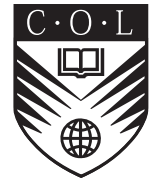


COMMONWEALTH *of* LEARNING



PREST

Practitioner Research and
Evaluation Skills Training in
Open and Distance Learning

Using programme monitoring
in research and evaluation

HANDBOOK

B1

The PREST training resources aim to help open and distance learning practitioners develop and extend their research and evaluation skills. They can be used on a self-study basis or by training providers. The resources consist of two sets of materials: a six-module foundation course in research and evaluation skills and six handbooks in specific research areas of ODL. There is an accompanying user guide. A full list appears on the back cover.

The print-based materials are freely downloadable from the Commonwealth of Learning (COL) website (www.col.org/prest). Providers wishing to print and bind copies can apply for camera-ready copy which includes colour covers (info@col.org). They were developed by the International Research Foundation for Open Learning (www.irfol.ac.uk) on behalf of COL.

The PREST core team

Charlotte Creed (Programme coordinator)
Richard Freeman (Instructional designer, editor and author)
Bernadette Robinson (Academic editor and author)
Alan Woodley (Academic editor and author)

Additional members

Terry Allsop (Critical reviewer)
Alicia Fentiman (Basic education adviser)
Graham Hiles (Page layout)
Helen Lentell (Commonwealth of Learning Training Programme Manager)
Santosh Panda (External academic editor)
Reehana Raza (Higher education adviser)

Steering group

The PREST programme has been guided by a distinguished international steering group including: Peter Cookson, Raj Dhanarajan, Tony Dodds, Terry Evans, Olugbemi Jege, David Murphy, Evie Nonyongo, Santosh Panda and Hilary Perraton.

Acknowledgements

We are particularly grateful to Hilary Perraton and Raj Dhanarajan who originally conceived of the PREST programme and have supported the project throughout. Among those to whom we are indebted for support, information and ideas are Honor Carter, Kate Crofts, John Daniel, Nick Gao, Jenny Glennie, Keith Harry, Colin Latchem, Lydia Meister, Roger Mills, Sanjaya Mishra, Ros Morpeth, Rod Tyrer, Paul West and Dave Wilson. In developing the materials, we have drawn inspiration from the lead provided by Roger Mitton in his handbook, Mitton, R. 1982 *Practical research in distance education*, Cambridge: International Extension College.

Handbook B1: Using programme monitoring in research and evaluation

Author: Neil Butcher
Critical reviewers: Richard Freeman, Bernadette Robinson and Doug Shale.

© 2004 The Commonwealth of Learning
ISBN 1-894975-00-6

Permission is granted for use by third parties on condition that attribution to COL is retained and that their use is strictly for non-commercial purposes and not for resale. Training providers wishing to version the materials must follow COL's rules on copyright matters.

Permissions

See the last page of the module.

Contents

Using programme monitoring in research and evaluation	1
Handbook overview	1
Learning outcomes	1
Handbook organisation	2
What am I assuming about you?	3
How to use the materials	3
Resources	7
Unit 1: The role of monitoring in research and evaluation	9
Unit overview	9
What is monitoring?	9
Three research needs	16
Why is programme monitoring important in conducting research and evaluation?	18
What we can expect to find in a programme monitoring system?	20
Summary	20
A note on qualitative and quantitative research	22
References	23
Unit 2: Elements of a programme monitoring system	25
Unit overview	25
Starting with the outputs of programme monitoring: What does the system need to tell us?	25
Designing a programme monitoring system	28
A review of key data requirements in a distance education programme	32
Designing and implementing a programme monitoring system	35
Reflections on designing and implementing programme monitoring systems	38
Summary	40
References	41
Unit 3: The research and evaluation value of monitoring systems	43
Unit overview	43
What roles can programme monitoring systems play in research and evaluation?	43
Looking at some samples of data	45
Deciding when programme monitoring systems can help to find answers to research questions	51
Measuring change over time	55
Summary	59
References	60
Feedback to selected activities	61
Unit 4: The politics and logistics of using programme monitoring systems in research and evaluation	67
Unit overview	67
The politics of sourcing monitoring information for research and evaluation purposes	68
Concerns of central administrators	69
Concerns of programme coordinators	70
Dealing with concerns about how data will be used	72
Strategies to reduce concerns	74
The split between research and data management in distance education institutions	76
Summary	77
Conclusion	79
Permissions	82
Resources File85

Using programme monitoring in research and evaluation



Handbook overview

Welcome to *Using programme monitoring in research in evaluation*. My name is Neil Butcher, and I have spent the last ten years of my life researching distance education programmes and institutions for the South African Institute for Distance Education (SAIDE). I will be taking you through this handbook, in the hope that by the end you will be able to do the following:

- ▶ Describe the requirements of basic programme monitoring systems and use the outputs of these systems to inform research and evaluation of distance education programmes.

Because of my background, I will be drawing heavily on my experience of open and distance learning (ODL) in South Africa, as well as research I have done in other African countries. Of course, I will also make use of the best international literature that I have managed to find on this topic, although not too much has been written. In this way, I am confident that, together, we will be able to go on a learning experience that you will find enriching and interesting.

Learning outcomes

When you have worked through this handbook, you should be able to:

- 1 Differentiate between monitoring and evaluation.
- 2 Define what kinds of monitoring information need to be gathered to inform research and evaluation of a distance education programme and for what purposes.
- 3 Identify and analyse appropriate methods to gather that information.
- 4 Map the systems required to manage that information efficiently, and define the reporting requirements of programme monitoring systems.
- 5 Apply the outputs of programme monitoring systems in support of research and evaluation processes.
- 6 Describe how research and evaluation can improve educational delivery, drawing on programme monitoring data.

I hope that does not sound too daunting!

People are often put off by discussions about programme monitoring, because they think that all of the talk about **systems** means that programme monitoring must be very complicated. I hope to show you that programme monitoring systems are straightforward, and that they have a valuable role to play in helping you as a researcher. The problem with programme monitoring systems is not that they are complicated – rather, they are made up of many details. If we can break apart these details, it will be possible to see how simple they actually are, and how much useful information they contain for research and evaluation.

At the end of the handbook, I will encourage you to return to this list to see whether or not the handbook has lived up to its promises.

Handbook organisation

The handbook is structured into this introduction and six units, as follows.

This introduction: (1 hr)

Unit 1: The role of monitoring in research and evaluation (4 hrs + 4 hrs for the project task)

Unit 2: Elements of a programme monitoring system (7 hrs + 4 hrs for the project task)

Unit 3: The research and evaluation value of monitoring systems (8 hrs + 3 hrs for the project task)

Unit 4: The politics and logistics of using programme monitoring systems in research and evaluation (6 hrs + 2 hrs for the project task)

Each unit is made up of the following components:

- ▶ an introductory paragraph or two that provide an overview of the unit, its focus and outcomes
- ▶ activities for you to engage in, such as readings to complete and analyse, and questions to answer. Space is provided within the handbook to answer most of these
- ▶ a commentary on these responses that takes you deeper into the topic by providing new information and suggesting further reading
- ▶ ‘food for thought’ – these are questions to get you to think more about what we are discussing. You may want to jot down answers to this on a piece of paper
- ▶ a unit summary
- ▶ feedback on your responses to the questions or problems posed in the activities.

You will need about 25 hours to work through the units of this handbook. The time required for the project unit is really up to you. A time limit is suggested for each step of the project process, but this can only be a guide.

What am I assuming about you?

Although this handbook is intended to provide an introduction to using programme monitoring in research and evaluation, I have made some assumptions about what you already know. These are presented below.

- ▶ I have assumed that you have a basic working knowledge of what ODL is, as well as what is required to deliver good quality ODL. If you do not have such an understanding, you might first like to read a basic primer on distance education, e.g. Keegan, D. 1996 *Foundations of distance education*, London: Routledge
- ▶ I have assumed that you will be comfortable with the level of English usage contained in this introduction. You can expect this level of English to run throughout the handbook. This may be an obvious point, but will become increasingly important as we progress because there will be a need to look at issues of some technical complexity.
- ▶ I have assumed that you may have limited research experience. As a result, I will be trying to avoid unnecessary research jargon. Many of you might be familiar the official 'methodological' terms for describing certain research techniques that we will discuss, but I have focused on trying to provide a simple, practical framework, rather than one that is very heavy on describing its underlying theoretical framework.

How to use the materials

I have tried not to assume that all readers will want to use these materials in the same way. Of course, there are limitations as to how well this can be done without creating a messy handbook, but there are basically three broad options open to you.

