.

We have been very aware of key developments in the educational world. These have included the vital need for clear aims and objectives, and for the ability to structure and present materials for learning in the most appropriate and effective manner.

The pedagogy which we seek is one which builds an enthusiasm alongside skills and knowledge. It is an enthusiasm from the teachers which informs their ability to improvise, to generate a 'knowledge through doing' which is one of the surest ways of guaranteeing that learning is not a transitory experience. The enthusiasm of the teachers should be, in turn, shared by the learners on courses.

The dissemination of information is much easier than the dissemination of educational practice. The latter can only be achieved through the constant engagement with a range of institutions, departments and individuals who are willing to share their experiences and to develop together. Educational practice has to be a shared process. It cannot be simply handed down.

Nevertheless, courses need to be designed and taught. This process is one of the most exciting and demanding of educational activities. It is one which requires a strategy for approaching both education and training. It requires that we define our terms carefully, and develop our strategies in relation to our terms.

With this in mind it is worth commenting on the title of this

publication. We refer to our students and to ourselves. The choice of the word 'student' here is quite deliberate. Education is a lifelong process, and any of us, however senior or junior, however experienced or inexperienced, may become a student more than once in our careers. This is a desirable educational aspiration. We who offer courses in one year may become students on courses in another. We are most keen to establish the fact that being a student is an honourable activity at any stage in our careers. It is often desirable and sometimes essential.

We also refer to 'ourselves'. Here we are speaking of those of us whose task is to provide educational and training experiences which fulfil recognised needs. This, it cannot be stressed too often, requires us to enter a process. The outcome of our courses will be to achieve specified objectives. But it will also be to engender an approach to our professional practice and our education which goes beyond the given objectives.

Our long-term goals should be to design courses which encourage growth, critical thinking and the ability to take appropriate creative action in specific contexts. We take the approach of educators who believe in the importance of information and the development of skills. In the last analysis, however, we are concerned with educational processes which outlast individual courses and combine knowledge and training with practical activity. It is an activity which is the business of our students and ourselves.

Education and training

The debate about whether there is a difference between being educated or being trained is not a new one. It is a question, however, which is seldom satisfactorily addressed. Training is often seen as a lower order activity than 'education'.

We believe that both training and education are of equal importance and value.

Perhaps the best way to try to explain this is to work through the use of metaphor.

We may not be particularly interested whether the pilot of the aircraft in which we are flying loves Miriam Makeba and Paul Klee, or the Beatles. Our first interest is whether or not he can fly the plane. During the flight other considerations are superfluous. The requirements of training are simply that the trained person can demonstrate her skills under a range of conditions.

The requirements of education are that an educated person should be capable of taking decisions and indeed of formulating the policies and strategies upon which decisions might be taken. Conservation courses are about both education and training and hence demand a range of approaches to the teaching and learning experience. Our students need to be highly trained to work in conventional circumstances, but also capable of adapting their skills to unusual or unforeseen circumstances.

In the conventional approaches associated with many professions, the distinction between education and training is well maintained. A trained person follows a line of direction according to preordained rules and standards. In some situations the trained person is able to pursue her interests more creatively under controlled conditions and she may undertake research. The innovative person, however, is usually associated with education rather than training. We do not agree with these distinctions. For us the conservator operates on three related levels: she is well trained in specific, pre-established skills; she is capable of innovation in the development of practice where skills need to be adapted or modified (what used to be called 'transfer of training'); and finally, she is able to make decisions based upon a broader understanding of issues or problems. In other words, our conservators will be both educated and trained – and any line of distinction between education and training needs to be blurred to the point of eradication. The one informs the other in a reciprocal relationship.

Let us state this key issue once more: we believe that conservation professionals should be both educated and trained. We would go further and suggest that, in conservation, we should insist that training and education are placed side by side as partners in the structure and preparation of our courses.

If we believe in education and training, this will have an important impact upon the kind of student and teacher we would like to see evolve. The process of education and training is sometimes subtle and discursive and sometimes formal and authoritative. The difference between the two is felt mainly at the point of delivery. In other words there are different pedagogic approaches available for education and for training. We consider these in our section on modes of learning and teaching.

Before we become involved with any more formal matters about

course design and structures, here is a short story. It is about a man called Roberto who lives in Italy and is asked to produce a course on British cooking. We think this story is a good way of focussing our attention on some of the key issues with which we are concerned.

Roberto's Course On British Cooking

Roberto had been a cook in a well-known restaurant for more than ten years. He had also trained several young chefs on the job. But now there was a need for more chefs than he or all his colleagues could prepare. So he was not entirely surprised when, one day, he was approached by a local college. They wanted him to produce a course on British cooking for newly qualified chefs - and some enthusiasts who had had little formal training.

Roberto was told that he would have to provide the outline and main structure of the course, even though he might not teach it himself. Being the kind of person he was, Roberto was honoured that he could 'produce' a course, even though he was not quite sure what that might mean.

Once he had decided to accept the challenge, Roberto telephoned all his fellow chefs, and one or two of his former teachers, to see if they had any advice. Most of them gave him the same answer - they had to learn as they went along, and that was the best thing he could do! Roberto did not like this much, and vowed that if he ever found out how to 'produce' courses, he would share his experience with others.

Roberto decided that, if he were going to go ahead with this production, he would have to answer a few important questions before he began. At home in the evening he sat quietly at his desk, took a sheet of paper and a pen and began to write. The first questions seemed to come easily. That was probably because he already knew the answers! But he still wrote them down. Then he had an idea and underneath each question he wrote the answer in a different colour. It looked something like this:

a) How long will the course be?
ten weeks
b) How many people/students will come on the course?
15-20
c) Where will it take place?
at the college
d) When will it take place?
starting on the first Monday of October of this year

Roberto felt rather pleased with his progress so far. He knew he was on his way. Then he couldn't think what to do next. After a few minutes of silent thought, he realised that there were many more questions to ask and answer. Some of them related to the ones already asked and some were new ones. In a mood somewhere between panic and exhilaration, Roberto wrote them down in no particular order:

What kind of level would the students be expected to reach?
What kind of resources would be available in terms of staff and money for travel?
Where would the students come from and how would

they be selected?
How much money/resources would be available for practical sessions?
Could he bring staff in from other parts of the country/world?
Who would actually be in charge of the course?
How would they know if they had succeeded or failed when it was all over?

In his excitement, Roberto was unaware that the kinds of questions he was asking were all very relevant, but they were not all of the same type.

Some of the questions were administrative. Some were academic and some were concerned with either aims or objectives. He went back over them again and noted which was which. Then he rearranged them into some kind of order, starting with the academic questions and issues, then going on to the administrative, then the aims and finally the objectives.

His revised list can be seen below.

ACADEMIC

There is a need for a specific course which prepares trained and educated cooks who are able to undertake cooking in the 'British' style. Such cooks should also understand something of the culture and environment from which the cooking springs. (I know this is not a question, but I want to say it here.)

ADMINISTRATIVE

How many students will there be and where will they come from?
How will they be selected?
Where will they live?
How long will the course be?
Cost and resources? Who pays and how much?

AIMS

To produce (Roberto was becoming a little more comfortable with this word) *a course which can educate and train cooks according to the general aim and specific objectives which will be outlined.*

OBJECTIVES

The objective of the course will be…

Here Roberto paused. Once again, his enthusiasm ran up against a wall of sand. What exactly did he mean by objectives? He knew that he wanted to be as precise as possible, but he was not so sure what it involved. Because this is a fable, Roberto took a couple of days off and went to a local, very well stocked educational library. When he returned to his desk after his brief period of study, he felt more sure of himself, and made the

following notes:

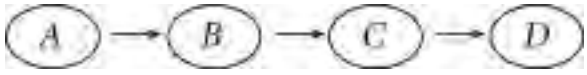
My notes on aims and objectives:

Don't forget that:
an aim is a general statement of intent, and that an objective is a statement of what students will do, the conditions under which they will do it and the standards they will achieve.

Roberto stared at what he had written for a long time. He knew that this would be an important guide when he came to work out the details of the course. By now he had calculated that the course would last for 10 weeks with 5 working days per week. There would be an 8-hour day with 3 working sessions of 2 hours in length and 1 hour for lunch with the rest of the time for breaks, discussion and dealing with the unexpected.

Once again, Roberto felt that he was at a point where some important decisions had to be made. He had to decide, before he went any further, just what kind of shape his course would have. He was not entirely sure what he meant by the 'shape' of his course, but he knew it was important enough to sort out before he got down to the fine details. So he put his work to one side - and thought about courses and shapes.

Because this is a fable, it was not necessary for Roberto to return to the library. He simply dreamed what he had to discover (we may not all be so lucky!). First he had a dream about a course which was made up of sessions which came one after another, with specific times allocated each day or week for what had to be done. He saw himself telling students how to crack eggs, how to make Yorkshire pudding and many other strange things. Then he saw another person talking to the students with a book on the philosophy of cooking in his hands. One activity followed another. He decided, in his dream, to call this a linear course. In fact it seemed so simple to him, that he decided to call it a plain linear course. When he woke up he went straight to his desk and made a simple diagram of his dream. It looked like this:



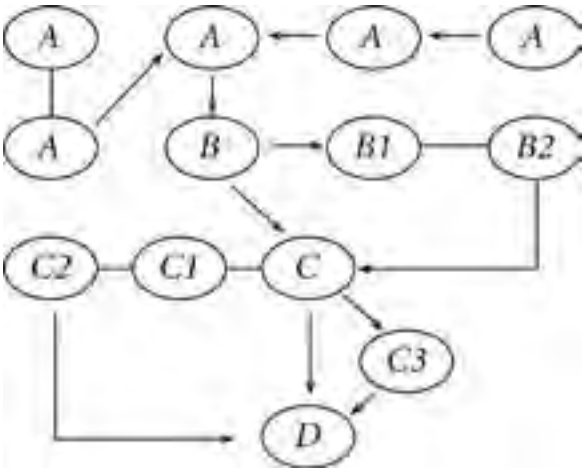
one thing follows another

Next day, at work in his restaurant, Roberto thought more about the plain linear course. He knew it was not the only way of structuring what had to be done - but something told him it was probably going to be the most useful. He decided he should also explore some other possibilities, though he was not sure what they might be. He decided he would wait until he could 'dream' a solution.

For supper that night he ate a large piece of mature Cheddar cheese, a small slice of Stilton, and drank a glass of stout. He was not disappointed with the results. His dreams that night were rich and brightly coloured.

First he dreamed of a course in which not all the activities took place at the same time. Some students had to do more units than others, and some bypassed units which were not thought necessary for them. In his dream he noticed that all students took the main or core units, but only some of them took units which were called prerequisites or optional. It was an exciting dream. He realised that some activities went on parallel with others.

He decided to call this The Parallel Course.

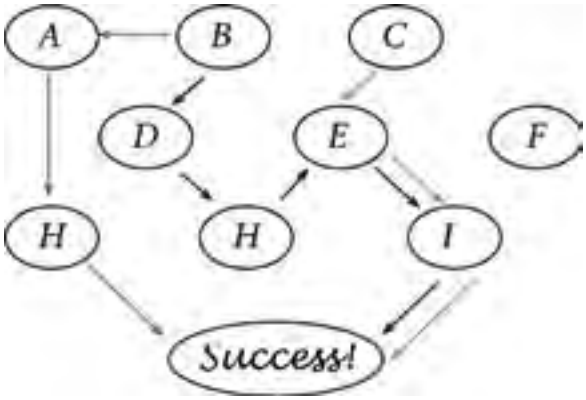


When he woke up he immediately wrote this down in his notebook. He also made another little sketch to remind himself of the 'shape' of a parallel course.

The meaning of a course shape was beginning to register with Roberto. He saw that some of his students would go straight from unit A to unit B etc. Some of them would take a prerequisite or two **before** they took unit A. Some would take an optional unit before they completed unit D. And some would be required to take a prerequisite **before** they went to unit D! Roberto was beginning to realise that he could actually **build** a course - and that it was exciting.

Roberto felt inspired. He ate another piece of cheese and then fell asleep once more. This time he dreamed of a very special kind of course. In it, the students were often doing different activities and they all seemed very capable. The only thing that was clear to him was that sometimes their activities overlapped, and sometimes they worked apart. But at a certain time they came together, and they had all achieved similar standards of excellence! This was certainly a splendid dream. Because so many things were going on at once, Roberto thought of a different name for this kind of

course. He called it a Multidimensional Course. This time, when he woke up, he had to think carefully about how to sketch what he had dreamed. It looked like this:



In this type of course, students could go from unit to unit according to their need and research interests. So one student could go from A to G, and another from E to I. Roberto could see that, if all units were interesting, it would be an ideal way to work. He also realised that such a course would only be useful after any basic work had been completed. It would, in effect, be a course for professionals who were ready for research. But it still seemed like a good idea, if used with care.

Roberto had eaten enough cheese to last him for quite a while! But he was now becoming something of an expert at dealing with course planning issues in his head as he went about his daily business. Do you teach cooking with lectures? How many seminars should I have? What do I mean by British culture? How much should my students know about cultural and theoretical 'things'? How much training do they need? He devised a plan to answer all the questions he had thought of so far - and he also spent another couple of days thinking about different ways in which students could be taught and might learn on the course he would produce.

Now there was the question of content. It's all very well, he thought to himself, playing around with course shapes and different ways of learning and teaching. But what do I put in the course! Actually, Roberto had been thinking about this all the time, but it had somehow been at the back of his mind. Once he turned his mind to questions of content, ideas just flooded in. He knew the only way he would get them under control was to turn them into a kind of shopping list:

1. *A unit on the ingredients in British cooking.*
2. *A unit on British cooking techniques.*
3. *Something on the philosophy of British cooking.*
4. *Something on 'pure' and 'derivative' recipes for British cooking.*
5. *Basic skills - boiling eggs and making roast beef.*

Roberto's list was longer than this, but we think you get the idea. He was covering a range of possible skills and knowledge which go under the name, when we work, of theory and practice. The practice could be further sub-divided into skill acquisition and cooking.

At last Roberto felt that he was ready to make some kind of order out of all the thinking and reading he had done.

Roberto began by making a resolution. He resolved that the course he produced would:

Remember the 14 characteristics of the students he would like to see come out of the course; try to make a productive combination of teaching and learning modes in his course; remember that writing objectives is the business of those who teach individual modules, but to provide clear aims for all activities.