I You could simply read through the handbook, and its *Resources File* (see table overleaf). If you do this, you will hopefully get a good introduction to the handbook topic and to the various issues mentioned above. Of course, without completing any of the activities, you will not achieve the same depth of experience and insight that will come from completing them. So, you are advised only to follow this route if you need a quick overview of key issues in using programme monitoring in research and evaluation. This might be helpful if you:

- have already successfully used programme monitoring data in research, and are looking for a quick refresher course on using programme monitoring in research and evaluation

- are a policy maker (at national, institutional, faculty, or programme levels) who needs to understand key issues relating to programme monitoring, research, and evaluation as part of your policy development process
 - do not have enough time to complete the activities.
- 2 You could read through the handbook and its accompanying reader and only complete the **activities**. The benefit of this approach is primarily that it will give you good opportunities to think through the key issues in the handbook, and formulate your own opinions before reading the material of the handbook units. As we all know, many learners simply skip over these activities and go straight on to reading the content of the material. This is no problem if you do not want to do this extra work. However, these activities are designed to get you to reflect on issues and formulate your own opinions, rather than just relying on the handbook to tell you the 'right' answer. If you do choose to complete these activities, I strongly recommend that you complete them at the exact point at which they appear in the text, as their placement is quite deliberate. If you read ahead and then complete these activities, you will lose many of their intended educational benefits. I recommend that you complete the activities if you:
- have enough time to complete them thoroughly
 - are keen to reflect actively on the work that you will do in this handbook
 - like to have an organised space to form your own opinions about key issues before reading more about them
 - have not had opportunities to use programme monitoring data in research and evaluation before
 - are completing this handbook as part of a structured learning experience.
- 3 You could read through the handbook and its *Resources File*, complete the *Activities*, and work through the **project tasks**. These require you to go into the field to do research work with ODL practitioners. Obviously, those who complete these project tasks are going to gain the most from this handbook, but these benefits come at the expense of your time. There is no point in attempting these tasks unless you are serious about pursuing them throughout the handbook. I advise you to complete these project tasks if you:
- are keen to pursue a career in ODL research and evaluation (or are already pursuing such a career path)
 - are beginning to conduct your own research and evaluation, and feel that the project tasks provide a good framework for helping you to use programme monitoring data to support you in this work

- can establish a good working relationship with a distance education programme manager somewhere in your area
 - have the time to do the field research thoroughly
 - are completing this handbook as part of a structured learning experience.
- 4 More information on the project tasks is presented below, so you might like to read the next section before making a final decision on whether or not to do them

The project tasks

It is in doing these tasks that you will really derive the greatest benefit from this handbook. I can introduce ideas and concepts and suggest ways for you to think carefully about them, but it is really only when you go out into the field and see what is happening in practice that these ideas will come alive. So, if you have the time and you are serious about research and evaluation, I would strongly encourage you to find ways to do these project tasks.

The project tasks will require you to find an existing ODL programme with which you can work. Over the course of the handbook you will:

- ▶ research how this programme gathers monitoring data
- ▶ develop descriptions of the systems it uses to gather this data
- ▶ reflect on the strength and weaknesses of how the programme is monitored
- ▶ establish a research or evaluation agenda for the programme; and then work out how programme monitoring data can help you to fulfil that research/evaluation agenda
- ▶ describe how this research can lead to an improvement in the quality of the programme with which you are working.

This is quite an undertaking, but I can promise you that it will be worth the effort. Your insight into programme monitoring and its role in research and evaluation will be much richer if you take the time to engage with practical examples in the field.

To do the project tasks, therefore, you will need to consider one of the following options:

- ▶ Are you involved in a distance education programme yourself? If so, you could use that programme to complete the project tasks.
- ▶ Do you know anyone who is running or helping to run a distance education programme? Will she be willing to let you spend some time with her to find out more about how her programme is monitored? If so, then you could ask that person to let you work with her.

- ▶ If you don't actually know someone personally who is involved in distance education, do you know of an organisation or institution near where you are living that is involved in delivering distance education programmes? If so, then you might approach that institution to help you with your project tasks.
- ▶ If there is no distance education delivery near you, then do you have access to the Internet? If so, then you might try to find someone running a distance education programme in another part of the world. You might then approach someone online and ask them to supply you some information via e-mail. A good starting point would be the web site of the Commonwealth of Learning – www.col.org – which has connections to distance education providers all over the world.
- ▶ If none of the approaches will work for you, then the last option is to approach any organisation involved in education delivery near you. Even if that education provider does not deliver distance education programmes, you can still derive enormous benefit from seeing how they go about monitoring their delivery of education. Many of the basic principles will remain the same regardless of what methods are used to deliver distance education.

I hope you will strongly consider doing the project tasks. It should be a fascinating exercise and will add enormously to the experience of this handbook.

Resources

The following resources are used in this handbook:

Resource	Name when referred to in our text	Location
Freeman, R. 1997 'Monitoring and evaluation' in <i>Managing Open Systems</i> . London: Kogan Page (extract pp 109-135)	<i>Freeman</i>	<i>Resources File</i>
Shale, D. and Gomes, J. 1998 'Performance indicators and university distance education providers' <i>Journal of Distance Education</i> 13, 1:1-20	<i>Shale and Gomes</i>	<i>Resources File</i>
SAIDE. 2003a <i>Administration and management of programmes using distance education methods</i> , Johannesburg: SAIDE	<i>Admin</i>	<i>Resources File</i>
Calder, J. 1994 <i>Programme evaluation and quality</i> , London: Kogan Page (extract pp 45-65)	<i>Calder1</i>	<i>Resources File</i>
Calder, J. 1994 <i>Programme evaluation and quality</i> , London: Kogan Page (extract pp 134-137)	<i>Calder2</i>	<i>Resources File</i>
Raza, R. 2002 <i>Evaluation research and data management in the south Asian open universities: some initial observations</i> , Cambridge: International Research Foundation for Open Learning	<i>Raza</i>	<i>Resources File</i>
SAIDE. 2003b <i>National Professional Diploma in Education (NPDE): University of South Africa</i> , Johannesburg: SAIDE	<i>NPDE</i>	<i>Resources File</i>
SAIDE. 2003c <i>Advanced Certificate in Education (ACE): University of the Witwatersrand</i> , Johannesburg: SAIDE	<i>ACE</i>	<i>Resources File</i>

The role of monitoring in research and evaluation



Unit overview

To begin, we will reflect on what we mean by all of the different terms that are used in monitoring, so that we move forward within a common framework of understanding. This process will encourage you to reflect on what you think monitoring is and why it is necessary. We will then seek to establish what role monitoring can play in research and evaluation. Thus, the first unit will provide a conceptual introduction to the handbook, but will also require you to begin to link the issue of monitoring to your research and evaluation agenda (whatever that agenda may be).

For those of you attempting the project tasks in this handbook you will be making contact with a distance education programme, and beginning the task of describing how it monitors its work.

This unit should take you about 8 hours to complete, made up of about 3 hours reading, 1 hour of activity and 4 hours for the project.

What is monitoring?

As it seems a sensible place to start, let's think first about what we mean by **monitoring**.

Activity 1 15 mins



I would like you to start by writing your own definitions of the following three terms: monitoring, evaluation, and audit. When you are doing this, try to think of situations in which you have heard the terms used before. This might help you to differentiate between them.

Write your own definitions of the following terms: monitoring, evaluation, and audit. For each one, also try to note at least one situation in which you have heard the term used before.

1 Monitoring

2 Evaluation

3 Audit

Feedback: see note in the next paragraph

Note on feedback

How did you do? Was it easy to construct your own definitions? Could you think of situations where the terms have been used before? Did you consult any other sources before constructing your definition? Below, we will compare your answers to some I found from other sources.

When people are trying to work out what they think different terms mean, they often turn straight to 'specialist' literature to read about the terms. In our situation, 'specialist' literature might refer to books or articles about distance education.

Considering some general definitions

When people are trying to work out what they think different terms mean, they often turn straight to 'specialist' literature to read about the terms. In our situation, 'specialist' literature might refer to books or articles about distance education. However, when I am researching the meaning of a particular term, I am concerned about starting with such literature, because definitions often become more complicated and confusing when they are applied to a specific context, like distance education for instance. For this reason, my preference is to start with a generic definition, and then see how it is applied within the distance education field. I have never found a better starting point for definitions than my dictionary (Onions 1987). Some terms have both everyday meanings and technical meanings and I find it easiest to begin by exploring the everyday meanings.

Do you think this is a useful starting point?

Monitoring

Interestingly, the word 'monitoring' did not appear in my dictionary. I did find the word 'monitor', but it was not described as a verb. The most relevant definition I could find here for our purposes was that a monitor is 'something that reminds or gives warning' (reprinted by permission of Oxford University Press). As we shall see, I think this is quite a helpful way to start thinking about the concept of 'monitoring', as monitoring is in many ways a process of reminding us to do things or warning us about actual or potential problems.

I had a bit more luck when I went on to the Web to find definitions for the term. (Did you know that there are web sites that have full dictionaries online?) Remembering that 'monitoring' implies that we are doing something, I was keen to find the word described as a verb. My first stop was the online Merriam-Webster dictionary (<http://www.m-w.com/netdict.htm>), where the word **monitor** was defined as a verb meaning 'to watch, keep track of, or check usually for a special purpose' (by permission. From Merriam-Webster's Online Dictionary ©2003 by Merriam-Webster, Incorporated (www.Merriam-Webster.com)). Looking further, the Cambridge Dictionary web site (<http://dictionary.cambridge.org/>) noted that to monitor is 'to watch and check a situation carefully for a period of time in order to discover something about it'.

Evaluation

Starting with my dictionary again, I tried to look at the term evaluation. It was simply defined as 'the act of evaluating', which initially I thought was not very helpful. However, it did remind me of an important point on the side, which is that all of these terms – monitoring, evaluating, auditing – are about doing something. They are terms that demand us to be active, not to spend lots of time theorizing about what they mean. The best way to understand these processes is to go out and see them in action (or to learn by doing), which is what we will begin to do later in this unit.

Again, my dictionary had a definition that did not immediately correspond with my own mental picture of evaluating – 'to reckon up, ascertain the amount of; to express in terms of the known'. I was beginning to think that either it is time to replace my dictionary or we have started using words in very different ways from how they were originally used. As with monitoring, though, I find it interesting to try to understand these original definitions to think about what they tell us about what we are doing now.

That was not enough, though, so I returned to the Web for help. Merriam-Webster gave me the following definition – 'to determine the significance, worth, or condition of, usually by careful appraisal and study' (by permission from Merriam-Webster's Online Dictionary ©2003 by Merriam-Webster, Incorporated (www.Merriam-Webster.com)). The Cambridge dictionary added

Food for thought

As described here, what aspects of distance education programmes do you think need *monitoring* and why?

How do you think distance education programmes might benefit from monitoring?

Food for thought

How do you think *evaluation* is different from monitoring?

Do you think monitoring might play any role in evaluation? If so, what do you think it might be?

What activities or aspects of distance education programmes do you think should be evaluated and why?

As described above, how do you think distance education programmes might benefit from evaluation?

to this by noting that to evaluate is 'to judge or calculate the quality, importance, amount or value of something'.

Audit

Another term often used is **audit** (or **inspection**), so I thought I would add this term to our discussion of definitions. Through my exploration of the above two terms, I had been losing faith in my dictionary to give meaningful definitions, but decided to give it one more try anyway. The most relevant definition it came up with was quite useful – 'official examination of accounts with verification by reference to witnesses and vouchers'. Merriam-Webster extended this further by noting that an audit is 'a formal examination of an organisation's or individual's accounts or financial situation' or, more broadly, 'a methodical examination and review' (by permission. From *Merriam-Webster's Online Dictionary* ©2003 by Merriam-Webster, Incorporated (www.Merriam-Webster.com)).

Merriam-Webster and the Cambridge Dictionary also had useful definitions of **inspect**, which I thought I would add as **inspection** is often used as a synonym for **audit**. They noted respectively that to inspect is 'to examine officially' or 'when you look at something carefully, or an official visit to a building or organisation to check that everything is correct and legal'.

Considering the terms together

I hope you found this brief exercise of reviewing the dictionary definitions of related terms interesting. Did it help to clarify your thinking at all? It certainly helped me. In summary, I think the following points emerged from our exploration that can be applied to how we think about distance education programmes:

- 1 Monitoring seems to be a day-to-day type of activity. Based on the definitions above, I imagine that monitoring is something initiated by a project or programme to effect immediate improvements in quality of delivery. I liked the notion that monitoring is designed to remind us or give us warning, because that is exactly what it should do in distance education. We monitor distance education programmes to ensure that we do everything that is expected of us and to identify where things might be going wrong. So, for me, monitoring is inextricably wrapped up with the process of running the distance education programme; it is **part** of running the distance education programme. For me, monitoring focuses attention on ensuring that we are running a distance education programme in the way we expected to run it, and that everything is going to plan and is running to schedule. Thus, it might be seen as a critical part of programme management.
- 2 It seems to me that the main aim of evaluation is to assess whether or not we can improve what we are doing, and if so how. Evaluation is also used to assess the achievement of targets or objectives, which may be interim

Food for thought

How do you think *auditing* is different from evaluation and monitoring? Do you think monitoring might play any role in auditing? If so, what do you think it might be?

As described above, how do you think distance education programmes might benefit from an audit?

targets or final ones (whether this be done in a formative or summative way). So, for me, this is the main difference between evaluation and monitoring. Monitoring is **not** aiming to judge the quality of what we are doing, while evaluation **is**. As we shall see though, monitoring data can be very useful in helping evaluators to make such judgements. I also liked the addition of the notion of 'careful appraisal or study' to the term evaluation. It suggests that evaluation is a rigorous, structured, and systematic exercise, rather than an *ad hoc* one. Based on the definitions above, it seems to me that evaluations could either be internal or external, that is they could either be conducted by someone helping to run the programme or by an outsider.

- 3 Audits or inspections would appear to be intermittent events, taking place at intervals, sometimes irregular intervals, and usually externally initiated or driven, rather than being a structured part of programme delivery. As our definitions suggested, the term audit has its origins in finances – in reviewing the financial accounts of an organisation or individual. This may be one way to differentiate an audit from an evaluation – that an audit reviews the finances of a distance education programmes, its income and expenditure. However, the term is now also used in a broader sense than simply the financial one (while many evaluations also review the cost-effectiveness of distance education). For me, an audit or inspection is a very particular type of review, and this is what differentiates the terms. Audits can be characterised by their focus. Many people would say that an audit does not evaluate anything, it simply assesses a situation (takes a snapshot at a particular point in time) and checks that the procedures are in place and functioning for the item in question. To this extent, it's really stock-taking and checking the stock-taking methods. Unlike an evaluation, a meaningful audit needs to be run by an **external person**, and will probably have been commissioned by an external agency that has a mandated responsibility for maintaining levels of quality amongst those whom it audits. Its purpose will be to make judgements against pre-defined criteria of quality and performance, and use this to ensure that performance of programmes meets these criteria. Auditors seldom make use of qualitative methods or questionnaires, and their scope or focus is much narrower than evaluations. They don't, for example, consult various stakeholders for an analysis of their perceptions. Auditors have responsibility for checking standards and procedures.

I hope this has helped to define the differences between these terms. We will not be exploring evaluation and auditing in any depth in this handbook, except to try to show you how monitoring systems can be used by evaluators (and, by extension, auditors). If you would like to read more about evaluation, there are various other handbooks in this series that you might find interesting. For example; A1, *An introduction to practitioner research and evaluation skills*; A2, *Planning research and evaluation* and B4, *Programme evaluation and its role on quality assurance*.

And now we consult some literature ...

By this stage, you might be wondering how I could dare to have a long conversation about terms without consulting the formal literature on distance education. Actually, I have been trying to make a point – good research, in my opinion, moves outside the field in which it is working. It tries to get inputs from various sources and disciplines, to enrich the research process. In a simple way, that is what I tried to demonstrate above. Do you think I succeeded?

Nevertheless, it is always important to return to the literature of a specific field at some point. Below, therefore, I present various definitions from different books that I found that may add something to our thoughts so far.

Reading



Monitoring

‘Monitoring: recording and tracking the progress of a programme while it is running, with a view to judging whether a plan is on course and its objectives are on the way to being achieved. Information collected for monitoring purposes is also useful as information for evaluation’ (Dolley, 1994).

‘Monitoring is the continuous assessment of the intervention and its environment with regard to the planned objectives, results, activities, and means. It takes place at all levels of management and uses both formal reporting and informal communications. Monitoring enables a stakeholder to review progress and to propose action to be taken in order to achieve the objectives. Monitoring identifies actual or potential successes or failures as early as possible and facilitates timely adjustments to the operations’ (Ministry for Foreign Affairs, 1998).

Evaluation

‘Evaluation is the systematic process of collecting, analysing and interpreting information that enables judgements to be made about the value of a programme (of learning) and its effectiveness and/or efficiency in achieving a set of outcomes’ (Dolley, 1994).

‘Evaluation is a systematic and objective assessment of the design, implementation and outcome of an ongoing or completed intervention. Evaluation generally performs two functions: i) it is a learning tool to improve future interventions, and ii) it provides a basis for accountability. Although both functions are usually covered by the same exercise, it is important to determine, in advance, the main users of an evaluation’ (Ministry for Foreign Affairs, 1998).

‘Evaluation is the process of collecting and/or using information for the purposes of determining the value and worth-whileness of the subject of the evaluation process’ (Birley & Morel, 1998).

‘Evaluation is the collection, analysis and interpretation of information about any aspect of a programme of education or training, as part of a recognising process of judging its effectiveness, its efficiency and any other outcomes it may have’ (Thorpe, 1993).

Audit

‘The review and scrutiny of evidence by external agents to enable judgements to be made about the achievement of standards. The comparison of actual events or practices or

outcomes with those predicted or claimed by an institution' (Robinson, B. *Personal communication*, 27 November 2003)

Monitoring and evaluation in distance education programmes

I hope that you have now had an opportunity to reflect on some of the key terms that we will be using throughout this handbook. We will now consolidate this by looking at our first reading in the handbook. Before reading this chapter, though, I suggest that you first look at Activity 2, as this reading may help you to think about your answers to the questions in the activity.

Reading – Resources file



At this point, I would like you to read the article on monitoring and evaluation. This is in your *Resources File* as Freeman.

This chapter provides some interesting observations on the respective roles of monitoring and evaluation, as well as considering practical examples of both in the context of distance education delivery. Remember to keep thinking about the ideas we have already discussed as you read this chapter. You may find yourself either disagreeing with some of what Richard Freeman says, or you may think about modifying your own perspectives based on his insights.

Activity 2 20 mins



- 1 Using the ideas that you have generated and the information you have read, write a brief overview of how you think monitoring and evaluation can each be used successfully to support distance education delivery. Try to link your overview to specific knowledge you may have of distance education programmes in your country.

Monitoring

Evaluation

- 2 Try to describe at least three different ways in which you think that a programme monitoring system could assist the evaluator of a distance education programme. Be as specific as you can in your response.

There is no feedback to this activity

Three research needs

You have now reflected generally about the meaning of different terms that are important in this handbook. If you have been completing the activities, you will also have begun to think about the use of these terms in relation to distance education in contexts with which you are familiar.

To start the process of thinking about the roles that programme monitoring can play in supporting research and evaluation, I am going to introduce three hypothetical research and evaluation scenarios. As you read each one, try to reflect on what these roles might be.

Case study



Kabir considers the efficiency of distance education

In the User Guide accompanying all the PREST modules and Handbooks, you have already met *Kabir Shastry*, a lecturer at the Open University of Udair (OUU) at the Department of Education. *Kabir* has been employed at the OUU for the past 12 years. A key concern that *Kabir* has is that he knows from his own investigation that getting research published and building an international reputation as a researcher depends on getting reliable data.

Kabir has been doing some reading, and has decided that international debates on the role of distance education in developing countries are based on quite simplistic assumptions about distance education being a cheap way of delivering education on a large scale. He is not sure that he agrees with this argument, as he suspects that the distance education systems within which he works are actually quite inefficient. As a result, he wants to test an hypothesis that – because of high dropout rates – distance education delivered by his institution is actually more expensive than face-to-face education at another university in the country.