[Because this is a fable, it will stop soon - you will only see Roberto's first outline for the course structure and content of week one. We hope it will be enough to inspire you to do better on whatever course you have to produce] You will find below the timetable for the first week of the course, and the letter which Roberto sent to all prospective teachers in advance. Please remember that what follows is offered as example of the kind of processes which a course producer goes through. The first week of this fictional course is designed to demonstrate a variety of activities, and each activity is carefully gauged in relation to the one which precedes or follows it. You will also note that the last session of the week is a discussion of week one and an introduction to week two. There is emphasis in this process on continuity and the importance of engaging continuously with the participants about the course they are undertaking.

Sample aims for each session are given at the end of this section, coded according to the numbers in the corner of each timetable slot.

OUTLINE TIMETABLE AND AIMS FOR WEEK ONE

This 10 week course is intended for newly qualified or suitably experienced cooks. It will provide an overview of the history and culture of British cooking, along with training in all basic skills associated with the craft. There will also be selected practical classes where all students will experience the usage of recipe cooking as individuals and working as part of a team.*

** entry will be through interview and initiative tests.*

Roberto has deliberately avoided a rigid patterning to the events. Each day is organised differently. The specific times are not included here, but remember that each session lasts two hours.

Here is a copy of a letter sent from Roberto to all prospective teachers on the course:

Dear Prospective Teacher

I am delighted to welcome you as a teacher on this 10-week course. You will see from the outline timetable that the activities to be undertaken are varied and deliberately interwoven so that theory and practice complement each other throughout. I have done no more here than give you the topics to be covered or the title for the lectures.

It would be very helpful if you could plan your own sessions with the sessions of others in mind. Because we are all local people, we can contact each other to discuss any points of organisation or suggestions for relating sessions.

In the first week it is essential that the students get a sense of the way of working which we intend to adopt. You will see that there are two lectures in the week. There will never be more than two in a week. We will also make increasing use of seminars, which should, after the first couple of weeks, be led by the students. (That does not mean that you should not be there!) Please note that each teacher is required to provide short and clear aims for every session they take. Where any training is involved, there should be clear objectives for each skill to be acquired.

The outline for the rest of the course can be worked out when we all meet next week.

This short letter and the following outline timetable are designed to set the scene for our discussions and planning.

Best wishes

Yours sincerely

Roberto etc.

And on the next page you will find the timetable:

DAY	SESSION 1	SESSION 2	SESSION 3	Informal sessions:
Monday	1. Opening ceremony –followed by - Introduction and welcome: What we expect from you and what you can expect from us. Introducing each other – introducing the staff	2. The Kitchens: an overview of facilities and procedures.	3. Our Library: the facilities and procedures for study and loan. Obtaining your email account.	4. Social evening – to finish by 10.00 p.m.
Tuesday	5. Lecture: British cuisine and the place of roast beef in British culture.	6. Visit to two local British restaurants to observe preparation for the evening" meals.	7. Workshop: How to handle metal foil and greaseproof paper.	8. Students' presentations (10 minutes each): On cooking at home.
Wednesday	9. Seminar based around a reading of H. Jones' account of work in a London Hotel.(text will be provided in advance)	10. Training session 1: The Yorkshire pudding mix – problems and possibilities. All students will make three different versions of the mix which will be logged and left to stand over the lunch break.	11. Training session 2: Baking and logging. All three mixtures will be baked and students will be required to keep a full log of all developments noted during the cooking. They will also be taught how to clean all kitchen implements whilst cooking takes place.	Students' presentations: continued.
Thursday	12. Researching a topic in the library – this session will include a one hour presentation on approaches to researching data held on databases, followed by practical search experience.	13. Researching a topic in the library – this session will consider the production of annotated bibliographies and students will begin the production of their own database.	14. Lecture: What is 'British' in British cooking? Followed by Student-led discussion of three recipes which will be provided.	
Friday	15. Workshop: Preparing a baking dish. Sessions will involve theories of oiling and the practice of dish scraping in a variety of situations.	16. Library: Reading of Antonia Pearson (2000) 'The problems with yeast' in *British Cooking Today*, Volume 38, number 2, pages 35-58. (multiple copies available)	17. Meeting with your teachers to discuss the week, and to outline the ways in which tutorials will be conducted for the rest of the course. Election of student representatives.	18. Summary of week one and introduction to week two.

TIMETABLE FOR WEEK ONE OF ROBERTO'S COURSE

Roberto also produced a series of aims for each session during the first week. This list serves two purposes - first it acts as a reminder to himself about what he is trying to do. Second, it offers a chance for colleagues to get a sense of what the aims might be if they are expected to contribute:

Roberto's notes on the outline aims for each session – to be provided to the teachers:

1. The aim of this session is to create a friendly and productive ethos from which the rest of the course will flow.
2. The aim of this session is to combine an opportunity for the participants to move around together with a chance for them to see the kind of equipment on which they will be working. It will also provide a time to give a first introduction to work practices and safety procedures.
3. The aim of this session is to show the participants the potential of library use in relation to our course. It is also designed to introduce library procedures, give them each an identity number to log on to the Internet, and allow them

some time to browse and surf.

4. The aim of this session is to provide a first social occasion where there will be many introductions and a few speeches. The main thing is that it should formally finish early in the evening.

5. The aim of this lecture is to contextualise the development of British cooking in relation to their practices of eating roast beef in a particular way.

6. The aim of this session is to remind students that their work is closely related to the world outside the course – and that it should be. They will also be given various observational tasks to record in their diaries as a result of the visits.

7. The aim of this session is to introduce them to workshop procedures and ensure that all students have or acquire the 6 basic skills associated with the use of foil and greaseproof paper.

8. The aim of this session (the first of two this week) is to give the students a chance to introduce themselves and say something about their background. The main constraint here will be time. It is an important part of the aim of these two sessions that as many staff as possible attend.

9. The aim of this session is to provide an introduction to discussion based around a close reading of a text. These texts will be given out at least one week in advance. Seminar procedures, including the encouragement of all students to speak (and think) will be a key aim to achieve here.

10. This first training session will aim to do two things: first, to induct the students into the ways in which training will be carried out; second to demonstrate how we expect success from our training by ensuring that all students in the group succeed in making an acceptable Yorkshire pudding mix according to standard criteria.

11. The aim of this second training session is to continue with the acquisition of necessary skills for the production of a Yorkshire pudding, and to demonstrate the importance of learning to log one's activities as a regular part of one's work.

12. The aim of this session is to provide the students with the skills and opportunity to undertake specific data searches with specific goals within a given period of time. They will be encouraged to use both computer based and paper based data sources.

13. The aim of this session is to train the students in the necessary skills to commence their own, computer based, data bank. They will begin this and be given the necessary storage disks to keep as backup.

14. The aim of this lecture is to establish the intercultural dimensions of the course by examining the roots of what is known as British cooking and encouraging a structured critique of a range of understandings of the concept of 'Britishness.'

15. The aim of this session is to combine practical work (the preparation of a baking dish) with certain theoretical positions in relation to such preparation. It will be a way of indicating to the students the importance we place on

combining theory and practice in our work.

16. The aim of this session is to provide a structured, timetabled session where critical reading is the activity. This text will form the basis for next week's seminar. It is most important that staff concerned with this project participate in the reading process by being in the library with the students. Once again the aim of the session is to establish an ethos…

17. The aim of this session is to allow students to provide initial feedback on all the activities of the week. It will also be a time when tutorials will be introduced, explained, and a schedule for each student drawn up. At the same time there will be elections for student representatives.

18. The aim of this session is to offer a brief, informal overview of the week and to discuss how it relates to week 2. This will be a regular feature of the course and it will stress the importance of relating each part of the course to the whole etc. By the end of this week, the aim will be to have built an ethos for working which is recognised and positively engaged with by the students.

Following on from the story of Roberto's Course, we will begin to consider the kinds of issues he had to face - but from a slightly more formal perspective. In doing so we will be considering our students, modes of learning and teaching, and our course structures. We will write of these separately for convenience, though in our planning and practice they should be held in a dynamic relationship. The simple diagram below indicates this relationship.

Our students and ourselves

In order to achieve our goals in relation to education and training we need to think carefully about the main characteristics we wish to foster in our students.

What follows is a series of aims with this issue very much in mind. They are not listed in order of priority. They apply equally to students and to all of us as teachers or as potential teachers. This, we must not forget:

Our students will be knowledgeable, skilled, autonomous, professionals.

All professionals in the field know that each conservation problem is different so there are few standardised procedures.

Students need a good knowledge of the subject in order to be able to recognise and analyse problems then work out the best approach to conservation. They need to learn not only the practical skills involved, for example, in assessing the condition of an object or a building, in cleaning or removing dirt, or in environmental monitoring, but also the skills needed to be able to think all round a problem, to weigh-up different options, to consider carefully every stage of what they are doing, and to work independently.

Our students will be able to work on their own or as part of a group.

Students should be independent enough to work on their own, e.g. in designing an appropriate support for an object, without constant reference to the teacher for guidance.

Equally, they should have good enough interpersonal skills/ 'people skills' to be able to work harmoniously and constructively with other students in carrying out a larger project such as a site management plan or an education project with children.

Our students will develop appropriate practical skills for a range of practical activities.

Practical skills are essential for all conservators since our work involves interaction with objects, such as handling very fragile ancient silk textiles, examining a complex painting, or the delicate process of cleaning a decorated metal surface. We want our students to be skilled, adaptable, resilient and able to make use of their practical training in a variety of situations.

Our students will possess organisational skills.

In designing a project, they should be able to plan a series of actions, list and assemble all necessary resources, involve relevant colleagues and then implement and monitor the project.

Our students will be able to recognise and describe problems.

For example, students will be able to recognise the signs of deterioration on building structure, diagnose and describe the problem before exploring appropriate solutions to halt the deterioration.

Our students will also be able to establish criteria and priorities which affect decisions.

There will be occasions when the task to be undertaken does not come with ready-made criteria for success. It may then be necessary for the student to decide just what would constitute, for instance, a successful mode of storage, or a successful technique of exhibition.

This will involve taking decisions about the priorities in an individual situation, for instance, whether an object of high fragility but great significance to a community should be displayed or protected.

Our students will be able to find relevant information and to consult specialists when this is needed. They should also be able to use the information appropriately.

Students should be able to search and retrieve information from existing documentation, from library sources or the Internet.

Our students, in their professional lives, will often need to consult others. They need to be able to identify who is relevant and of appropriate standing in the profession or other group (e.g., specialist curator, archaeologist, engineers, scientists, site managers, leader in the local community).

In each case, they should also be able to decide if the information they obtain is applicable or not.

Our students will be able to formulate questions and to review options in order to reach an appropriate solution to a problem.

Students should not be satisfied simply with reaching the first possible conclusions, but be able to think 'all round' a problem. They should have a wide enough knowledge to be able to identify a range of options to solve any one conservation problem.

They should be ready to ask themselves questions such as 'who has an interest in this building?', 'what is the real aim of this process?', 'what is the cultural significance of this collection?' 'what would happen if we do not improve the environmental conditions now in this store?'.

In reviewing options, for example to deal with insect infested textiles, they should be able to decide whether to use chemical fumigants, a freezing treatment, or a low-oxygen atmosphere.

Our students will be capable of lateral thinking, in other words they will be able to devise, where necessary, alternative solutions to problems.

For example, in the absence of internationally recommended materials and equipment, our students should be able to devise an alternative approach to solve a problem - perhaps using locally obtainable appropriate materials from the market and adapted/modified domestic equipment.

Our students will be able to create and present relevant information for the heritage profession.

It is a requirement of good practice to document all conservation work and research. To promote development of philosophy and practice, it is also important that students learn to communicate within the profession (by means of internal documentation, publications, conferences, etc.).

Our students will be culturally, contextually and economically sensitive.

Students should be able to listen to and take into account the concerns of others. This listening should involve a sensitivity to other disciplines, cultures, economies and societies. It is vital that our students understand the contexts in which they are likely to be working. This requires an ability to empathise with people and culture as a way of life - as well as an intellectual and historical foundation.

Our students will have the confidence to re-evaluate decisions and take appropriate action.

Heritage professionals are human and do not make perfect decisions every time. Students must be prepared to re-evaluate their decisions and actions when necessary.

For example, it they have agreed to an object's being loaned for an exhibition, but then realise the object is just too fragile to be able to withstand this, they must be able to explain this, and negotiate the selection of another object or another activity.

Our students will demonstrate enthusiasm in their work.

Heritage professionals should demonstrate their enthusiasm for their work by the way in which they set about it. This would apply in relation to their employers, to their peers, and especially in relation to the public.

Students should be generally cheerful and hard working, willing to show others what they are doing, and eager to find out more about the subject.

Our students will be capable of public communication in a range of circumstances, and using a variety of media.

Heritage professionals have a responsibility to communicate and promote conservation in the wider community.

Students have to be competent in communicating in a variety of ways and using appropriate language depending on context. For example they should be able to communicate clearly with any group, from a professional organisation to a class of school pupils, or a group of journalists.

They should be competent communicators when making verbal or illustrated presentations and should be capable of using a range of relevant visual and audiovisual media. They should also, of course, be able to communicate through the written word.

Learning and teaching

This book is about learning and producing courses. It's important to consider the individual roles of learning and teaching in the whole process of developing our students. As we will see, there is a variety of different modes of learning and teaching in current use, and some are described later in this book. What we want to emphasise here is that, while the best teaching encourages students to learn, teaching does not automatically lead to learning.

Conventional teaching in schools and universities often relies on the teacher providing information by talking to a group of students (a school class, a university lecture). Another form of conventional teaching is used to impart practical skills. This may be more accurately described as instruction, and involves demonstration by the teacher and repeated practice by the student.

Both these forms of teaching are valuable. We believe that other forms of learning and teaching must be used alongside these conventional ones, to increase our success in evolving knowledgeable, skilled, autonomous professionals.

We know that children learn through play and through using all their senses – touching, testing, tasting, watching, listening, questioning, and that while they are doing this they are actively engaged in learning. We need to explore the use of a similar range of methods, to ensure that students learn. This is why in the next section you will find a description not just of lectures and practicals, but of tutorials, games, and workshops. You will also find a description of what is often known as problem-based learning - an approach in which students take complete control of their learning.