Kabir knows that trying to access information through his institutional administration is a waste of time, as very little information is released by the institution and his research question is very contentious. Also, although he has a vague sense of what he is looking for, he knows he needs to tighten up his own understanding of what information he is looking for and where he might get it from...

Activity 3 10 mins



What general information do you think *Kabir* will need to test his research hypothesis?

Feedback: see note in the next paragraph

Note on feedback

You will probably be keen to get some feedback on your answers now, to see whether or not your interpretation of the research challenge was 'correct'. In most activities, I will try to provide exactly such feedback where I can. In this case, though, we will not be exploring these answers immediately, as we will continue to explore these scenarios in the remaining units in this handbook. Thus, the answers will unfold as you complete the entire handbook. The key lesson to learn in this and the following activities is that, no matter what your research agenda, you should try to think carefully about how you can use programme monitoring systems to assist you in what you are aiming to do.

Case study



Fancy looks at open schooling

Another person you were introduced to in the user guide was *Fancy*, a woman in her late twenties who works with a small non-governmental health organisation in Botswana. She has been asked by the Ministries of Health and Education to examine alternative modes of schooling which can cater to the growing number of AIDS orphans throughout the country, especially amongst the most marginalised communities.

There are many research questions facing *Fancy* in this task. She needs to understand more about the potential target populations, as well as immerse herself in understanding alternative modes of schooling. How can she find out about open schooling? Interactive radio broadcasts? Community schools? Are they successful? Relatively speaking, what are the cheapest and most expensive modes of schooling, and what creates those costs? What models exist and can they be adapted to the Botswana context? What investments need to be made up front to set up alternative modes of schooling?

Clearly, *Fancy* has her work cut out for her ...

Activity 4 10 mins



An important focus for *Fancy* will be to find out more about what open schools are and how they work. Try to imagine what information a programme monitoring system for an open school might contain.

How do you think a system monitoring open schooling might help *Fancy* to formulate and answer her research questions?

There is no feedback to this activity

Case study**Abida and programme evaluation**

Finally, *Abida* Quuyaam is a researcher at Auranzeb Open University (AOU). She is part of the Evaluation and Research Group (ERG) at the university where she works as a junior researcher at the unit. *Abida* is keen to do research for both institutional and personal reasons. *Abida* has been approached by a colleague of hers in the Faculty of Education, who is keen to conduct a thorough evaluation of a Bachelor of Education degree programme that has been running at the university for the past four years. The degree programme has 3,125 students spread all over the country. Her colleague has some funds available to support the evaluation process, and has requested *Abida's* help to design and implement the evaluation. This is an exciting exercise for *Abida*, her first serious assignment, and an opportunity to move beyond being a junior researcher. Now all she needs to do is design a good evaluation ...

Activity 5 10 mins

Finally, as you remember from the user guide, *Abida Quuyamm* has many challenges ahead of her, and immediately considers the possibility of using data kept by the Faculty of Education on the Degree programme. What information do you think she should be asking for from the Faculty of Education's programme monitoring system? What monitoring information is likely to be useful in evaluating the programme?

There is no feedback to this activity

Why is programme monitoring important in conducting research and evaluation?

How did you go with activities 3, 4 and 5? Did you struggle to answer the questions or did you find it easy to connect programme monitoring to the research agenda of each of our characters?

Don't worry if you struggled – we will be returning to each of these examples as we proceed on our learning journey to illustrate how programme monitoring data can be used practically by researchers and evaluators. By the time you have finished working through this handbook, you will have had a chance to modify and expand your answers. The most important issues that I'd like you to consider that emerge from this exercise are:

- 1 There are many different research applications for programme monitoring data. Researchers with very different research agendas are likely to be able to find ways in which to use programme monitoring systems to support their research. From your perspective, therefore, the key lesson to learn is that, no matter what your research agenda, you should try to think carefully about how you can use programme monitoring systems. In the following units, I will try to demonstrate to you how you can do this, and what specific research data you can hope to find.
- 2 There is no formula for working out how to use programme monitoring data in a research or evaluation exercise. As we will see in the remaining units, there are many different kinds of information that you might find in a programme monitoring system, and many different ways in which they can be used. As with all research, the most important task is to establish clearly what you are trying to achieve, and then work out how different kinds of information can help you to achieve these goals. Thus, how you use programme monitoring data will depend entirely on the context and objectives of your research.

Reflections on the importance of programme monitoring data

Now, I am going to make some general statements about why I think monitoring data is important in research and evaluation. Bear in mind that these are just my thoughts, and need to be read with the above lessons in mind.

Activity 6 15 mins



As you read the statements below, try to decide whether you agree or disagree with them. This might most usefully be done by considering them in relation to the three stories I have presented above.

Programme monitoring data is important in research and evaluation because:

- 1 Research can be enormously improved if it is backed up by evidence about what is actually happening on the ground. Systems that monitor implementation of distance education delivery can be an excellent source for such evidence (provided the monitoring systems are not flawed, badly designed, or poorly managed).

My thoughts:

- 2 Much research relies on qualitative data and anecdotes to reach conclusions. If this information can be partnered with facts and figures from programme monitoring systems (quantitative data), research conclusions can carry that much more weight. And, contrary to what is often said, qualitative and quantitative research processes can be complementary, and part of the same research exercise.

My thoughts:

- 3 Evaluations of ODL programmes or institutions – a particular type of research project – need facts and figures about what is happening in the programme/s being evaluated. There is no better source (and sometimes no other source) for this information than programme monitoring systems (depending of course on the quality of the system).

My thoughts:

There is no feedback to this activity

What we can expect to find in a programme monitoring system?

This does not mean that monitoring systems will automatically provide all of the answers to questions we are looking at. To understand exactly what information we might expect to get from these systems, we first need to understand what we can expect to find in a programme monitoring system. This will be the focus of unit two, where we will look at the elements of a programme monitoring system.

Summary

That brings us to the end of Unit 1. During this unit, we have:

- ▶ considered the differences between monitoring, evaluation, and auditing
- ▶ looked at some definitions of each of these terms, and explored them with specific reference to distance education programmes

- ▶ examined some hypothetical research agendas, and begun to reflect on how they might make use of programme monitoring data in carrying out their research
- ▶ explored a practical example of a programme monitoring system (if you completed the project task).

In Unit 2, we are going to go on a quick tour of programme monitoring systems, for those of you who are still not sure what such a system ought to do. If you feel confident that you already know what a programme monitoring system is and what it needs to do, you could skip straight on to Unit 3, where we will consider in more depth the research and evaluation value of programme monitoring systems.

Before proceeding to the Unit 2, though, you will complete your first project task. In this task, you will look at a specific distance education programme, and review its programme monitoring systems. I can only reiterate the value of conducting this work. Programme monitoring is an eminently practical function, and best viewed in action rather than read about.

Project task Part 1



Finding a programme

The best way to understand a programme monitoring system is to see one in action – this part of the project will help you to do that.

If you intend to try the project tasks (which I strongly recommend), I suggest that you keep a copy of all of the results of your work. You will need to refer back to your work in later parts of the project task.

Step 1: Establishing a relationship

In the introduction to this handbook, I suggested different ways in which you could establish a relationship with someone running (or helping to run) an ODL programme. You will need to establish this relationship as your first project task. (You can refer back to the introduction to read through these ideas.) You will need to ask this person to help you gain a better understanding of how they monitor their programmes. Mostly, you will need them to spend a bit of time with you showing you their systems and how they work. My experience is that, if you are friendly and make it clear that you are doing this work for purely developmental purposes (i.e. you have no hidden agenda), then most people are likely to help you in your work, although of course some may refuse access on the grounds of confidentiality.

Step 2: Describing the programme monitoring system

Once you have established a good working relationship with someone, then you will need to work with them to answer the following questions:

What systems have been established to monitor implementation of this programme? Try to describe these systems in as much detail as possible.

What data is gathered through these systems?

What is this data used for and by whom?

What data is **not** gathered that you think might be useful in monitoring the programme?

What do you think are the major strengths **and** weaknesses of these systems?

I suggest you write your answers to these questions in a single document, and keep it somewhere safe so that you can refer back to it during the next project task.

A note on qualitative and quantitative research

In this unit, I have introduced the two research terms 'quantitative' and 'qualitative'. I will be using these terms quite a lot as we proceed. If you are not familiar with the terms, you might find the following introduction helpful. If you are comfortable, you could simply skip this section.

Reading



Schumacher and McMillan have the following introductory comments to make on qualitative and quantitative research:

'The terms 'quantitative' and 'qualitative' are used frequently to identify different approaches to research. While there has been much debate about the two approaches, it is helpful to introduce the terms on two levels of discourse. At one level, quantitative and qualitative refer to distinctions about the nature of knowledge: how one understands the world and the ultimate purpose of the research. On another level of discourse, the terms refer to research methods – how data are collected and analysed – and the type of generalizations derived from the data. Traditionally both quantitative and qualitative research studies are conducted in education. The most obvious distinction to a reader between quantitative and qualitative research is the form of data presentation. Quantitative research presents statistical results represented with numbers; qualitative research presents facts in a narration with words' (Schumacher & McMillan, 1993).

It is often argued that, primarily, the difference between qualitative and quantitative approaches or paradigms lies in the different data collection strategies: qualitative approaches are thus classified as being non-numeric research, and quantitative approaches as numeric research. This is, however, a radical oversimplification of the debate. The notion that the sharp distinction and divide between qualitative and quantitative methodologies is a false dichotomy, is supported by much literature. Though authors in general agree that these two perspectives have particular and different historical roots and are based on different value systems, many are of the opinion that these differences have been overemphasised, and that, more importantly, one will seldom find any research that employs only one of the two perspectives. The following extract from Keohane, King & Verba (1994:5) gives a sense of this debate:

'The differences between qualitative and quantitative traditions are only stylistic and are methodologically and substantively unimportant. All good research can be understood – indeed, is best understood – to derive from the same underlying logic of inference. Both qualitative and quantitative research can be systematic and scientific. Most research does not fit clearly into one category or the other. The best often combines features of each' (Keohane et al, 1994).

According to Bryman (1988) *'the distinction between qualitative and quantitative research is really a technical matter, whereby the choice between them is to do with their suitability in answering particular research questions'*.

Though the division of the two traditions may be artificial, there is no question about the fact that the two methodologies can do different things. Data obtained by making use of qualitative measures is in general more in-depth, textured, and richer. The kind of data generated by quantitative methods, on the other hand, is more generalizable, and predictions can be made (obviously subject to limitations of the selected sample). Macun and Posel (1998) suggest that the issue of reliability in any kind of research is best tackled through triangulation. They further state that:

'Therefore, rather than relying on any research method to replicate the data produced by another, we can more fruitfully treat each method as providing complementary sorts of data, the reliability of which rests in their coherence as an integrated answer to the research question.'

Triangulation

The use of more than one method in collecting data on a particular event.

If you would like to follow these topics in more depth, I suggest you consult the core modules.

References

- Birley, M. and Morel, N. 1998 *A practical guide to academic research*, London: Kogan Page (extract pp 125)
- Bryman, A. 1988 *Quality and quantity in social research*, Boston: Unwin Hyman
- Cambridge Advanced Learner's Dictionary*. 2003, Cambridge: Cambridge University Press, at <http://dictionary.cambridge.org>
- Dolley, J. 1994 *Planning, monitoring and evaluating learning programmes*, Buckingham: The Open University Press (extract pp 29 & 66)
- Freeman, R. 1997 *Managing open systems*, London: Kogan Page
- Keohane, R., King, G. and Verba, S. 1994 *Designing social inquiry – scientific inference in qualitative research*, New Jersey: Princeton University Press
- Macun, I. and Posel, D. 1998 'Focus groups: a South African experience and a methodological reflection' in *African Sociological Review* 1, 2: http://www.codesria.org/Links/Publications/contents_asr/asr_2_1.htm
- Merriam-Webster's Online Dictionary*. 2003, Springfield, MA: Merriam-Webster Inc (www.merriam-webster.com), at <http://www.m-w.com/>

Ministry for Foreign Affairs. 1998 *Guidelines for programme design, monitoring and evaluation*, Helsinki: Department for International Development, at <http://global.finland.fi/julkaisut/yleis/pdme/index.html> (extract pp 45)

Onion, C. 1987 *Shorter Oxford English Dictionary*, New York: Oxford University Press

Schumacher, S. and McMillan, J. 1993 *Research in education: a conceptual introduction*, New York: HarperCollins (extract pp 14)

Thorpe, M. 1993 *Evaluating open and distance learning* (2nd edition), Harlow: Longman, cited in D. Rowntree 1998 'Assessing the quality of materials-based teaching and learning', *Open Learning* 13, 2: 12-22. available at: <http://iet.open.ac.uk/pp/D.G.F.Rowntree/assessMBL.html>

Elements of a programme monitoring system



Unit overview

The main purpose of this handbook is to help you to understand how programme monitoring systems can be used to support research and evaluation. In the first unit, we explored in general terms what monitoring is, compared it to the process of evaluation, and looked briefly at the how monitoring and evaluation might be used in ODL programmes. But this doesn't yet tell us what a programme monitoring system actually is, so we turn our attention to this topic in this unit. This understanding is important because it helps us to know in advance what possible research and evaluation applications there are for data to be found in programme monitoring systems.

In this unit, we will take a quick tour of programme monitoring systems, in order to deepen our understanding of how they can help researchers. We will consider what these systems need to tell ODL practitioners, as well as what information they need to gather in order to tell those practitioners what they need to know. We will explore examples of programme monitoring systems, and consider the requirements for designing and implementing them effectively.

For those of you completing the project tasks, at the end of the unit, you will review the output of your work in the first unit in order to assess the extent to which you correctly identified the monitoring systems in the programme you are working with. You will also be required to consider how effectively you think the example you have selected is monitoring different elements of its distance education programme.

This unit should take you about 11 hours to complete, made up of about 3 hours reading, 4 hours of activity and associated readings, and 4 hours for the project.

Starting with the outputs of programme monitoring: What does the system need to tell us?

'A good monitoring system tells administrators what problems instructors and students are experiencing and indicates if delays or breakdowns occur in the communication system – while there is still enough time to take remedial action' (Moore, 1999).

The starting point of any system design is to understand what the system needs to produce at the end. In the reading you completed for unit one, Richard Freeman (1997) noted that monitoring focuses on where changes can be made in the short term, while we also discovered that the purpose of monitoring is to judge whether or not we are achieving our objectives.

Given this, it follows logically that a programme monitoring system needs to provide distance education practitioners with information that they can use to judge whether or not these objectives are being met. Before this, of course, they need to be clear what their objectives actually are. These might be different for different distance education programmes, but there are likely to be some common objectives in most distance education programmes.

Below is a list of broad criteria for measuring the quality of distance education. It is taken from a set of quality guidelines for distance education developed in South Africa. I would argue that, if a distance education provider could meet all of the objectives below (which would be difficult), then it could be confident about the quality and likely success of its programmes.

Reading



- 1 'The educational provider has a clear sense of purpose and direction, which is informed by national priorities as well as by the quality demands of cost-effective educational provision.
- 2 There is a system for updating detailed information about past, present and potential learners and using the information to inform policy and planning of programme development, course design and materials development, learner support, and other relevant aspects of educational provision.
- 3 Programmes are flexible and designed with national needs as well as the needs of prospective learners and employers in mind; their form and structure encourage access and are responsive to changing environments; learning and assessment methods are appropriate to the aims and purposes of the programmes.
- 4 The course curriculum is well-researched, with aims and learning outcomes appropriate to the level of study; content, teaching and learning and assessment methods facilitate the achievement of the aims and learning outcomes; there is an identified process of development and evaluation of courses.
- 5 The content, assessment, and teaching and learning approaches in the course materials support the aims and learning outcomes; the materials are accessibly presented; there is an identified process of development and evaluation of course materials.
- 6 Assessment is an essential feature of the teaching and learning process, is properly managed, and meets the requirements of accreditation bodies and employers.
- 7 Learners are supported to a considerable extent to become independent learners through the use of various communication systems; the need of learners for physical facilities and study resources and participation in decision-making is also taken into account.
- 8 The staff structure as well as the experience, qualifications, responsibilities and job descriptions of staff are appropriate for the education and training services provided; staff induction and development programmes equip staff to perform their roles and

Food for thought

How do you think this list of quality guidelines would be different if it were written for a face-to-face education programme?

Which items would be the same?

Based on the work you did in Unit 1, which of these statements could – in part, at least – be measured using programme monitoring systems?

tasks effectively.

- 9 There is effective, transparent and democratic management of communication and information as well as human and material resources; efficient administrative systems support the activities of the educational provider; the educational provider is financially sound and can make reliable educational provision.
- 10 In the interests of cost-effective provision of education and training, collaborative relationships are formed and collaborative projects are undertaken wherever possible.
- 11 A continuous review of the quality system ensures that learners' and staff needs as well as the needs of other clients are met.
- 12 The needs of the learners and other clients are accurately addressed; the education and training services of the educational provider are effectively promoted in a variety of ways.
- 13 The programme achieves valid teaching and learning goals in cost-effective ways that have a positive impact on society and meet the needs of clients and national priorities.'

(Department of Education, 1996)

That's quite a list, but is, I hope, helpful in considering all of the different elements of distance education provision that need to be monitored.

However, stating objectives without providing some indication of how we will know whether or not they have been achieved may be a waste of time. Thus, a list of objectives such as the one above can be significantly improved by the addition of **performance indicators**. Performance indicators are statements that use statistics, ratios, costs and other forms of information to measure progress in achieving specific objectives. If well formulated, they can be used to measure performance and can then serve as signals to institutions to explore reasons why there may have been deviations from expected levels of performance.

Of course, these ideas are quite difficult to follow in theory, so we will explore them in the next activity.

Activity 1 30 mins



You will recall from Unit 1 that *Fancy* has been asked to look at different modes of schooling in Botswana, in order to assess the potential for open schooling in that country. You made a first attempt then to outline what you thought a programme monitoring system for an open school would need to contain. In this activity, we will go back to first principles to begin to establish how accurate your first attempt was.

Objectives of an open school

First, write down at least five broad objectives that you think an open school in a developing country such as Botswana might set for itself. These might include broad statements such as 'Deliver a high quality schooling experience for youth and adult learners' and more specific statements such as 'Materials are designed in such a way that our target learners will be able to work successfully (independently) through the course

and meet the assessment criteria defined for the course'. Use the list presented above to guide you in doing this.

Indicators to measure the achievement of these objectives

Second, you need to use the list of objectives you have compiled to prepare a list of indicators that you can use to measure whether or not these objectives have been met. An obvious example of an appropriate indicator of success might be 'Number of students who successfully complete the programme'.

Feedback: see note in the next paragraph

Note on feedback

How did you find this exercise? It may not have been as easy as it originally looked, particularly when it came to describing indicators to measure the achievement of objectives. In my experience, defining clear, concrete objectives and indicators is a task that most people find very difficult. In the next piece of text we will consider each in turn.