We have seen above that a distinction is often made, in terms of status, between education and training, but we believe that they are of equal importance and should inform each other in a reciprocal relationship. We believe that using a combination of approaches to learning and teaching, including, for example, simulations and problem-solving, not only stimulates students to learn but also facilitates the development of the characteristics identified earlier.

How does this affect us as teachers?

Conventional forms of teaching involve the teachers being in control of what happens during the teaching session. We have already indicated that some of the other forms of learning and teaching require the teacher to 'take a back seat' and to let the students take over. Some teachers find this difficult at first because it is not easy to predict what will happen during this type of learning session. This is not the main issue, however. We need to concentrate on the productive dimensions of some of the alternative approaches to learning. This will involve us as teachers in the task of building confidence in students. It will also require us to develop our pastoral role in relation to our students. We want to emphasise that using some of these methods can be as exciting and stimulating for the teacher as for the students.

In an earlier section (Our students and ourselves) we described the characteristics we want our students to have, and we pointed out that

most or all of these characteristics are also needed by us as teachers. To use a range of different learning and teaching approaches successfully we need to be flexible and responsive as teachers. We need to be capable of lateral thinking, we need to be ready to evaluate what we have done, and sometimes to adopt an alternative approach to a given task or process.

The word 'process' has been used on many occasions in this little book. It is time now to consider how and why it is such and important word. To enter upon a creative education (not a mechanical unthinking one) is to enter a process. It means that education has to be dynamic, in movement, a period of protracted growth and development. We must keep this in mind as we attempt to attain our objectives and achieve our aims. Students do need skills. They do need to be competent in a range of activities. But above all else they also need to be able to think critically and creatively, and to adapt their experience and skills, where appropriate, to a variety of circumstances and conditions. Students need to recognise that they are, metaphorically and sometimes literally, on a journey. The modes of learning and teaching which we adopt should facilitate that journey. Our courses should develop in our students a way of thinking and acting. The attainment of objectives must only be a step along that path. There will always be more objectives to attain. Objectives help us to take individual steps. Critical and creative thinking make possible the journey.

As we choose or select our modes of learning and teaching in our courses, we should keep this very much in mind.

Approaches to learning and teaching

There are many different ways in which learning and teaching can take place. It is very important to give them serious consideration before planning a course. This section offers some information about the best known approaches to learning and teaching. The section also contains some practical observations about each of these approaches. We attempt to demonstrate the strengths and weaknesses of each approach. In doing so, we are trying to illustrate that no approach to learning and teaching is without its deficiencies. We also attempt to show that most approaches have distinct strengths if used appropriately as part of balanced and varied programme. We begin with the lecture.

The lecture

We include a little more information about lectures than we do the other modes of teaching and learning. This is simply because the lecture is the most often used and abused of the modes we consider. A lecture is a particular kind of talk given by one person to many people. It is still a very common form of teaching and it is often seen as the bedrock, the foundation of any worthwhile course.

A critic with some wit once pointed out that a lecture is a way of getting the contents of the lecturer's notebook into the student's notebook without having to go through the brain of either of them!

We have all had experience of filing into a lecture hall and sitting down to receive a more or less well-prepared lecture. We may have listened to one or two inspiring lectures in our lives, but in the main the lecture tends to offer us a recurrent and not particularly positive experience. We may start out with our (metaphorical) pencils sharpened and our wits about us. After a while there is a dropping off of our attention and we may drift away into wondering what to eat for dinner. By the end of the lecture we may have returned to listening to the lecturer and decided to try to give her or him one more chance before it is all over. This pattern is very much related to research findings. We all experience a rising and declining learning curve as we listen to a lecture.

Research has shown, unsurprisingly, that lectures are more popular with some students than with others. It has also been shown that lectures are often less effective than reading. They may also be less effective than well-prepared discussion, and are certainly less effective, for most of the time, than seminars.

Lectures are almost always too long. If they are given in the context of conservation or art history, they are often too long and over illustrated with irrelevant material. It is thus possible for the students to reach saturation point both aurally and visually. This somewhat bizarre list could be extended.

If one discusses these issues with students, they may begin by agreeing with all these negative appraisals. If one goes too far down this road, however, the students will point out that they have attended interesting lectures. It seems that there is something inherent in contemporary higher education that suggests that for every interesting

or important lecture one attends, one has to do the penance of attending another twenty or so that are neither.

But what can or should we and our students expect from a lecture?

The points which follow offer more than sufficient reason for maintaining lecture programmes as part of conservation courses. They would, however, be regular but somewhat less frequent and much more carefully structured into a more varied programme:

Lectures can serve as a focal point in the course.

One should remember that a sense of identity and community on any course is vital, and the coming together for lectures is an important way of giving that form of assembly a dignity and purpose.

Lectures are times when students may hear a clear exposition of one or two difficult concepts or procedures by someone who is able to handle such matters professionally.

The lecture thus facilitates a mode of understanding and learning which is less problematic than certain forms of private study may sometimes become.

Lectures can encourage and develop the ability in students to follow relatively complex discourse and to take relevant notes.

Note taking is a skill that requires encouragement and recognition by teaching staff. The skills of note taking are linked to other skills in reading and writing.

Lectures are a very useful way of either introducing or reviewing a topic.

Students often become lost in the maze of information they are given. A clear concise lecture can cut through the confusion and provide clarity and elucidation. The lecture form, however, needs to be used with discretion and lectures should be kept at a reasonable length. (No lecture should ever go on for more than 45 minutes without a break or a change to another activity.)

Lectures can help to promote reflection and discussion and debate in a way which is not always open to other forms of presentation.

A successful lecturer is able to promote reflection and thought through the ways in which she structures and presents data, ideas, and formulates questions for further consideration.

A lecture can help to strengthen and sustain motivation.

This is a crucially important point when students are often under pressure and would benefit from a balanced and enthusiastic endorsement of the field they are studying.

A lecture can help to refocus attention, to boost morale, and to demonstrate the ways in which aspects of a given course of profession relate one to the other.

A non-patronising, encouraging lecturer can do much to build the confidence and structure the experience of students who may otherwise flounder.

An illustrated lecture, if handled with care, can become a memorable learning experience, provoking reflection and increasing knowledge.

Now we will move on to consider some other possibilities for varying our modes of teaching and learning. They are not in order of priority or relevance. That will depend upon decisions which we have to make in designing our course. This will include the length, place, time and audience for any course we design. It will also depend upon the key qualities and characteristics we intend to evolve in our students.

See Example 1 About Lectures on p.41.

Handouts

A handout is a sheet of information given to students in relation to a lecture or a training or other session on a course. A handout is likely to contain focused or concentrated information, or reminders of how procedures are carried out, or summaries of arguments and key references. (We should remember that we should not give out the complete text of our lectures as handouts.)

The advantage of a handout is that it provides the student with a tangible reminder of a lecture or other session. It also means that all students are thereby provided with the same information.

The handout provides students working in a second language with the chance to concentrate more on the content of a session, rather than trying to take notes all the time.

Providing handouts means that slow writers are less likely to be disadvantaged by having to take notes quickly.

There are, inevitably, some disadvantages to using handouts. We need to be aware of them when making decisions about what we will provide.

There is the possibility that students may stop listening on the basis that they expect to receive a handout summarising everything that is being said. Sometimes handouts may become less effective than encouraging students to take their own notes.

Handouts may foster a sense of dependency in the students which is not conducive to autonomous behaviour.

Handouts may take many forms. If well designed and introduced at the appropriate moment, handouts can be a most effective aid to teaching and learning, and be stimulating for both producers and students.

See Example 2 Forms of handouts on p. 44.

Training

We use the term training here as a synonym for instruction. There will be occasions on our courses when we wish to impart skills to our students. Where these are psychomotor (hand and brain) skills it may be necessary for us to provide a very precise and structured instructional experience.

We will need to remember that training of this kind requires clear objectives and a mode of address which is concise, confident and non-patronising. We will also need to be able to perform ourselves the skills we are introducing to others. Training sessions will include demonstrations, the building of routines, the repetition of skills. All such sessions will be closely supervised.

Training must precede practical sessions.

Practical sessions

I hear, and I forget; I see and I remember; I do and I understand.

Chinese Proverb

The importance of practical work to our courses is quite central. It is also something which is not always given the time and attention which it deserves. Instead more time is spent worrying about who will give the lectures. Our practical sessions should be prepared with the same care and preparation that we devote to other activities.

In the practical sessions we have the opportunity to utilise and develop the skills we have acquired in our training.

The above considerations will have an impact on the way you go about your course design.

Problem based learning

This is an approach in which traditional teaching has been discarded in favour of students taking control of their learning, and of the ways in which they do it.

Students are presented with a problem and are free to use a variety of methods to solve it – so they may read, consult, request a tutorial on a specific topic, practice a technique, set up some laboratory tests, and so on.

Here the teacher does not impart knowledge but becomes a facilitator or catalyst whose role is to encourage the students to work things out for themselves. It is also an approach which helps to bring together, productively, elements of both theory and practice.

Problem-based learning is closely linked to other forms of problem solving activity where initiative is required from the learner because there is no preordained answer to the problem they are asked to solve. Lateral thinking is encouraged in such activity.

See Example 7 Problem-based learning on p. 56.

Games and simulations

Games and simulations are a means by which students can develop their capacity for group work and for taking initiative. At their best, they offer the student a chance to learn and to develop new skills. The advantage of games is that they may actually encourage the student to find new solutions to problems, and to think more creatively.

GAMES are an excellent way of getting students to relax and to learn skills or more creative modes of thinking. The successful game allows the student to be more creative and open than the more conventional modes of teaching and learning.

SIMULATIONS bring the student or group as close as possible to an actual situation without creating the situation itself. There are now, for instance, flight simulators, and driving simulators available as computer software. In the field of conservation, artificial aging and the preparation of standardised samples for testing products are examples of simulations. We can also simulate a situation which involves negotiation with staff or the drawing up of budgets for a project etc. This involves role-playing.

See Example 5 Activities involving games on p. 51 and Example 6 Activities involving simulation on p. 54.

Seminars

The seminar is a time of intensive and sometimes prolonged study. In our context it may be the length of one full session of up to three hours. In the seminar the text for discussion has been read in advance and is then re-examined by the group.

For the seminar to be successful, it must be led by someone : the tutor, or by one or more of the students. Seminars may sometimes be based around a lecture by a visiting speaker. The key point to note is that students should come to a seminar already prepared to take part.

For a seminar to be successful, there has to be a relationship of trust

and respect between all participants. It is a time of reflection based on discussion, exploration, debate, exchange of ideas, and clarification of the ideas of others.

See Example 3 Practical activities on p. 47.

Tutorials

The personal tutorial is the time when the tutor can exercise most influence - either positive or negative. It is a time when the needs of the individual student can be addressed and it allows both student and tutor to talk with relative freedom.

The tutorial also involves elements of pastoral care - not something which many tutors in higher education have been prepared to handle.

The main advantage of the tutorial is that it allows tutors to encourage students and to work with them on their perceived weaknesses or anxieties at the professional level.

Mentoring

Mentoring has become more popular and relevant in recent years. A mentor has been described as a 'trusted colleague'. Mentors do not have to be experts in the field of study of the student. They are seldom involved in any formal assessment procedures.

The concept of mentoring is hardly new. It means that there is someone to whom one may turn for advice or who may be around to encourage and support us in our learning. What is new in mentoring within a course is that the process is somewhat formalised rather than left to chance.

In some courses mentors are appointed with responsibilities for specific students. If it works well, the mentoring system provides a friendly induction process where the student learns from someone they respect in an environment which is supportive.

Reading and writing

Reading and writing are included here as modes of teaching and learning because they are so often forgotten when we plan our courses. When students attend courses, we expect them to be numerate and literate. And of course they are! But there is more to reading and writing than being able to recognise words and sentences.

To learn to read critically means we have to balance the acquisition of information with a measured, considered response. Critical reading and writing should not be aggressive or insensitive activities. The critical reader or writer should be both persistent and modest.

It is important to structure reading and writing experiences into courses for all students.

It is also important to structure library sessions into any course. Such sessions can sometimes be highly directed - as when you ask your students to collect all the bibliographic references they can find on a specific subject. At other times they may simply recognise that time should be set aside for reading to take place.

We may also teach students how to prepare an annotated bibliography. We might also plan for structured, critical reading

See Example 4 Seminars on p. 49.

seminars around a given paper or other text concerned with relevant issues, thus linking reading and writing with the provision of seminars.

Reading

Our students need to be able to do the following when they are reading:

Distinguish between written texts based upon opinion and those which offer an argument based upon data and research.

Recognise the genre they are reading – whether it is a report, a polemical essay, a scientific research paper, an academic thesis etc.

Be able to cross check what they are reading against other relevant texts.

Read in such a way as to be able to identify those texts which contain material which is relevant to the task in hand. In an era of information overload, we need to learn, where necessary, to 'read for need.'

Identify and summarise the main arguments and conclusions which may be drawn from a given text.

Writing

It is important that, in your courses, you encourage your students to see the value of writing – and provide them the opportunity to develop necessary skills. These would include:

The ability to write accurate summaries, as noted above.

The ability to write an annotated bibliography.

The ability to make a clear and coherent argument about specific topics and problems in the field.

Students need to be able to quote and paraphrase correctly, with due acknowledgement to the authors included in their writing. If these procedures are followed correctly, they obviate the possibility of plagiarism.

They also need to be able to express themselves accurately in their own words, allowing for the minor linguistic variation which writing in a second or third language may engender.

The ability to write accurate descriptive prose, whether for a field or other report is important. Reports written for publication in newsletters, or professional journals may also feature in students' training. These are likely to be of the 'essay' or even 'dissertation' type. Students should be taught how to make the most effective use of illustrative material in the form of images, diagrams, case studies etc.

They should also be taught the skills of taking notes - both when listening to lectures or presentations, and when reading academic or other professional texts.

Students should also be able to write specifically for the public and for the press. For these purposes they need to develop appropriate vocabularies and modes of address.

Many professionals make a daily note or write a continuing account of the work they undertake. We should encourage our students to keep diaries – both as a means of recording and documenting work undertaken, and as a way of developing skills of description and analysis.

In the bibliography are some references which provide further information about the development of reading and writing skills.