Designing a programme monitoring system

Consider what you need to measure/monitor

The main point to note from the above exercise is that programme monitoring systems cannot be properly developed unless they are designed with a clear understanding of what they need to measure/monitor. So, you have to start with the objectives of the programme that you are monitoring in order to establish what the monitoring systems need to tell you. This will not necessarily be the same from programme to programme, although there may be some common features (for example, many programmes may include objectives based on the quality guidelines we looked at before the activity).

The importance of making choices when designing a programme monitoring system

An important additional point to note is that the above exercise illustrates the importance of making choices when designing a programme monitoring system. You will not have enough money to monitor everything. Also, if you try to monitor everything, you will probably gather lots of information that you do not use. So, programme monitoring systems design need to take account of what the priorities are in terms of monitoring success – using programme objectives as a starting point.

The following extract from an editorial in the *American Journal of Distance Education* offers this advice:

*‘What are the features of a good [monitoring and evaluation] system? There are I believe three key features. The first is the preliminary specification of good learning objectives. From the beginning of the course design process until the final summative evaluation of the project, no matter how large or small the course or how long or brief its duration, the central questions remain the same, namely: did each student produce evidence of having learned what was required as specified in the learning objectives, **and if not, why not?**’ (Moore, 1999).*

This is critical. The purpose of distance education programmes – in common with any other learning programme – is to help learners to achieve specific learning objectives or outcomes. However, in the context of programme monitoring, it is critical to remember that we are interested not only in what the individual learner is achieving, but also in what the programme as a whole is achieving.

That, of course, is only one part of what you were asked to do in the last activity. The second part was to consider what indicators might be used to assess whether or not we are achieving our objectives. Clearly, for a list as long as the quality guidelines for distance education developed in South Africa, one could define several indicators that could be used to measure success. Look at the reading below, which details possible performance indicators of student support services. Are any of them reflected in the list you wrote for *Fancy’s* open school?

Reading



Institutional goal

‘Provision of extra support to learners as per their requirements and convenience, with minimum cost, so as to remove their isolation and anxiety, increase their motivation and self-confidence, and improve their learning effectiveness.

Goals/objectives of student support services

- Provision of institutional and human networking, and resources for student support services
- Provision of adequate staff development and monitoring mechanisms for smooth

functioning of the student support system

- Provision of learner support services to help learners study the learning package
- Provision of human element in distance education besides library, audio-video and teleconferencing service

Performance indicators

1 Headquarters

- Provision of an adequate network of support services
- Provision of appropriate and adequate financial resources
- Provision of appropriate and adequate human resources
- Provision of appropriate and adequate physical resources
- Continuous and appropriate staff development programmes for headquarters, regional centres and study centre staff
- Functioning of a management information system
- Adequate mechanism of coordination and monitoring of the network
- Adequate mechanism for providing direct individual support and assistance to students
- Adequate contact and meetings with regional and study centre officers
- Timely dissemination of information and circulars to those concerned in the network
- Sufficient flexibility in the system and quick decision-making to suit needs and requirements in the field
- Mechanism for and promptness in monitoring of student assignments and related output
- Clear-cut policy on attaching a learner to a study centre/tutor

2 Regional centres

- Distribution of work with clear-cut individual responsibility
- Provision for and effective utilisation of financial resources
- Existence and application (frequency) of monitoring system for study centre activities and follow-up action
- Admission of students in time
- Timely distribution of materials at stipulated intervals
- Conduct of exams properly and in time
- Prompt reply to students' study centres' and headquarters' queries
- Effective promotion of distance education system and programmes

3 Study centres

- Well established norms for identification and establishment of study centres
- Norms for number of students and staff attached to study centres
- Provision of adequate space and furniture for study centres
- Existence of and adherence to clear-cut norms (qualifications, experience) for recruitment of tutors/counsellors
- Proper induction and continuous orientation of tutors on counselling, tutoring, evaluation, and the like
- Proper training of tutors on relevant teaching techniques
- Briefing on tutors on availability of other resource support to learners
- Development and use of manuals for tutors and coordinators
- Adequate and continuous training of coordinators and other secretarial staff

- Details on learners assigned to tutors/mentors and their special needs
- 4 Library services
- Number of books (reference and subject-specific) available
 - Opening of library during counselling sessions
 - Effective use of library by students
- 5 Counselling
- Conduct of pre-stipulated counselling sessions, subject-wise
 - Adequate physical infrastructure for conduct of counselling sessions
 - Ensuring adequate student attendance and participation in counselling sessions
 - Provision/availability of all study material and audio-video materials at study centres
 - Conduct of audio-video sessions regularly in time
- 6 Assignment evaluation
- Effective evaluation of student assignments
 - Adequate tutor comments on assignment responses
 - Reliable and valid evaluation/markings or grading of assignment responses, and matching of marks/grades with tutor comments
 - Adherence to stipulated turn-around time for evaluated assignments
 - Provision of adequate space and furniture for study centres
 - Existence of and adherence to clear-cut norms (qualifications, experience) for recruitment of tutors/counsellors
 - Proper induction and continuous orientation of tutors on counselling, tutoring, evaluation, and the like
 - Proper training of tutors on relevant teaching techniques
 - Briefing on tutors on availability of other resource support to learners
 - Development and use of manuals for tutors and coordinators
 - Adequate and continuous training of coordinators and other secretarial staff
 - Details on learners assigned to tutors/mentors and their special needs
- 7 Student satisfaction
- Extent of satisfaction of students of various student support services
 - Extent of student queries and their attendance
 - Extent of queries by prospective students and responses by study centre staff
 - Student use of support services for effective learning and professional enhancement’.

(Powar et al, 2000)

As this extract illustrates, performance indicators can be quite detailed. However, they are a fundamental basis for establishing an effective monitoring system, as they tell us exactly which elements of performance we should be seeking to monitor. As importantly, from the perspective of this handbook, imagine how much more precise the answers to many distance education research questions would be if we had information about performance indicators such as those listed above at our fingertips!

Reading – Resources file

I have included a reading that explains in much more detail about performance indicators, and is, I think, a fascinating map of what a distance education monitoring system ought to be telling us. As a result, I suggest you take some time now to read *Shale & Gomes* in the *Resources File*.

A review of key data requirements in a distance education programme

In the discussion above, we have focused attention on what programme monitoring systems ought to tell us. This is a critical starting point, as design of such a system works most successfully when it begins with the required outputs of the system. Now, though, we will turn our attention to what data needs to be gathered in order for us to be able to monitor indicators such as those listed above. As Moore notes:

'Effective monitoring requires a network of indicators that collect data on learner and instructor performance. This must be done frequently and routinely, and the data has to be relayed with similar frequency to a control center where it can be evaluated' (Moore, 1999).

Activity 2 1 hr

This activity continues the work that you started in Activity 1. You will assess in more detail what data *Fancy* should be looking for in a programme monitoring system for an open school.

Use the lists you generated in Activity 1 and those provided after the activity to prepare a detailed list of the kinds of data that you think a programme monitoring system ought to gather. To assist you in this task, I have supplied some headings under which you can develop your lists. You also might like to refer back to the chapter by Richard Freeman (1997) for more ideas.

Materials development and production

Materials distribution

Student recruitment

Tutoring and counselling

Student records

Staff records

Assessment/accreditation

Financial information

Feedback: see note in the next paragraph

Note on feedback

What trends did you notice from the above activity? As you can see, programme monitoring systems may be required for several elements of a distance education programme. Thus, in order to understand them well, it is important, even as researchers, that we are well versed in good distance education practice. Unless we understand what constitutes good distance education, it is difficult to know what might need to be monitored. As researchers, we will miss opportunities to find data to support our research work if we are not clear what we should be looking for!

Hopefully, the above activity helped to highlight another important point about programme monitoring systems. Such systems are not a separate component of distance education programme design and delivery, divorced from implementation. There is a very strong overlap between the activities required to administer a distance education programme and the information required to monitor a programme's implementation. Indeed, many people might argue that programme monitoring is actually an integral part of administering a programme, rather than a separate activity. In the most well designed programme monitoring systems, monitoring data is gathered and used as part of implementation of the programme. We will look at this in more detail when we examine two case studies of programme monitoring systems below.

However, let's put ourselves back in *Fancy's* shoes, taking one example and following it through to illustrate the point.

When *Fancy* looked at the objectives of establishing an open school in Activity 1, she may have identified that a key objective of an open school is to provide meaningful access to high quality schooling for large numbers of out-of-school youth. With this starting point, she might have mapped out the following:

Reading



Fancy's monitoring

Programme objective

- provide high quality schooling opportunities to large numbers of learners denied access to the formal schooling system

Performance indicator

- numbers of learners enrolled in open schooling programme/s
- numbers of learners successfully completing the programme/s
- recognition of programme/s by National Accreditation Agency in Botswana
- gender equity in learner profile

If the programme shows good results in these four key areas, then it is reasonable to assume that it has achieved this objective.

Data required to monitor achievement of objective

To assess the above, we will need the following data:

- data on student enrolments, which we might want broken down in different ways – for example, by gender – to help us analyse trends within the data
- data on student completion rates (possibly also broken down into different categories).

However, just having all this information is not enough for us to know whether or not the objective has been met. For *Fancy* to assess the success of the open school, she will need to be able to consider the completion rates of specific cohorts of students. This is a key difference between just having access to data and using it for monitoring purposes. If, for example, 2,000 students enrolled for a programme in 1997, it is important for *Fancy* to know how many of those students successfully completed the programme within, say, six years. If she discovers that only 500 (or 25%) of those 2,000 students completed the programme, then she may become concerned about the quality of the programme or the extent to which it is really achieving its stated objective. If she discovers that over 1,000 (or over 50%) successfully completed the programme, then she may be happier with the results. So, we can use administrative data (in this example, on enrolments and completion rates), but it is only when we start analysing that data more carefully that we are able to use it to monitor achievement of performance indicators.

Reading – Resources file



With this approach in mind, take some time now to read an extract from a document called *Administration and management of programmes using distance education methods*. You will find this extract in your *Resources File*. This extract focuses on the information that should be gathered in administration and management of a Bachelor of Education programme from a South African University. The extract may not be a comprehensive list, but it contains a good overview of different kinds of data that need to be gathered to run (and monitor) a distance education programme). As you read the extract, compare it with the lists you generated in Activity 2 to see if you missed anything. While you are reading, I also suggest you make reference to the set of performance indicators supplied to you after Activity 1. How do you think these kinds of data sets might help a distance education programme coordinator to monitor those performance indicators?

Designing and implementing a programme monitoring system

In brief, so far, you will hopefully have noted the following key points:

- ▶ to monitor a distance education programme successfully, we need to start by defining the objectives of that programme
- ▶ once we are clear about the objectives, it is necessary to identify those performance indicators that we will use to assess the achievement of the objectives
- ▶ we then continue by working out what data we need to gather in order to measure the performance indicators
- ▶ when we analyse the data we have gathered to see how the programme is performing against those performance indicators, we are in the business of monitoring the programme's implementation.

In essence then, we actually already have a brief overview of the steps that one should follow to design the framework of a programme monitoring system. However, it is one thing to know what we aim to monitor and what information we need to do that monitoring – it is much more complex to work out how we are going to gather the information and do the required analysis on an ongoing basis. This is the real challenge of programme monitoring: making it work in practice.

It is beyond the scope of this handbook to consider the implementation of programme monitoring systems in any depth, but we will spend a brief time considering aspects of their implementation. This is necessary because researchers and evaluators will need to be aware of the challenges associated with programme monitoring when they work with distance education practitioners.

Note on feedback

The case studies illustrate clearly that there is no 'one-size-fits-all' approach to programme monitoring. Different programmes have different needs and objectives, and this clearly affects the way in which systems are set up to monitor them. The two case studies also illustrate clearly the relationship between programme monitoring and institutional systems. For example, as Freeman made very clear in the previous unit's reading, 'except in very small or well funded programmes, central monitoring has to be based largely on analysis of computer data that has been gathered for other purposes'. Significant limits were placed on the distance education programme operating in a traditionally face-to-face university (and I have seen many examples of this elsewhere) because these central administrators do not take sufficient account of the monitoring requirements of distance education programmes.

It is also clear that different systems will be making use of many different kinds of tools as part of their programme monitoring systems. We have seen several examples of these throughout our readings, and in the case studies. They might include mark sheets, feedback forms, records of assignment submission and return dates, attendance registers, and a host of other electronic or paper-based tools. It is important to note that monitoring is likely to take place at many different levels, and thus monitoring tools can range from simple one-page forms to highly complex computer systems. In large distance education programmes, however, it is increasingly the case (even in most developing country contexts) that some form of computer system will be used to collate data and present summary reports that can be used for monitoring purposes. The challenge for any programme monitoring systems designer is to ensure that these computer systems generate reports that answer critical questions about the performance of the programme. In many cases, I have found people frustrated by the fact that they spend so much time entering administrative data into central computer systems, only to find that they cannot get the information presented back to them in ways that help them to monitor their performance effectively.

However, I think it is also important to note that, in many cases, differences between programme monitoring systems are also a feature of who designed them and how seriously they have taken monitoring. The work we have done in this unit illustrates unequivocally that setting up and running a programme monitoring system is a detailed exercise, requiring careful planning and ongoing time in collecting the data needed to monitor performance. As our readings and examples have shown, at one level or another, programme monitoring needs to involve everyone participating in delivering the programme, either as they help to gather the data necessary to monitor performance or as they participate in analysing that data. I know of many programmes where commitment to this level of detailed work simply does not exist (although it is often regarded as politically incorrect to offer this judgement). If programme monitoring is not taken seriously by top-level decision makers and given the necessary political, financial, and human

resource support to be done properly, the systems either dwindle into disuse or yield data that is too incomplete or shallow to allow for meaningful analysis.

This poses a major challenge to researchers and evaluators – how can you know if the data you have received is of good enough quality to be reliable? We will focus on this question more in later units, but it is important to remember as a researcher that you cannot simply assume that a programme monitoring system will be readily available to supply you all of the answers you need to your research questions. Either the designers of the system may not have been interested in the same questions as you or the implementers of the system may have not dedicated sufficient resources to ensure that the system is adequately maintained.

Reflections on designing and implementing programme monitoring systems

Now I am going to make some general statements about what I think some major issues are in implementing programme monitoring systems. Bear in mind that these are just my thoughts, and need to be read with the above lessons and readings in mind.

Activity 4 25 mins



As you read the statements below, try to add your thoughts to them. This might most usefully be done by considering them in relation to the work you have done in this handbook. They are designed to help you pull out the most important lessons that have been implicit in this unit to date.

- 1 There is no universal formula for designing a programme monitoring system. Its design, and the tools that are finally used, will depend on the objectives of the programme and the performance indicators used to measure those objectives. However, there are some commonalities found in programme monitoring systems and thus enormous benefits to be gained by systems designers in examining what others have done, as the lessons they have learned are of enormous value in designing a new system.

My thoughts:

- 2 First and foremost, programme monitoring systems need to be designed with the information we need to know in mind. This is called output-based design, and it is critical to ensuring that a programme monitoring system can indeed supply us with the analytical information we require to monitor performance of a distance education programme.

My thoughts:

- 3 Although designing a programme monitoring system is a major challenge, the biggest challenge of all is to ensure that the system is maintained on an ongoing basis, and that all necessary information is gathered to ensure meaningful results from the system. This is the largest ongoing cost in programme monitoring, and needs to be carefully considered during design of a programme monitoring system. If a system is designed to answer too many questions, it will be too expensive to maintain. Thus, it is necessary to focus on priority performance indicators only. Seeking to monitor everything will only undermine the quality of the system and its data.

My thoughts:

- 4 Above all else, programme monitoring needs to be integrated into the day-to-day delivery of Open and Distance Learning (ODL) programmes, so that monitoring does not become an additional administrative burden for people delivering of the programme. Examples of monitoring tools that are part of day-to-day delivery of distance education programmes can be found in the various readings for this unit. These tools can then be combined with analytical tools (more often than not computer-based) to yield aggregated data and analyses of performance.

My thoughts:

- 5 At some level, all people involved in implementing an ODL programme will need to participate in ensuring the success of programme monitoring. Programme monitoring is thus not simply an 'administrative' task, although much programme monitoring data will be drawn from administrative systems. It is, however, also likely that for a programme monitoring system drawing on the ideas contained in this unit to work successfully, its design and implementation will need to be coordinated by someone with a dedicated responsibility for the system. To do their job effectively, this person will require high-level support and the financial resources needed to design and implement the various tools that will be part of the programme monitoring system.

My thoughts:

There is no feedback to this activity

Summary

I hope that this unit has helped to give you a deeper insight into what programme monitoring systems are and what information they might contain.

During this unit, we have:

- ▶ explored the steps required to design a programme monitoring system
- ▶ considered the data required to monitor distance education programmes
- ▶ explored theoretical readings and case studies that provide descriptions of elements of programme monitoring systems
- ▶ considered a few of the challenges associated with establishing and maintaining a programme monitoring system.

Project task Part 2



Assessing the programme monitoring system

During Part 1 of the project task, you identified a programme and attempted to describe its programme monitoring system. Now you will return to the example you found and evaluate it in more detail, with the lessons you have learned in mind.

Step 1: Assessing design of the system

Return to the person with whom you have established your working relationship, and work with them to find answers to the following questions:

- 1 Have any programme objectives been established? If so, what are they?
- 2 If you answered 'Yes' to Question 1, do you think the objectives identified are adequate for this programme? How do you think they should be modified?
- 3 If you answered 'No' to Question 1, what objectives do you think the programme ought to have?
- 4 If you answered Part 1 to Question 1, do you think that the programme monitoring system you described in Part 1 monitors these objectives adequately?
- 5 If you answered 'No' to Question 1, do you think that the programme monitoring system you described in Part 1 could monitor the objectives you listed in question two adequately?
- 6 Based on your work in Unit 2, revisit your answers in Part 1 of the project task. In particular consider your answer to the question 'What do you think the major strengths **and** weaknesses of these systems are?' Have you modified your answer at all? If so, note the modifications you would make to your original answer.

Step 2: Assessing implementation of the system

Enter a discussion with the person you have established your working relationship with and find answers to the following questions:

- 7 What tools are used to support programme monitoring in this programme? What is their purpose? In completing this task, I suggest you establish a grid with three columns: 'Description of tool', 'Purpose of tool', and 'People responsible for maintaining tool'.
- 8 Are there any tools that you think are missing from the list you compiled? Which are they?
- 9 What do you think the two biggest challenges are in ongoing implementation and management of the programme monitoring system you have found? How would you handle these challenges if you were the programme coordinator?

I suggest you write your answers to all of these questions in a single document, and keep it somewhere safe so that you can refer back to it during Part 3 of the project task.

In Unit 3, we will consider in more depth the research and evaluation value of programme monitoring systems.