Materials-based learning

In a materials-based learning system, learners depend on materials which may have many forms: printed materials (books, worksheets, etc.), technology-based materials (CD, video, etc).

This approach involves them more than do face-to-face sessions as they take responsibility of their own learning. It allows them to choose their course of study and determine their own timetable, thereby enhancing their autonomy. They can learn on their own, at a pace and a place of their choice.

Materials-based learning does not mean to learn with materials alone. Learners may meet regularly with other learners or a tutor (see page X). In some cases, this figure may be crucial to guide and help learners in their learning process.

This approach requires attention and personal effort from students who have to read quite a lot. To be successful, learning materials should have very clear objectives in line with the learners' needs, be user-friendly and propose activities and helpful examples.

Modes of learning and expectations for acquisition

A grid is provided below. It can be used or developed for use in assessing the most appropriate or desirable mode of learning for a particular task, topic or session. The 'technique' column offers a range of possible activities, to which you may wish to add in relation to your own facilities and experience.

The other column is called the 'acquisition' column. It is concerned with the various skills, intellectual capacities or creative potential you may wish to foster, develop or ensure in your students. Ideally one should fill in with a number each relevant box for a chosen task or session. We recommend that for each session you choose up to five techniques, ranked in order of appropriateness for your needs.

What you will find is that this will have an impact upon some taken for granted assumptions about the most appropriate mode of working. For instance, if you wish to provide a session on problem solving in relation to a chosen topic, you are not likely to choose a lecture as the best approach. If you wish to ensure that psychomotor skills are developed, you are not likely to choose a seminar or a handout as most appropriate. It is always a matter of strategic choice. If you make the wrong one you may give both yourself and your students a very hard time …

Acquisition Expectation	Technique								
	Lecture	Handout	Training	Games & Simulations	Seminars	Student presentations	Tutorials	Mentoring	Practical Sessions
Lateral thinking									
Problem- solving skills									
Note taking skills									
Psychomotor skills									
Practical skills									
Communication Skills									
Research skills									
Decision-making skills									
Autonomy									
Organisational skills									
Observation skills									

The selection of 'techniques' and 'acquisition expectations'

A note on assessment and evaluation

Assessment of student work

Assessment of the quality of student work can have two functions. It can provide students with feedback (through discussion with the teacher) so that they can improve their understanding and/or practice. This form of assessment is sometimes described as formative and can have an important role in learning. Assessment can also be used to provide a grade or mark when the course leads to some form of qualification (e.g. an academic diploma). This form of assessment is sometimes described as summative.

In short courses it is not necessarily appropriate to include assessment, although we may wish to consider including it for some modes of learning. One situation where assessment is always necessary is when we provide training in specific skills. Instruction of this kind should have clearly defined objectives and assessment is used to ensure that the objectives are met – i.e. to ensure that the student really can perform the task.

Informal discussion between teacher and student may be very useful particularly when a student in her normal working life has little access to other specialists. We might also consider including self, or peer assessment in some courses. Self assessment involves inviting individual students to comment on their own work, and peer assessment involves students assessing each other's work - these can be useful, for example, when encouraging students to learn how to make public presentations, or in commenting on role-play.

Evaluation

Evaluation is a useful tool for improving courses. Through consultation of the students at the end of the course, or shortly after, it is possible to identify strengths and weaknesses in the design and implementation of the course. The process enables us to make modifications and to explore the use of different modes of learning and teaching.

Evaluation is normally undertaken anonymously, using a carefully pre-prepared questionnaire, so that students feel able to be frank in their criticisms and praise. The students' comments and suggestions should be analysed in the light of the context and conditions in which the course has been run.

Discussion of the results of the evaluation both with colleagues and with the group of students concerned may enable the teacher to gather further useful comment and advice.

Evaluation can also be done through directed discussion, where for example, one group of students is given the task of identifying all the strengths in the course, while another comments on the weaknesses. Although this approach might appear less transparent, students are in

fact stimulated by each other's comments and the process can yield very useful results.

In a course which is co-ordinated by one teacher, but involves contributions from a number of others, it may also be useful to invite visiting teachers to comment on the syllabus, structure and organisation of the course.

Course planning

It is not a popular notion with all course planners (or their managers), but planning courses takes time! It could be argued that the amount of time necessary to plan courses should be in inverse proportion to the length of the course. Examples of best practice such as courses produced by the GAIA Terra project involve a team of people over a considerable period of time in producing a five-week course on conservation of earthen architecture. We may not be so privileged, but we do need to allocate time - recognised time - to the planning and production of courses. It is not an evening or weekend activity. It is serious work.

In this section we want to focus our attention on questions which relate to the planning of specific courses. We will do this in stages.

Planning a course is like writing a piece of music. We have to consider where we want the points of emphasis, the appropriate tempo, and the variations of rhythm and melody you intend to offer. We also have to decide who is playing the instruments and what kind of audience they will have!

Before we enter the process of production, it is important for us to remember that it is a process and it should always be dynamic. We want to ensure that whilst planning we can still think, and not feel obliged to simply fill in empty boxes which are supposed to be transposed into a course at some magic moment.

We need to be able to think and rethink our courses, to plan and re-plan them. We have to develop our own techniques of intellectual sketching out of ideas and possibilities. At the same time, we have to answer some questions before we begin. Even though we may be aware of the questions, it is not a bad idea to restate them as a simple reminder:

How long will the course or module last?

This is important for obvious reasons. A three-day course makes different demands on staff, students and equipment than does a three-month one! This is an obvious point, but it is often the case that the obvious forgotten or overlooked as we plan our courses. We will make no further reference to this matter - but we should always ask ourselves it there is anything obvious we have overlooked in our preparations.

How many students will there be?

It is important to know both the numbers of students one expects and whether it will be a full-time or part-time, residential or non-residential course.

What will be their background?

It is not always possible to find out detailed information about your students. It is important that all steps to obtain information that can be taken are taken. The design of application forms is important here, as are letters of reference and, where possible interviews.

Who will do the teaching?

It is sometimes the case that, in our enthusiasm to establish course, we forget that we will need suitably qualified and experienced staff to teach on them.

Where will the teaching take place?

In the world of today this question has global implications! In which country or region will we be teaching? If it is in a location or building which we know, which room or rooms which we be able to occupy?

What is the resource provision?

We need to know which equipment is available, from computers to clamps and hammers! We also need to know if there will be any technical staff available and whether they will be with us full time or part time.

Do the course aims exist, or should I provide them?

Sometimes courses are produced on a vague notion that "we need a course on 'x' or 'y' ". No one ever stops to ask what the aims of such a course might be. We need to establish this before we begin.

Do the course objectives exist?

Course objectives are more specific because they address what our students will be able to do when they have finished it. They must be written, but this can be done at various points during the production process according to need.

We are also assuming, in writing this text, that we know the field with which we are dealing! This means that, for now, we should be able to concentrate more strategically on our general approach than issues of precise content.

Deciding on our course structure

So, if we have now answered the previous questions, we can ask the first question about the course or module you will produce.

What kind of structure will my course have?

All courses have some kind of structure. Sometimes the structure comes about by accident. We are concerned with structures that are planned.

We are concerned here with Course Planning, and we will consider this in some detail. First, let us consider the three main types of course structure which we may draw upon. They all have strengths and weaknesses and they are often used in combination in the actual design of actual courses.

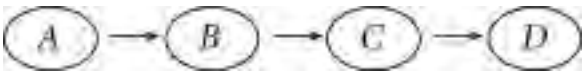
Plain linear course

The plain linear course structure is probably the most common. In a linear course, unsurprisingly, one thing follows another!

We may 'do metals' on Monday morning, 'do stone' on Monday afternoon, go to the library on Tuesday morning, have a lecture on Art History on Tuesday afternoon etc. Such a course structure can provide security for the insecure. If the course is not well planned and delivered, it can also mean that students see each activity as separate and not necessarily related to another.

In practice, the plain linear course need not be so plain! Nor should it imply that we want to produce plain linear students.

We need to evolve course structures which allow the students to make links between different activities. In fact they should be encouraged, through the course structure, to make such links. This can be done, in part, by us thinking carefully about the structure and the variety of activities within the structure.



Linear course

In the plain linear course, as we have said, one thing follows another. Each component is separate and may or may not be related to what follows. The 'advantage' of a plain linear course is that teachers can come in and do their work without much or any knowledge of what anyone else has done. The disadvantage is that, for many students, one part of a course may not seem to have any necessary relation to another.

One way of dealing with this is to have a resident teacher who makes all the necessary links between components. This can be of crucial importance because that teacher is the one person who has an overview of the whole course and the way it is presented and taught.

In the plain linear course, each component (A, B, C. etc.) may last for as little as an hour or as long as a week.

It may be necessary and desirable, for a whole variety of reasons, for us to work using some kind of linear structure. If we do, we will need to develop strategies for ensuring that students know what they are doing and why they are doing it.

There are at least two other possibilities for course structure which we need to consider before making a decision. The next one is what we call the parallel course. It is called a parallel course because some parts of it may run at the same time and not be attended by all of the students.

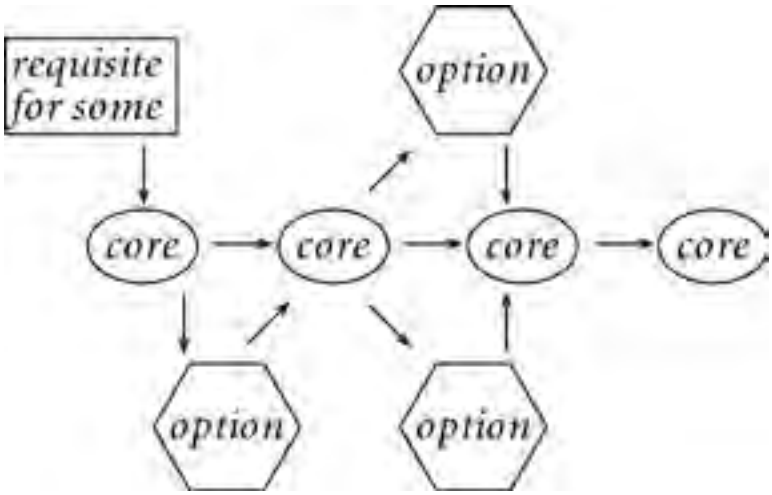
Parallel course

The parallel course is one in which some elements run at the same time and are not attended by all students.

It is also one which allows a certain amount of choice, though all students, with occasional exceptions, take all the core elements.

You can see, diagrammatically, that there are different routes through the parallel course. All students, with some exceptions because of past experience etc., take the key or core elements, but there is also room for some choice.

Such a structure requires confidence from the teachers and can build confidence in the students.



Parallel course

Multidimensional course

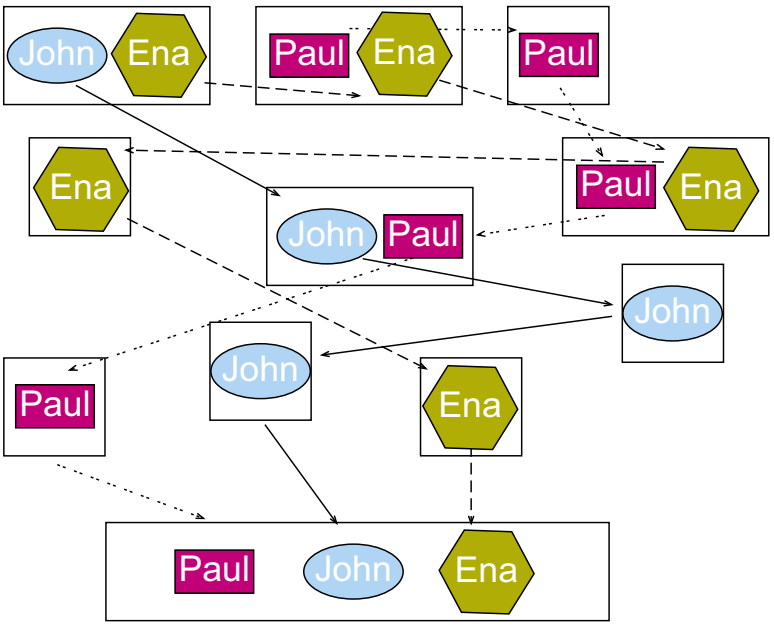
This is the third type of course. The multidimensional course is one which allows for multiple entry points and for multiple routes through the work to be done. The emphasis is on a successful outcome which achieves accepted or appropriate solutions to problems and issues. Multidimensional courses may become sections or modules on longer courses.

In the multiple entry course the teacher has to encourage the student to take responsibility for all major decisions and the implementation of such decisions in practice.

Note the multiple routes and points of entry. Only the end goal is

shared by all. Students may meet together by arrangement during the course, but their main activities are undertaken independently.

The end goal of success!



Multidimensional course

We have now considered briefly three types of course structure

The plain linear

The parallel

The multidimensional

We may choose any one of these approaches - or more likely a combination of the approaches. (It is most likely that we will use a plain linear approach, combined with elements of the parallel course!) The main thing is that we should think about it and be enthusiastic about our solution.

If we have not already done so, now would be a good time to look at the variety of approaches to learning and teaching which we can structure into our courses.

Evolving our course

When we have considered carefully the type of course we intend to produce, and the possible approaches to learning and teaching which may be appropriate for us, we move to the next stage.

Remember that this is not supposed to be a how-to-do-it guide. It is about possible approaches to a process of production. The most important thing is that we develop our own approach. The second most important thing is that we do it with a whole range of variables in your mind.

First of all, we need to remind ourselves of the basic questions to which we need answers before we begin.

We have to remember that we are involved in the process of production - and that it should always be dynamic. We have already asked these questions when we thought about our course structure. They are here once more as a reminder:

- *how long will the course or module last?*
- *how many students will there be?*
- *what will be their background?*
- *who will do the teaching?*
- *where will the teaching take place?*
- *what is the resource provision?*
- *do the course aims exist, or should I provide them?*
- *do the course objectives exist?*

It is a good idea to draw up our own checklist before we begin production. It may be the same as the one above, or it may be modified according to the kind of course we are producing.

Most of us find it difficult to work on several ideas at the same time - therefore we may make lists or do little drawings to help us remember where we are in the production process.

Because this process involves thinking about more than one thing at the same time, it is also likely that we will have to go back and modify our ideas as we go along. This will be apparent as we look at each section in the pages that follow.

Proceeding with the production

This section draws upon the example in Roberto's Course on British Cooking. In this instance, our approach is rather formal. This is simply to encourage ourselves to combine more formal procedures with creativity.

We should make a written note of our answers to all the questions on the number of students, resources etc. We recognise that there may different needs which require some different questions to be asked, though we think the list provided covers the more general issues which are relevant for us all.

It is very important, from time to time, to reset our sights on our target. We should look once more at the 14 points which suggest the desirable characteristics of the students we hope to evolve.

We should remind ourselves once more of the different possibilities available in terms of modes of learning and teaching.

Then we must decide which shape of course is most appropriate for

our needs.

When we have done these things, we can move to a consideration of them in relation to course content - though it is likely that they will have been in the back of our mind for much of the time when we were making our initial plans.

Our plan

The course content for our (fictional) course on British cooking is likely to fall into three main areas:

Skill acquisition
The theory, philosophy, ethics and aesthetics of British cooking
The accumulation of cooking skills

[there will, of course be other areas to consider, from the well-being of the students to the issue of arranging visits.]

We should list all the content or thematic content we can think of under each of the three main areas: skills to be acquired; philosophy, ethics, culture etc.; the accumulation of cooking skills. We can do this on our own or with a colleague if this is possible (two heads are often better than one).

We should rank the content in order of priority and set it out on paper, still under the three main headings.

If we have done all these things, and answered all the questions we have posed, we will be like a builder who has assembled all the materials and can now begin to build - according to the course structure of our choice.

It is important to look carefully at the aims for each individual session. They provide points of focus which can lead, without too much difficulty, to the formulation of objectives.

Not in conclusion

Whichever route we have taken through the material offered here, there are some important points to make in conclusion:

The first is that there cannot be a conclusion in a publication such as this! We have stressed that we are talking about processes. We hope that readers will see this text as a modest contribution towards their development as educators and communicators in the field of conservation.

We said at the beginning of this journey that we did not intend to provide a 'how-to-do-it.' What we have attempted to do is to focus attention on some of the major issues with which we will have to deal. If we are already experienced lecturers and teachers, perhaps we can reappraise our approaches on the basis of what is offered here.

If we are about to embark upon course production for the first time, this text is designed to enthuse us, to generate a little excitement - and at the same time to offer a core of necessary considerations and basic skills.

Where we have told readers what they already know, we hope we have given positive reinforcement to their knowledge.

Where we have made suggestions which are new to our readers, we hope they will give them serious consideration.

We have tried to make our points as clearly as possible. We will consider our work a success if our readers feel they have had enough of this text and feel confident that they can get on and produce their own courses.

There are many sources from which we can all learn more as we develop our own skills as course producers and facilitators of learning. There is an annotated bibliography for this purpose and a series of suggested web links that we think are useful.

There is much more to be done, but we believe our profession is one which benefits enormously from the enthusiasm of many of its teachers as well as its learners. We hope that reading this text will help those who wish to do so to enhance their teaching (and learning) capacities and strengthen their abilities in relation to course production.

Glossary

Aim: An aim is a general statement of what students will achieve on a course or module. It is not as specific as an objective, but it can be very useful as a way of identifying the ethos of a course.

Annotated bibliography: a bibliography in which each entry (giving author, title etc) is followed by written comments on the content of the publication.

Autonomy: We have said more than once that we believe in our students' becoming autonomous. To be autonomous is to be free to think things out for ourselves, to determine, and reflect on, our own actions as and when this is necessary. It means that we do not have to depend on others in order to make decisions, or to think.
Being autonomous is not the same as being a loner. We want students who can work independently, but recognise the central importance of being able to work with others. Autonomous students are able and motivated to work on their own, but have the confidence to work with others, and know that they must.
Students who are *not* autonomous often affect an appearance of independence (which may include a reluctance to talk about themselves and their work) to cover their insecurities.
Autonomy is built up over a period and depends on the relationship of the student not only to the teacher but also to her peers. It also depends on the choice of modes of learning and teaching.

Course: a period of structured learning usually undertaken with a group of students and one or more facilitators or teachers. Courses may vary in length from less than a day to several years.

Education: the acquisition of a range of knowledge about a specific subject or more widely, which can be drawn on in reflection and decision-making

Gaia Project: The Gaia Project was established in 1987 as a joint initiative of ICCROM and the International Centre for Earth Construction (CRATerre-EAG) devoted to the study and conservation of earthen architecture. The Gaia Project implemented a series of research and education programs. Gaia developed and launched the international PAT courses and was instrumental in the establishment of the training program at the Escola Nacional de Artes e Oficios Tradicionais (ENAOTS) in Serpa (Portugal), as well as several field courses throughout Africa. The Gaia Project evolved into the Terra Project when the Getty Conservation Institute joined the partnership as a result of their collaboration in the PAT96 course.

GENERATION 2: This was a 2-year project that ICCROM launched in April 2001 in collaboration with EPA (Ecole du Patrimoine Africain, Porto Novo, Benin) and PMDA (Programme for Museum Development in Africa, Mombasa, Kenya). This project is funded by the Getty Grant Program and aims at refining a teaching methodology producing innovative materials and start building a new generation of trainers in Africa.

ICCROM: the International Centre for the Study of the Preservation and Restoration of Cultural Property is an intergovernmental organization and the only institution of its kind dedicated to the protection and preservation of cultural heritage worldwide, including monuments and sites, as well as museum, library and archive collections. ICCROM fulfils its mission through collecting and disseminating information: coordinating research, offering consultancy and advice; providing advanced training; and promoting awareness of the value of preserving cultural heritage.

Instruction: structured learning in which a teacher demonstrates a particular skill, and students repeat the action under supervision until they have acquired the skill themselves.

Lateral thinking: it is a term coined by Edward de Bono for two contrasted but complementary modes of thinking. In problem solving, vertical thinking elaborates methods for overcoming obstacles in the chosen line of approach, while lateral thinking tries to bypass them by switching to a radically different approach involving a distinct reformulation of the problem.
(Fontana Dictionary of Modern Thought, Fontana Press 1988)

Learning curve: a way of expressing the amount we learn and the rate at which we learn it, thus a steep learning curve indicates that we have learned a great deal in a short time.

Module: a sub-division of a course, thus a course may consist of a certain number of modules normally each on a separate general topic.

Objective: an objective is a statement of what a student will do, the conditions under which she or he will do it, and the standards which will be achieved.

Pastoral care: the whole business of providing advice and support to someone in our general care, in this case a student. Pastoral care covers matters such as health and personal welfare rather than the student's training or academic work.

PAT99: PAT99 was the last in the ten-year history of PAT courses - a series of short-term, mid-career programs on the conservation and management of earthen architecture. Four international courses were hosted at the School of Architecture of Grenoble: a pilot course in 1989, followed by three international courses in 1990, 1992 and 1994 (known respectively as PAT89, PAT90, PAT92, and PAT94). Two Pan-American courses were organized in Trujillo, Peru, at the World Heritage site of Chan Chan in 1996 (PAT96) and 1999 (PAT99). Altogether, the PAT courses from 1989 to 1994 served to establish a network of some 120 professionals from 36 countries in Europe, the Americas, Africa, and Asia. The two regional PAT courses organized in Peru trained an additional 52 participants from 18 countries in the Americas.

Plagiarism: the use of other people's work as if it is our own. If another's words are used in written work or in any publication, without appropriate acknowledgement, this is plagiarism, and is considered to be an academic and professional offence.

PREMA: PREMA 1990-2000 (Prevention in Museums in Africa) was a long-term programme to arrest decay and prevent deterioration of the collections in the museums of sub-Saharan Africa. Since 1986, ICCROM in collaboration with 25 partners providing technical and financial support has organised this integrated programme of training and technical assistance for museum professionals from all sub-Saharan countries.

Professional: a person who adheres to a set of ethical standards and working practices defined by acknowledged authorities / the whole body of those/ working in the same field.

Student: a person engaged in a structured period of study at any given level and irrespective of their existing professional or academic experience.

Terra Project: The Terra Project was launched in 1997 and is a collaborative initiative of ICCROM, the International Centre for Earth Construction (CRATerre-EAG), and the Getty Conservation Institute (GCI). The aim of the Terra Project is to develop the conservation of earthen architectural heritage – as a science, a field of study, a professional practice, and a social endeavour – through institutional cooperation in the areas of research, education, planning and implementation, and advocacy.

Training: the acquisition of a range of skills necessary for the performance of certain tasks. So, for example, a conservator must be trained in the use of a range of tools and equipment in order to be able to clean a painting.
Transfer of training: the ability to adapt and innovate, and to apply our training in 'new' circumstances, e.g. we may modify our present skills and/or develop new ones to deal with a new situation.

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This is still one of the most interesting and accessible overviews of the debates about and potential uses of objectives. For the enthusiast.

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Discusses the different ways in which we may evaluate and improve the standards of teaching (and hence learning) in higher education. Links educational theory with the practicalities of teaching. Argues, importantly, about the importance of listening to students, and being prepared to change the way we approach teaching.

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London: Harper Row
This is a classic. Written mainly for teachers in post secondary education who have to produce courses. Deals with questions of policy and strategy, encouraging us to select from amongst a range of techniques and approaches. Concerned with the principles underlying course design. This is one book that all course designers and producers should read.

* Asterisked texts are highly recommended.

Example 1 About lectures

The following example is derived from Session 2.1.2 of the PAT99 course, which was developed by Tony Crosby and taught by Tony Crosby, Roberto Stiuv, and Fabio Amador.
This is an example of a lecture and its associated handout on the topic of documenting earthen architectural heritage. This was a 3 ¼ hour session within a 6-week course. Because the students were mid-career architects, conservators, archaeologists, and engineers, the purpose of the lecture was not to provide training in *how* to document, but rather to address documentation decision-making within the framework of conservation planning. It therefore emphasized the reasons and levels of documentation (e.g. to present, to record, to establish baseline information, to understand construction technology, to define particular characteristics, to register interventions, to monitor deterioration, etc.), while also providing information recording tools and techniques appropriate to earthen sites and structures. In addition, the lecture provided clear links to other subject matter and sessions in the course, so as to underscore the role of documentation within a broader conservation context.
The didactic approach of the session was that of a traditional lecture accompanied by slides, overheads, and handouts. It employed a variety of examples and case histories of earthen architecture documentation to illustrate concepts. The lecture was complemented by a practical field session that likewise focused on increased cognitive awareness about documentation decision-making (*see Example 2B Practical Activity*).

Sample Lecture Handout: Documentation

Objectives of the Session
- The initial documentation decision is to determine the purpose for documenting.
- An understanding of the process of defining character and its role in the planning process.
- An understanding of the relationship between documentation purpose and the documentation methodology.
- A basic understanding of a wide range of documentation tools and methods.

Description and Content of the Session
Classroom Lecture:

The classroom lecture will introduce the subject of documentation by first discussing the purposes for documenting a site or structure. Examples of documentation methods will then be presented in a general overview, and then specific documentation purposes and methods will be presented. While a lecture format, active class participation will be continually encouraged.

Introduction
a. Review the session activities for the day and the responsibility of the instructors.
b. Encourage student participation.
c. Establish relationship between this session with the previous sessions and particularly with the sessions that are to come later

Purposes for Documentation
a. Ask class to give examples of why one documents a site or structure and make a list – make sure that the basic ones are covered and group; review those listed with a prepared overhead.

1. Emphasize graphic documentation
2. Describe an effect of decay and ask how it can be documented.
3. Relate the effect of decay to the cause and discuss how the decay process can be documented.

b. Show transparencies (examples) of sites and structures and emphasize/discuss a particular documentation purpose for each example.

1. Describe examples of sites and structures when a combination of purposes requires a combination of tools and methods.

Documentation Methodology

a. Ask class to give examples of documentation tools and methods and make a list – again make sure that the primary ones are listed; review those with a prepared overhead.

b. Discuss each primary documentation method in some detail, emphasizing the relationship to purpose.

1. Photography (general, rectified, photogrammetry, digital)
2. GIS Technology
3. Video recording
4. Collection of environmental data
5. Drawings

Process of Documentation for Particular Purposes

a. Present example of a site in drawings and photographs and discuss how it would be documented for the purpose of (1) establishing a baseline to which details can be added in the future, (2) developing a condition assessment report, and (3) monitoring decay.
b. Present an example of a structure and discuss how it would be documented for purposes (1) and (2) above and for determining character.
c. Use examples of archaeological sites and historic buildings and cultural landscapes.
d. Emphasize how the relative affect of threats is a factor in making documentation decisions.
e. Use same example of structure and place a specific time limit on the documentation and discuss what changes have to be

Describe the process of defining the character and establishing character-defining features of a specific site and structure.

a. Use example and list characteristics of a particular site.
b. Emphasize visual character, but define character identification by that which can be identified by the five human senses of sight, sound, smell, hearing, and touch.
c. Discuss that the primary purposes for establishing character are: (1) to understand the essence of what is important in the establishment of a management, (2) to understand the effects on the important characteristics by interventions, alterations, and other changes and (3) to help prioritize protection interventions.
d. Discuss the effect of distance, how the visual character is affected, and how management decisions such as interpretive trails can affect how some features are treated.

1. How is a feature perceived from difference distances?
2. Give example of an archaeological site with similar structures that are protected using different methods, because one is see at close hand and the other is only seen at a distance

Summary

a. Documentation is a tool to be used for some purpose, and the more clearly defined is the purpose, the more efficient is the process.
b. While described separately, character identification is a part of any normal evaluation process when the importance of the structure or site is being considered.
c. Within the various purposes discussed, two should always be part of any documentation program: (1) to monitor future changes (to whatever level is possible) and (2) to establish a base to which more information can be added in the future (if it doesn't already exist).
d. Describe field exercise.

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Glossary

Character defining features – The specific elements of a structure or a site that define its character through the use of the five human senses of sight, smell, touch, taste and hearing.

Defining character – The process through which the character defining features are identified.

Documentation – The results (products) of documenting a site or structure, specific to the documentation purpose.

Documentation purpose – The specific reason, or need that a site or structure is documented. Examples are: (1) for monitoring decay; (2) for adding more detail to at a later date; (3) for identifying character; (4) for presentation; (5) for planning and detailing future interventions; (6) for a condition assessment; and (7) for developing a management plan.

Example 2 Forms of handouts

This following example is derived from a 3-week workshop on Museum Enlivening Skills, which was developed by Malcolm MacLeod in the framework of the PREMA Programme in 1998. These handouts are in the form of Information Sheets.

Information Sheet:
KEY THINGS THAT MUST BE DONE BEFORE OPENING AN EXHIBITION

The planning process should be done in relation to the objects and other resources. It involves the following:

1. Decide on objectives to include
2. Identify resources
3. Allocate resources
4. Locate responsibilities
5. Set completion date
6. Set timetable and then monitor preparations against target dates along the way to opening day.

You must conduct a survey of the available space for the display.

You have to look at the collections in the Gallery and in the reserve stores, the Gallery's shape and size, electrical installation, ventilation, access – and the way people get in and out of it.
You have to ask yourselves what is next to the space and how that affects the new use of the gallery.
Consider security and safety, and the walls: can photos be mounted on them?

The following points must be taken into consideration:

1. The storyline
2. Gallery survey
3. Deadline: ensure that the timetable is adhered to perfectly. Corrective action must be taken immediately if something goes wrong and has not been done on time.
4. Keep an exhibition master file. This would contain the storyline, results of the gallery survey, list of exhibits, conditional report, basic essential papers, absolutely everything to do with the exhibition - for further reference.
5. Set up an effective communication structure - assemble an exhibition team and allocate responsibilities to all the personnel concerned.

Ensure there is proper flow of information to all personnel concerned at all levels:

- TEAM
- RESPONSIBILITIES
- COMMUNICATION

All the concerned personnel (team) should know all the crucial matters involved in creating the exhibition by:
- Holding regular meetings and briefing them,
- Each part of the team should know the other people's responsibilities and deadlines.
- The groups must hold weekly meetings and keep minutes
- Everyone involved should have access to the minutes

- MEETING
- REPORTING TO MEETING
- DECISIONS FOR ACTION
- ACTION
- NEXT MEETING

The design is divided into 2 parts:

1. CONCEPTUAL
2. PHYSICAL

(CONCEPTUAL: Involves listing of all objects to be used, how the story-line explains them and the exhibition theme.)

Information Sheet:
VISITOR SURVEY

WHY CONDUCT A VISITOR SURVEY

I. Government allocates huge amounts of money to museums. Museums are charged with both social and commercial responsibilities. Whenever there seems to be a problem this will affect the performance of the museum - there is a need to ask the following questions:

1. Are we reaching all the "publics"?
2. Who is coming and who is not? Why are they coming (or not)?

II. We have to reach out to groups who are not coming. In order to achieve this we need to look at:

1. Physical accessibility
2. Financial accessibility
3. Emotional accessibility: people feeling comfortable in the museum.
4. Political accessibility: the political relationship of the various publics to the displays.
5. Intellectual accessibility: language - literacy level, level of existing knowledge.

REASONS FOR A VISITOR SURVEY

1. To determine the kind of visitors who visit the museum
2. To discover what the visitors think about the museum and how they contribute to the museum?
3. How many and how often do they come and why?
4. How can museums be improved to attract more visitors?

MAIN TYPES OF INFORMATION

Qualitative and quantitative (key differences here)

1. Qualitative information collects opinions and views about the visit and how the visitors feel about the Museum. Quantitative information deals with statistics and mathematical analyses of the data, i.e. who comes, how often, from how far etc. The basic method is to use discussion groups to analyse the soft data. Both methods are widely used.

PITFALLS OF VISITOR RESEARCH

∗ There are many inherent problems i.e. visitors at times give unreliable answers, some have a deep “Courtesy Bias” (they give polite rather than honest answers).

∗ There are difficulties in setting or phrasing the questions so people will answer them willingly and honestly i.e. asking direct questions *versus* allowing visitors to choose the questions they answer.

∗ Cultural variations and sensitivities - questions that seem polite in some cultures could be impolite in others - they thus have to be re-designed.

BENEFITS

∗ A belief that the survey has produced reliable information and one can link the results to people’s experiences of the museum, i.e. you have a good idea what pleases or displeases people who visit your museum

∗ The results can measure the success or failure of the museum to achieve its mission.

∗ All this can be earned through the responses of the visitors to the survey.

SURVEY METHODS: FOR SMALL/MEDIUM SIZE MUSEUM: CONSIDER

- What information is needed and why?
- Whether the museum will be able to act on the findings?

THE DESIGN OF THE QUESTIONNAIRE

- Keep it simple
- Don’t ask challenging questions
- Avoid questions where you won’t get any answers
- Use short questionnaires

There are two types of questionnaires

1. One completed by interviewing your visitors
2. Self-completion questionnaire

PILOT STUDY

Try a pilot study of your questionnaire for about a week to predict the outcome and find out any problems with the questions you are asking.

SAMPLING METHODS

* Sample: choose a representative number of your visitors to the museum: you cannot question every single visitor
* Decide on the intervals between questioning visitors: decide on the time of arrival of those you will question and their number. Do not force visitors to attempt the survey.
* About one in ten or one in twenty will be a useful sample in many cases.

NB. : It is always better to get Market Research firms to do the survey for your museum as these are professional groups who are highly conversant with current methods.

Example 3a Practical activities

This session was developed and taught by Bob Barclay during a 3-week workshop on Mounting and Support of Collections in Ghana in 1998 in the framework of the PREMA Programme.

MAKING THE DESIGNED MOUNTS FOR OBJECTS

time: **1 day or more**

DESCRIPTION	MATERIAL	PRE-REQUISITES	OBJECTIVE	PRODUCTION
Group exercise You should make whatever mounts are needed for the artefacts following the drawings and written descriptions prepared during module 1. Each student should be assigned tasks so that all are exposed to various techniques and materials. Use the list as an ideal list for tools that are available in local shops and markets. At the end of this module, the artefacts should be cleaned and stabilised, and mounted for display or storage.	Drawings and description prepared during Module 1, Bibliographic reference: *List of tools, Mount-making for Museum Objects*	Working in group, Module 1	You will make the mounts following the drawings and descriptions prepared in Module 1. This activity familiarises you with the tools and techniques of mount-making, and requires lots of practice with a wide range of materials.	Mounts for the objects prepared for display or storage

Example 3b Practical activities

The following example is derived from Session 2.1.3 of the PAT99 course, which was developed by Tony Crosby and coordinated by Tony Crosby, Roberto Stiuv, Fabio Amador, Francisco Uviña, and Carlos del Mar.

This is an example of a practical session on the topic of documenting earthen sites. This was a 2-hour session within a 6-week course on the conservation and management of earthen architectural heritage. The field exercise followed a classroom lecture that provided a context for and introduced the exercise (*see Example 1B Handout*). The students were professionals with a fair amount of training in recording methods and tools. The aim of the exercise was to elucidate decision-making processes about why, what, where, and how to record, as well as to foster awareness about how those decisions impact other aspects of conservation planning and implementation. By employing a "micro, meso, macro" approach, the exercise also highlighted the fact that recording is often a highly subjective endeavour, one that involves an analytical evaluation of many observations and contextual factors, rather than just a simple recording of evidence.

The exercise focused on the use of documentation to define the character of a heritage site or vestige for the purposes of:

- Aiding in the identification of significance and the analysis of context
- Developing an understanding of the overall site
- Prioritizing interventions
- Understanding the consequences of actions (or non-actions).

The exercise utilized a palace within the World Heritage site of Chan Chan. Areas of the palace – referred to as "stations" - where significant deterioration and/or intervention had occurred were identified and researched by instructors in advance. Students were divided into groups of five and given a plan and historic photographs of the "stations," along with the following assignment:

1. Describe characteristics of the stations from 3 different perspectives:

a) 100 - 200 meters
b) 10 – 20 meters
c) 1 – 2 meters

At each of the distances/perspectives, isolate the senses and record perceptions to the extent possible. Eliminate sight, then hearing, then smell. Record visual perceptions graphically and the others verbally. Collect information in order to present findings later as a group. (60 minutes)

2. Within each group, discuss findings and prioritize most important characteristics from each perspective (30 minutes)

3. Presentation, discussion, and conclusions of the exercise with all groups (30 min).

The students used digital photos, sketches, annotated photos and drawings, and written notes to record perceived characteristics. Their findings were organized and presented on large boards, known as "com-boards"*. These com-boards were retained and used later in the course as part of a larger exercise in which students prepared a mock management plan for the site of Chan Chan (*see Example 6A Problem-based learning*).

** Com-boards were used throughout the 6-week PAT course as a tool for facilitating the preparation and presentation of group work, as well as to post and illustrate data during lectures and lab sessions. All com-boards were digitally recorded and archived by session throughout the course, and students were given a CD-ROM with the archive at the end of the 6 weeks.*

Example 4 Seminars

The following example is derived from the Course 'Sharing Conservation Decisions', which was organized by ICCROM in collaboration with the Istituto Centrale di Restauro and the Opificio delle Pietre Dure, the two major conservation institutes in Italy, November 2002

This type of seminar is meant to encourage critical reading. In this specific case, the topic of the exercise is to track evidence of the conservation decision-making process in articles describing conservation work on specific objects.

The participants were split up into groups and asked to read two articles from The ICOM-Conservation Committee Preprints: One dealing with the conservation of ancient Egyptian beaded items of dress, and one dealing with storage, display and packing systems for Australian Aboriginal bark paintings.

A framework (see below) was provided which included a list of the key topics that should be discussed in relation to the article read: most importantly, the identification of decision-making moments and a critical assessment of the article and how the treatment or research was presented.

The groups were given an hour to meet and discuss the articles, after which the groups reported their ideas and engaged in a discussion chaired by the teacher.

An alternative approach consists in distributing the articles to students one day at least before the seminar. There can be more than 2 articles proposed for discussion, to be shared within the group of students, as long as each student reads at least 2 articles.

What to do with these papers?

- Read the papers and use the framework to analyse the decision-making processes
- Highlight strengths and weaknesses in the papers and prepare well-argued elements to present the analysis and participate in the seminar

Sharing Conservation Decisions

A framework to analyse decisions in conservation literature

1. State the purpose	***You cannot make appropriate decisions if you don't know the purpose of the conservation project*** **Is the purpose clearly formulated?**
2. Who are the stakeholders?	*You cannot make the appropriate decisions if you do not consider the opinions and needs of the various stakeholders***.** **Can you identify various stakeholders in relation to the purpose of the conservation project?** **Are their various opinions and approaches expressed in the article?**
3. Documentation	*Collecting, understanding and interpreting information on past decisions will inform today's decision. What would you need to know or what would you need to consider before taking actions? Where could you find this information?* **How is this investigation process reflected in the article? What sources of information were sought? What type of data did they provide? What do the references at the end of the article reflect?**
4. Tracking decisions	*The conservation project may require more than one decision. As the project develops, decisions might be altered.* **Can you identify the moments of decision in the article? Were the decisions justified, explained?** *For crucial decisions (which might influence the integrity of the object, its legibility, its long-term preservation.), we should always strive to propose an alternative, i.e. a different solution which could equally be implemented* **Are there alternatives presented to the key decisions reported in this article? If yes, do you feel they were thoroughly considered?**
5. Draw conclusions	Do you think a different decision could have been equally valuable? Do you think the decision taken in this conservation project was sufficiently "informed"?

Form developed by Judith Hofenk de Graaff, Sharing Conservation Decision, ICCROM, November 2002

Example 5a Activities involving games

The following example is derived from a 3-week workshop on Partnership and Fundraising developed by Terry Little and Gaël de Guichen in the framework of the PREMA Programme in 1998. This game complements a series of lectures and practical work on the topic of project design for funding purposes.

The motto of this activity is simple and crucial: you must be able to defend your project! The court-game conveys this message effectively, since it urges the participants to find ways of "selling" their arguments to the jury, i.e. to the future donors. Basically, the standard court procedure is imitated by the participants – they should decide who will defend the project, who will play the devil's advocate (sorry, the donor's advocate), and who will weigh the arguments of defenders and prosecutors. All 3 groups (defenders, prosecutors, jury) should occupy themselves thoroughly with the project to contribute fully to the "hearing".

NB. The participants' input is the key here. The instructors should only set the framework and let the players devise the game plan. So, the participants might call "witnesses" to support their case or invent other creative ways to make a point. The activity should not be perceived as work. Much more, it should be a fun way to demonstrate one's knowledge.

Example 5b Activities involving games

The following example is derived from a 3-week workshop on the topic of Deterioration if Collections organized in 1998 in the framework of the PREMA Programme. This session was developed and taught by Margaret McCord.

A PLAY ABOUT MUSEUM USE

time: 7.5 hours

AIM

There are five steps in this activity but there may be a gap between each step and the next. The purpose is NOT to discourage any way of using collections, but rather to indicate times when planning, preparation and protection should be in your mind.

DEFINITIONS:
Documentary: a factual presentation of a real event, person's life etc.
Dramatise: to exaggerate the importance or emotional nature of a situation
Sketch: a short and slightly constructed play, dramatic scene, musical entertainment.

1) CREATING THE PLAY ABOUT MUSEUM USE

time: 2 hours

AIM

This activity is intended to give you more experience in analysing museum use of collections. It also asks you to envisage some of the dangers objects may encounter.

CONDITIONS

This is a team activity

Return to your home team', the one you created for Activity 1. Choose another one of the Museum Uses listed in Activity 2, a different Use for each team.

Draw the system for this Use in the same way as the whole group did in Activity 3. Identify all the points at which the object/s might be handled or change location by putting an **X** for handling and an **O** for change of location in the appropriate square. [or use a green sticker for change of location and a red one for handling if these are available].

Use this information to create a short play or sketch, like a documentary film, about your Museum Use. Give it a good title too. Be as creative as you like but **NB: the running time for each play is 5 to 15 minutes.**

Elect the actors and decide what prop's you need - simple furniture and imitation objects. Not every member of the team has to take part in the play but everyone should contribute to its creation. Rehearse your drama at least once.

Watchpoint: Each change of location [**O**] will also mean handling [**X**] but the reverse is not always true.

It is essential to have a break between Steps 4.1 & 4.2 in order to allow the teams to plan and rehearse their plays (a minimum of 2 full days : a weekend or several evenings must be allowed). You could rehearse your play after Activity 14.

2) DRAMA PERFORMANCE

time: 30 minutes per play to allow for setting up props and applause.

AIM

This Activity and the next illustrate danger points for the collections in Museum Uses. The drama and its analysis is a learning experience for the whole group - not an opportunity to criticise the way the performing team deals with the objects'.

CONDITIONS

This is a whole class activity.

Watchpoint: You are trying to look at the Museum Use from the object's point of view.

Teams act out the processes involved in the complete Museum Use they have chosen.

3) IDENTIFICATION OF DANGERS ILLUSTRATED IN DRAMA PERFORMANCE

time: 1 hour

AIM

This activity is intended to increase your powers of observation and criticism of the way other people are doing a job.

CONDITIONS

This is a team activity

Members of the audience watch quietly writing down any points where you think the objects involved in this Museum Use are in any form of danger. Note the Actor and what he or she is doing as well as the danger.

When the play is over feed back all of the dangers to the Facilitator who will write them all on the board or flipchart. Teams of actors/authors should add any more dangers they are aware of too.
Use single words if possible and certainly nothing longer than 3-word phrases.

If more than one play is shown ask them to draw a line between each set of notes

Example 6a Activities involving simulation

The following example is derived from Session 4.1.1 of the PAT99 course, which was developed by Carolina Castellanos and facilitated by Carolina Castellanos, Erica Avrami, Roberto Lopez, and Fabio Amador.

This is an example of a 1-hour simulation/role-play exercise that accompanied a lecture related to the assessment of cultural significance in conservation decision-making and planning. The lecture focused on the following issues:

- A definition of "cultural significance" as an umbrella term for the many values associated with a heritage site
- The role of values in determining what and how to conserve
- The impact of contextual factors and physical condition on value
- Methods for identifying and assessing values
- Selected case histories of sites and the role of values/cultural significance in conservation decision-making.

A simulated "town meeting" followed the lecture directly. The purpose of the exercise was:

- to illustrate the concept of "stakeholders" in a site,
- to demonstrate how social factors influence cultural significance,
- to elucidate the often subjective role of conservation professionals, archaeologists, architects, government authorities, etc. in the assessment of significance, and
- to reinforce the need for community participation and facilitation in the assessment process.

The simulation parameters were prepared in advance by the instructors. A series of roles representing community members were identified and defined, including the local director of the site, site conservator, a foreign archaeologist excavating at the site, a tourism developer, director of the local housing authority, a journalist, a local teacher, representative of a foundation providing funds to the site, etc.

More than half the students were given a role; each role had a written description that provided general information about the position and opinion of the individual. The remaining students served as unidentified local community members and were encouraged to ask questions, raise issues, etc. As part of the simulation, a community leader (Chairman) and a small group of local authorities had organized the event, and those role-players served as the "panel" that ran the meeting, with the Chairman as lead facilitator. One of the instructors served as the Chairman, so as to be able to moderate the learning experience. The other instructors took on a small number of the roles in order to set the stage and to raise related – and often contentious - issues in order to encourage participation and debate.

The purpose of the meeting was to identify the cultural significance of a case site as part of a broader planning and management initiative. The exercise encouraged divergent thinking by asking students to play roles other than their own and to explore the many values that can be associated with a heritage site. Convergence was then attempted by simulating consensus-building and the prioritization of values by the meeting attendees.

Example 6b Activities involving simulation

The following example is derived from Session 3.3.2 of the PAT99 course, which was developed by Tony Crosby and taught by Tony Crosby, Roberto Lopez, Wilfredo Carazas, Roberto Stiuv, Fabio Amador, Francisco Uviña, Cecilia Alderton, Eduardo Muñoz, and Carlos Casteñeda.

This is an example of an exercise designed to simulate, at a large scale, pathologies related to earthen constructions. This 4-hour field session built upon a lecture outlining the various pathologies (structural, water-related, etc.) and factors influencing them. By subsequently simulating the conditions reviewed in the classrooms, students were able to reinforce their understanding of the physical factors and forces that influence condition, to explore cause-effect relationships, and to improve their diagnosis of deterioration patterns.

In advance of the session, five full-scale wall constructions were designed and built within an experimental "yard" at the course site. All incorporated the intersection of two walls, but each had varying construction details (e.g. one wythe vs. two wythes, bonding vs. no bonding at corner, mortar vs. no mortar, etc.)

The students were divided into five groups, an associate instructor was assigned to each group, and each group was assigned to one of the five wall constructions.

The role of the associate instructors was:

- To provide information about the construction details of their group's particular wall.
- To introduce three pathology scenarios to be simulated. Pathologies included: vertical wall separation, differential settlement, undistributed loading by a roof beam, base failure at the corner of a structure, and lateral loads from ground motion.
- To provide guidance to the students as they designed the simulation.

The charge of the students was:

- To discuss and determine their approach to distressing the walls and recording the process and outcomes.
- To create the pathology scenario by simulating distress forces/factors.
- To discuss and prepare the results.
- To present the results along with a description of how they simulated the pathologies, the rationale for their approaches, and a correlation of their approaches to real world conditions that could exert the forces/factors applied.

As in most sessions of the PAT99 course, students utilized large boards, known as "com-boards,"* to synthesize, record, and present their findings. The com-boards and the wall constructions were retained for use later in the course, when the damaged walls were utilized in sessions related to interventions.

** Com-boards were used throughout the 6-week PAT course as a tool for facilitating the preparation and presentation of group work, as well as to post and illustrate data during lectures and lab sessions. All com-boards were digitally recorded and archived by session throughout the course, and students were given a CD-ROM with the archive at the end of the 6 weeks.*

Example 7a Problem-based learning

The following example is derived from a series of planning sessions from the PAT99 course, which were developed by Carolina Castellanos and Erica Avrami.

A series of practical sessions in the PAT99 course were devoted to the development of a mock management plan for Chan Chan, the World Heritage site where the course was hosted. The exercise comprised several sessions over the length of the course, and represented approximately 10% of the 6-week learning experience.

As recognized by the cultural heritage field in general, the ever-growing societal collection of cultural property means increasingly complex challenges for the management of these resources. The numerous and often vast earthen structures and site throughout the world, and particularly in the area of Peru where the course was held, serve as a stark testament to the need for integrated planning of efforts related to conservation, tourism, education, research, etc.

With this in mind, a fundamental premise of the overall PAT99 curriculum was decision-making within the context of conservation planning, thus emphasizing *reasoning* rather than *information*. Planning became a thread that wove the many aspects of earthen architecture conservation into a methodological learning framework. Most traditional subject matter was covered, including:

- History and cultural tradition
- Planning theory and practice
- Recording and documentation
- Earthen materials, building techniques, and construction typologies
- Pathology and deterioration factors
- Assessment of physical condition, context, and cultural significance
- Preventive maintenance and monitoring
- Intervention strategies and techniques
- Evaluation of results

However, the topics were organized in inter-related ways around a planning process "spine," and some non-traditional topics (e.g. facilitation techniques) were added to introduce tools for implementing planning. All of these subjects were applied practically through an ongoing planning exercise.

For the purposes of the planning exercise, students were divided into five groups of five that remained constant throughout the 6-week period. Each group was assigned an associate instructor who provided guidance to the group and feedback to lead instructors. The charge was to prepare and present a mock management plan for the site of Chan Chan.

During other course sessions student undertook practical work related to documentation, condition analysis, interventions, etc. that often utilized Chan Chan as a test/case site. These findings were brought into the planning sessions and used to build a cadre of knowledge about the site and to inform the planning process. The planning sessions, themselves, therefore focused on:

- Integrating assessments of cultural significance, context, and condition
- Delineating conservation principles and priorities
- Developing strategies for conservation and related site efforts, including research, education, tourism, etc.

On average, students worked in their planning groups approximately one half-day session a week, bringing in the learning of the previous week's experience. This provided an ongoing dialogue between theory and practice, and fostered practicable links between the many topics covered in the course. As with other sessions in the PAT99 course, students utilized large boards, called "com-boards" * to facilitate discussions and present materials.

As in real-life planning scenarios, students had to manage group dynamics, build consensus, and reach compromises over conflicts. Interim discussions with the entire student body were used to raise issues and questions related to the exercise and planning processes in general.

Students were allotted a full day at the end of the course to synthesize their results and prepare their presentations. A half-day was spent presenting and discussing the proposals, which included staff from the site as well as all course instructors.

** Com-boards were used throughout the 6-week PAT course as a tool for facilitating the preparation and presentation of group work, as well as to post and illustrate data during lectures and lab sessions. All com-boards were digitally recorded and archived by session throughout the course, and students were given a CD-ROM with the archive at the end of the 6 weeks.*

Example 7b Problem-based learning

The following example is derived from Session 2.6.2 of the PAT99 course, which was developed by Hugo Houben and taught by Hubert Guillaud, Wilfredo Carazas, Cecilia Alderton, and Carlos Casteñeda.

This is an example of a 1½ hour exercise that accompanied a site visit during the 6-week PAT99 session. A principle for site visits during the course was the development of an ancillary exercise or practical session that linked the site, or some aspect of it, to what the students had been learning in the past few days. This provided an opportunity to elaborate classroom and lab concepts in the field and to foster greater engagement with the rich earthen heritage in the region where the course took place. Recent teaching had focused on earth as a construction material, building techniques, and architectural typologies. This site visit was therefore utilized to explore these topics through observation and practical work.

The visit was to Tomaval, an earthen site of the Viru culture on the northern coast of Peru (c. 1^{st} – 4^{th} century AD). The "castillo" (castle) is constructed of uniquely formed adobe blocks. How they were moulded has been a long-time fascination of anthropologists, conservators, and others with an interest in the site.

Students went on an extensive visit to the site, led by local officials who provided information about cultural history, archaeology, conservation efforts, etc. The adobe blocks were highlighted, and the students were asked to determine how the blocks were moulded and to re-create what might have been the original moulds.

Students were provided with:

- examples of original adobe blocks for visual analysis,
- construction materials and tools that would have been available at the time.

Students were divided into groups. Each group was charged with:

- discussing and determining how the original adobes had been moulded,
- experimenting with the design and construction of moulds, as well as with moulding techniques,
- synthesizing, preparing, and presenting their proposal.

Each group presented their proposals, with discussions and critiques by peers, instructors, and local officials.

Example 8 Evaluation methods

The following examples are related to a course called "Sharing Conservation Decisions" that was offered by ICCROM in November 2002. As this was the first time, a great deal of effort that has been extended to ensure its thorough evaluation. These examples show a variety of perspectives.

The goal is to continue offering this course in the future and the vast quantity of evaluative information that has been gathered during the course and the months succeeding it, will serve as valuable tools to help modify and improve contents, logistics, and other aspects. In this report each of the varied evaluation methods are introduced and summarized under the broader categories of participant evaluations, teachers/partners evaluations, and ICCROM evaluations.

PARTICIPANT EVALUATIONS

Weekly evaluation forms

This form was developed by ICCROM for its courses and was modified for the SCD course (*see "weekly evaluation form"*). At the end of each week the forms were distributed to the participants and then collected at the start of the following week. It is a two-part form that fits onto the front and back of one page. The first part is comprised of a list of eight questions about various aspects of the course: coordination, relevance of contents, quality of lecturers, level of clarity, quality of written materials, balance of teaching and learning methods, and relevance and coordination of study visits. The participants are asked to rate each of these topics from a level of 1 (bad) to 5 (excellent). There is also a small space available under the questions for comments. The second part of the form allows more room for expressing written opinions with the questions: Did you learn something completely new during this section of the course, and if yes, what? What was the worst during this part of the course? And what was the best during this part of the course?

The value of these evaluations is that they provide both immediate feedback and a tool for later quantifying the information. It was possible for the ICCROM team to respond to some of the suggestions made in these evaluations immediately, which was very much appreciated by the participants and improved the overall quality of the course. Additionally, the information was input into an excel spreadsheet to allow the results of the 1-5 rating scale to be converted into graphs, a useful means for visualizing and comparing the information either week by week, or topic by topic.

Diaries

At the beginning of the course each participant was given a small diary and an inspirational letter to explain its purpose. The goal of the diary was to give the participants an outlet for recording and keeping track of ideas, doubts and discoveries as they arose during the course. In the case of this course's subject matter the purpose of the diary was also related to the development of skills in conservation decision making through analytical and investigative thinking. This, however, could be adapted as appropriate according to the subject matter of other courses. The participants were asked at the beginning of the course to make the diaries available to the course coordinators at the end of it. The pages of the diaries were photocopied and incorporated into the body of evaluative information in order to provide more discursive insights.

Group Evaluation Session

The final day of the course the participants took part in a group evaluation session lead by one of the ICCROM course coordinators. This was a key evaluative tool for tapping into the overall, immediate impressions of the participants through constructive small group evaluations and a final discussion.

The session was first introduced by the ICCROM facilitator in order to explain its purpose. The facilitator then worked with the group to identify the key issues to be addressed during the evaluation session. This was a kind of group discussion, and the issues raised by the participants were recorded on the flip chart, which were then categorized by the facilitator into the following four topics: 1) content 2) learning environment 3) modes of teaching and 4) people. Each of these categories was thoroughly explained to ensure that everyone had a

very clear idea of what they meant. This was also a good process for getting everyone involved and into the mindset of thinking about the course as a whole.
The facilitator then divided up the group into small teams of 3-4 people. Each team was assigned 2 topics to focus on in their discussions, and within those two topics the best features of one and the worst features of the other. The groups split up and spent approximately an hour discussing their topics. At the end we reconvened together as a whole to engage in the final group discussion.
The final group discussion was lead by the facilitator topic by topic. The reporting group for each selected topic was first given a chance to share their results. The floor was then opened up to the whole group and others were asked to contribute any additional comments. The contents of this process were carefully documented with written notes. Within the framework of a good facilitator, this process is a constructive means for channelling the opinions and feelings of the participants to produce an overall picture of the strengths and weaknesses of the course.

Post-Course Evaluation

The participants were sent a three-page, more in depth evaluation form after the course had ended. They were asked to wait several months before completing the evaluation, to give themselves time to absorb and think about what had taken place during the intensity of the month long course. The final deadline for returning the evaluation was 3 and a-half months after the course.
A total of 22 questions are on this form, organized according to the topics of: general coordination, course facilities, course programme (content and structure), self-assessment, and follow-up and other comments. These questions are more specific and are designed to get more detailed information from the participants.

TEACHER/LECTURER EVALUATIONS

Post-Course Evaluation

The teachers and lecturers of the course were sent an in-depth evaluation after the course (*see teachers evaluation form*). This is similar to the post-course evaluation of the participants, but designed with the role of the teacher in mind. Its fifteen questions also focus on the issues of coordination, facilities, content, follow-up, and course design suggestions.

Evaluation Meetings

Several meetings are also planned to take place to allow for the exchange of results, opinions and suggestions between the teachers and collaborating institutions.

(a) With Partner Institutes

The first of these is a day long meeting between the ICCROM team and the Italian partner institutes. This will be a forum for reviewing the course contents and sharing the results of evaluation efforts from the points of view of the various ICCROM team members (tutors, assistants, participants), and in particular, from the point of view of each of the partner institutions. The following discussion sessions will focus on the identification of problems and modes for improving them, specific suggestions for future courses and finally, a plan of action for future collaborations.

(b) With Course Design Team

This follow up meeting is also scheduled to take place. The intention is to reunite those who were involved with the actual development of the design of the course in order to discuss and evaluate its successes and failures of from their points of view. The goal will be to outline concrete actions and changes to implement in regards to the content of the course and other factors related to learning-teaching modes to be utilized in the course.

ICCROM EVALUATIONS

Course Assistant Evaluations

(a) Course Diary

It was possible for ICCROM to sponsor an intern to act as a course assistant throughout the duration of the course. One of the major responsibilities of this assistant was to document each of the activities that took place during the course and to provide a critical evaluation of it. This critical evaluation was an occasion to make observations and suggestions about the successes and failures of the various components of the course through personal insights obtained through actually experiencing the course and interacting with the participants, collaborating partners and teachers, and ICCROM team alike. It was also considered to be an

advantage that this individual had an objective vantage point as an "outsider" not directly involved with the development of the course, nor the pre-course collaborative efforts between ICCROM and the partner institutions.

Once the course had finished the assistant was given the time necessary to compile a course diary. This diary contains all of the documents that were distributed during the course, including logistical, informational, and course content related materials. It also contains the detailed written notes compiled by the assistant for each activity, and, most importantly, the corresponding course record. The course record is essentially the critical evaluation for each activity in the format of a table. It contains an entry box for the title/name of the activity, the date, week, and time it took place, the tutor or lecturer who lead the activity, and the type of activity it was. There is then a much larger space for the critical summary of the activity. This was a very free form way of evaluating and gave the assistant the liberty to first concisely summarize the activity and then describe the successes and/or failures that were perceived from her point of view. At the bottom of the form is a box for recommendations, which was a chance to simply state concrete actions that could be made in the future to improve the activity.

(b) General Evaluation

The assistant also produced a more concise written evaluation in the form of a report. It summarizes week by week the strengths and weaknesses of the course, as extrapolated from the individual critical summaries and information obtained through the end of the course group evaluation with the participants.

Logistics Meeting

Approximately two and a half months after the course, a meeting was held for the ICCROM staff members that were involved in the logistical aspects of the course. The agenda was designed to focus on the following topics: use of ICCROM premises for the course (spaces, didactic requirements), the timing, and scheduling of the course, the housing of the participants and teachers, and security issues. The group was asked to raise the problems and make suggestions as related to each of these topics. From this meeting a formal report will be generated that will not only help ICCROM's own staff in the organization of future courses, but will encourage to develop concrete actions to improve future activities.

Example 9 A linear course

The following example is derived from a five-day course on Teaching Skills for Conservation, which was designed by Robert Ferguson (West Dean, September 1999).

COURSE TIMETABLE

Sunday 11 April:

7.20	Introduction in Steward's Room
7.30	Dinner
8.30 - 9.30	**Viewing**

Monday 12 April:

8.00	Breakfast
9.15 - 10.30	**Introduction to Course and its Aims and Objectives**
10.30	Coffee
11.00 - 12.30	**Presentation and Discussion: Education and/or Training for Conservation and Curatorship?**
12.30-1.30	Lunch
2.00 - 3.30	**Appropriate Modes of Presentation and** Learning I
3.30	Tea
4.00 - 5.30	**Appropriate Modes of Presentation and** Learning II
7.00	Dinner
8.00 -9.00	**Viewing**

Tuesday 13 April:

8.00	Breakfast
9.15 - 10.30	**Planning a short presentation**
10.30	Coffee
11.00 - 12.30	**Participant presentations**
12.30-1.30	Lunch
2.00 - 3.30	**Introduction to Microsoft PowerPoint**
3.30	Tea
4.00 - 5.00	**Introduction to Microsoft PowerPoint**
5.00-7.00	**An introduction to the Internet**
8.00 -9.00	Dinner
8.00 -9.00	**Viewing and discussion of presentations**

Wednesday 14 April:

8.00	Breakfast
9.15 - 10.30	**Training: Task Analysis**
10.30	Coffee
11.00 - 12.30	**Training: Writing Objectives**
12.30-1.30	Lunch
2.00 - 3.30	**Training: preparing a training session**
3.30	Tea
4.00 - 5.30	**Training presentations by participants**
7.00	Dinner
8.00 -9.00	**Viewing**

Thursday 15 April:

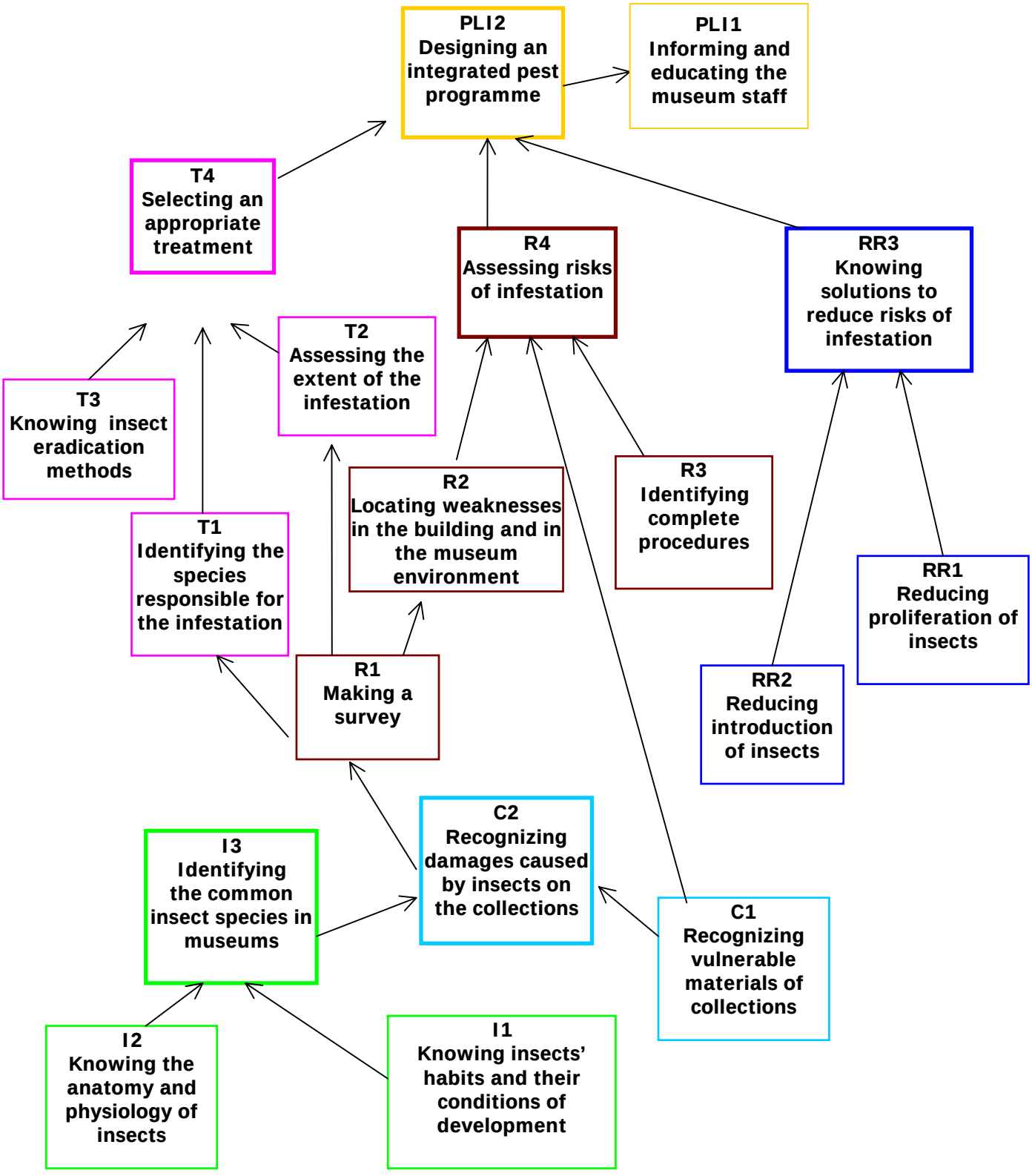
8.00	Breakfast
9.15 - 10.30	**Counselling Skills for teachers**
10.30	Coffee
11.00 - 12.30	**Counselling Skills for teachers**
12.30-1.30	Lunch
2.00 - 3.30	**Introduction to Course Design**
3.30	Tea
4.00 - 5.30	**Course Design Project I**
7.00	Dinner
8.00 -9.00	**Viewing**

Friday 16 April:

8.00	Breakfast
9.15 - 10.30	**Course Design Project II**
10.30	Coffee
11.00 - 12.30	**Course Design: presentations and evaluation**
12.30-1.30	Lunch
2.00 - 3.30	**Identifying our needs for the future and course evaluation**
3.30	Tea and **End of Course**

Example 10 A parallel course

The following example is derived from a 3-week workshop on Pest Control, which was developed and taught by Isabelle Verger at EPA(Benin) in 1999 in the framework of the PREMA Programme.



Example 11 A multi-dimensional course

The following example is taken from the MSc in Conservation for Archaeology and Museums (University College London – Institute of Archaeology) and was developed by Elizabeth Pye. It consists of a structured internship, which is full part of the curriculum.

INTRODUCTION TO YOUR INTERNSHIP

AIMS OF THE INTERNSHIP

The second year of the two-year MSc in Conservation for Archaeology and Museums takes the form of an internship. The aim of the internship is to give you 'real life' professional experience of current conservation practice, while working in a museum or similar institution. The total period of your internship is one calendar year. Normally this is undertaken in one institution but occasionally two complementary 6-month internships are arranged.

We have internship partnerships with a range of museums and related institutions whose work we know well (such as the British Museum, English Heritage, and the Pitt Rivers Museum). Our requirements are that the conservation staff are professionally qualified and experienced, that they keep up to date with current developments, and may be involved in innovation themselves, that the facilities are modern, that the work is undertaken to accepted professional and ethical standards, and in accord with approved health and safety regulations.

We do not expect a uniform structure and content for all the internships we approve, but we do expect each one to provide excellent experience. Each of you will be working in a different institution (or a different part of a large institution such as the British Museum), working with different people and on different conservation projects. So your internship experience will be unique to you.

YOUR CAREER ASPIRATIONS

We aim to fit your internship to your career aspirations. Conservation is now very varied and could involve you in collections management, preventive conservation, conservation of a wide range of different object types (as in a small museum), or specialist work on a particular object-type or a particular material e.g. ethnographic objects, or metals (as in a large national museum). You could be permanently employed by an institution or working independently for a variety of organisations.

By the time you reach the point of deciding on your internship you will be beginning to form a view of your conservation interests and the kind of career you wish to have in conservation. You will each have accumulated a range of experience arising from the nature of your undergraduate degree, the topic you chose to research for your MA dissertation, the objects and projects you have worked on during the first year of the MSc programme and any additional experiences you have had e.g. volunteer work during the summer in a museum or on an archaeological site. Reviewing this experience should help you to decide what your interests are.

SELECTING YOUR INTERNSHIP

Our aim is to discuss your developing interests, career preferences, and the range of internships available, in order to select an internship which will give you the experience you need to plan your career. You do not have total freedom to choose your internship because we take into consideration both your knowledge and training requirements and the requirements and character of the institution concerned. We will aim to 'match' our assessment of your needs to the type and size of the museum, the type of work you might be involved with, the composition of the supervisory team, the conservation facilities and so on.

FINALISING THE CHOICE

Once a possible internship host has been identified we will send a copy of your CV and a letter of recommendation to the proposed host museum. You will then visit the museum where you will be interviewed by your potential supervisor and have the opportunity to see the museum itself, the conservation labs, and the types of work undertaken. Provided both

you and the supervisor are happy, your internship will be approved, and you will agree a starting date in late September/early October.

DURING THE INTERNSHIP

The MSc Programme Co-ordinator is responsible for the overall management of all internships; your Tutor is responsible for your internship and is the point of contact for both you and your supervisor. He or she will keep in regular touch with you throughout the year by phone and e-mail, and will agree your work plans at three-monthly intervals.

Although you will each have very different experience there are some key events during the year, which allow us all to meet and review the progress of your internships. Normally the whole of your group will meet at least three times (in late September just before the start of the internship, in mid December at a Christmas party, and in late June when there will be an Open Day at the Institute (and you will be required to give a short oral presentation on your work). Your Tutor will not only keep in regular contact but will visit you formally at least twice during the internship (in late December or early January, and in March/ April).

KEY DATES DURING THE YEAR

The key dates below summarise the arrangements for the internships:

- **November**: the Co-ordinator will check availability of internships with host institutions
- **March**: you will discuss and refine the type of internship you wish to undertake
- **March/April:** your name will be proposed to a host institution; you will be interviewed and your choice of internship will be finalised
- **Late September**: student enrolment, and meeting with Institute conservation staff at the beginning of the second year; internship supervisors' meeting
- **Late September/ early October**: beginning of internship
- **Early October**: agreement of work-plan for first three months
- **Third week in December**: Christmas party
- **December/January**: first Tutor's visit and assessment, discussion of work-plan for next three months
- **March/April**: second Tutor's visit and assessment, discussion of work-plan for next three months
- **Mid/late June**: Open day and oral presentation, discussion of work-plan for next three months
- **15th September**: submission of portfolio
- **Late September**: completion of internship

FURTHER INFORMATION

The MSc Co-ordinator holds a file of information about each potential internship host that will be available for you to look through. Several documents provide further information about the organisation of the internship itself e.g. the Course Handbook, and the Internship Guide for Students and Supervisors.