References

SAIDE, 2003a *Administration and Management of Programmes Using Distance Education Methods*. Johannesburg: SAIDE

Department of Education, 1996 *A Distance Education Quality Standards Framework for South Africa*. Pretoria: Department of Education.

Freeman, R. 1997 *Managing open systems*, London: Kogan Page (extract pp 110)

Moore, M. 1999 'Editorial: Monitoring and evaluation' *American Journal of Distance Education* 13, 2:1

Powar, K., et al. 2000 *Performance indicators in distance higher education*, New Delhi: Aravali Books International

Shale, D. and Gomes, J. 1998 'Performance indicators and university distance education providers' *Journal of Distance Education* 13, 1:1-20

The research and evaluation value of monitoring systems



Unit overview

I hope that the previous unit gave you some sense of what you should be expecting to find in a programme monitoring system, as well as an introductory understanding of the challenges of running such a system. It is important for you, as a researcher, to understand these issues, as they will make you more aware of what you might be expect to encounter in your quest to find relevant research data.

In this unit, we will consider more closely, the value of some of the research and evaluation programme monitoring systems and the data they contain. We will explore concrete examples of data from programme monitoring systems to give you a feel for how you can use these systems to support your work as a researcher. Because there are so many possible ways in which programme monitoring data can be used for research, this will be illustrative rather than comprehensive, aiming to provide you with some sense of possible research and evaluation applications for programme monitoring data.

For those of you completing the project tasks, you will define specific research questions that you would like answered and then use the programme monitoring system you have been exploring to try to help you to answer these questions effectively.

This unit should take you about 11 hours to complete, made up of about 3 hours reading, 5 hours of activity and associated readings, and 3 hours for the project.

What roles can programme monitoring systems play in research and evaluation?

I hope it has become clear that programme monitoring systems can contain a range of useful data for researchers and evaluators. Now let's try to connect that data to a research agenda. There are two basic options open to you as a researcher, and how you proceed will depend on what you are seeking to do:

- ▶ either you might already have well-defined research and evaluation questions, and need to find relevant data from a programme monitoring system to help you to find answers to those questions; or
- ▶ you might peruse programme monitoring data, and use it to help you formulate research questions.

If we consider the researchers we introduced in Unit 1, it is fair to suppose that each might be in slightly different positions. Let's start by thinking about *Fancy*, who you will recall is exploring the possibility of using open schooling to cater for AIDS orphans. In broad terms, *Fancy* might already have defined her key research question – namely, does open schooling constitute a viable alternative to traditional schooling for AIDS orphans? Beyond this, she may also have decided that she is keen to research what logistical challenges there are to implementing open schooling for this specific target audience.

Remember though, that *Fancy* does not have much knowledge of educational literature. Thus, it might be difficult for her to identify beyond this what she needs to understand about open schooling and its opportunities and limitations. Here, programme monitoring data might well become useful to help her to define more specific research questions. You will soon see how this is possible.

The same scenario might well apply for *Abida*, who has been asked to design and implement a thorough evaluation of a Bachelor of Education degree running at Auranzeb Open University. She might also have a clear sense of some preliminary evaluation questions that she wants to pose, and no doubt programme monitoring data will be critical to help her find some answers. For example, maybe she has decided that some key questions (amongst many others) are:

- ▶ What kinds of people are enrolling on this programme, and where are they from?
- ▶ How many students successfully complete the degree programme? Are there any demographic trends that suggest clear differences between who enrolls and who successfully completes the programme? For example, is a disproportionately high or low percentage of women enrolled or are students enrolled from a specific geographical area completing the programme?
- ▶ What patterns are there regarding the submission of assignments by enrolled students?

And so on.

Like *Fancy*, however, *Abida* should also be aware that, once she is able to review programme monitoring data, she might want to formulate some more specific research questions.

Kabir, on the other hand, has already established a pretty specific focus for his research. Remember that he has been concerned with the possible inefficiency of distance education at the Open University of Udair. As a result, he wants to test an hypothesis that, because of high dropout rates, distance education delivered by his institution is more expensive than face-to-face education at another university in the country. To do this, he will need to know:

- ▶ What are the completion rates on selected distance education programmes at his institution? (i.e. of students who enrol for a specific programme, how many successfully complete **the programme** within a specified time frame?)
- ▶ How do these completion rates compare with comparable programmes at traditional contact institutions in his country?
- ▶ How much does it cost to run the distance and contact programmes respectively?

You might like to turn back to Unit 1 to remind yourself what information you thought *Kabir* would need to test his research hypothesis. Does it match the above list?

In this instance, it is not so likely that *Kabir* will need to define further research questions. Indeed, he will have enough work finding answers to the above questions, and he will want to stay focused on finding these specific answers.

Over the remaining two units, we will work through a series of activities to consider both how pre-defined research questions can be answered – in part, if not entirely – using programme monitoring data and how programme monitoring data can be used to further refine research and evaluation questions to lead to new lines of enquiry.

Looking at some samples of data

Now we will take some time to consider examples of data drawn from programme monitoring systems, and think about how these could be used in research. In the examples provided below, you will see data that is in a consolidated form. This suggests that the programme monitoring systems from which it is drawn are well designed and maintained. It will be another problem altogether if programme monitoring systems cannot provide good reports on their data, but we will consider this problem in the following unit. For now, let's explore some data and how it can be used in research.

Activity 1 90 mins



Table 1, Table 2 and Table 3 are examples of data you might get from a programme monitoring system. They are taken from a statistical digest of the Namibian College for Open Learning (NAMCOL) for 2002 (<http://www.namcol.com.na/>). In terms of its founding act, NAMCOL was established to design, develop, and offer programmes intended to upgrade and enhance levels of general education, professional skills, vocational skills, managerial skills, and economic self-improvement.

For each sample:

- ▶ indicate what key research questions you think it might help you to answer
- ▶ list any further research questions that you think emerge from a review of this data.

Table 1 Enrolments by gender and level of study, 2002

Subject	Female		Male	
	n	%	n	%
Namibia Totals	19,481	67.7%	9,277	32.3%
JSC (Grade 10)	10,115	66.2%	5,153	33.8%
IGSCE (Grade 12)	9,308	69.4%	4,099	30.6%
Certificate in Education for Development (CED)	58	69.9%	25	30.1%

Research questions answered

Further research questions posed by data

Table 2 Assignments submitted by DE learners for marking by subject and level, 2002

Subject	JSC (Grade 10)			IGCSE (Grade 12)		
	Distance education subject enrolments	Assignments marked	Average assignments completed per learner	Distance education subject enrolments	Assignments marked and returned	Average assignments completed per learner
Totals	9,491	19,208	2.02	19,547	29,561	1.51
Accounting	165	298	1.81	622	809	1.30
Biology/life science	2,402	4,899	2.04	2,862	4,235	1.48
Business mng't/studies	2,033	4,382	2.16	1,411	1,703	1.21
Development studies	Not available through distance education at this level			3 526	7 567	1.98
English, 2nd language	1,215	2,356	1.94	4,825	7,135	1.48
Geography	1,130	2,222	1.97	984	1,506	1.53
History	1,279	2,521	1.97	934	1,396	1.5
Mathematics	431	853	1.98	1,147	1,310	1.14
Natural economy	Not available through distance education at this level			1,973	2 758	1.4
Physical science	836	1,677	2.01	963	1,142	1.19

Research questions answered

Further research questions posed by data

Table 3 Dropout among NAMCOL JSC Learners 2001-2002

Mode of study	2001				2002			
	NAMCOL subject enrolments	NAMCOL subject enrolments not entered for exam	Subject entries receiving incomplete symbol	Total No. of subject entries not accounted for	NAMCOL subject enrolments	NAMCOL subject enrolments not entered for exam	Subject entries receiving incomplete symbol	Total No. of subject entries not accounted for
Totals	27,080	1,880	3,101	4,981	36,699	5,047	4,226	9,271
		6.9%	11.5%	18.4%		13.8%	11.5%	25.3%
Distance education	7,285	1,078	1,295	2,373	9,505	2,213	1,705	3,918
		14.8%	17.8%	32.6%		24.5%	17.9%	41.2%
Face-to-face Mode	19,795	802	1,806	2,608	27,194	2,834	2,521	5,353
		4.1%	9.1%	13.2%		12.4%	9.1%	21.4%

Research questions answered

Further research questions posed by data

The feedback to this activity is at the end of the unit ►

Activity 2 40 mins**Re-presenting the data**

First, consider how you think the data on subject enrolments could be presented in another way to make it easier to interpret. Then, using the extra column in the table provided below (or your own presentation format), try to find a way to represent the data on subject enrolments in another form that you think will make it easier for people to draw meaningful conclusions from it.

Table 4 Enrolments by subject and level

Subject	JSC Enrolments	IGCSE Enrolments	
Accounting	165	622	
Biology/life science	2,402	2,862	
Business mgm't/studies	2,033	1,411	
English, 2nd language	1,215	4,825	
Geography	1,130	984	
History	1,279	934	
Mathematics	431	1,147	
Physical science	836	963	

The feedback to this activity is at the end of the unit ►

The need to re-arrange data

Did you find the task above easy or difficult? Some important points emerge about this:

- As research and evaluation often involve **interpretation** of data, you need to think carefully about how you will present data when you use it to answer research questions. It is not sufficient to assume that you can simply re-present the data in the form in which you received it.
- Manipulating data from programme monitoring systems often requires a basic knowledge of mathematics and statistics if you are to use data to its fullest potential. If you feel you are lacking in these skills, it will be a good idea to look at Core Module A3 *Getting and analysing quantitative data*.

In addition, the data in this example made me wonder about the following issues that might justify further research:

- ▶ How does the average assignment completion rate per learner compare with what is expected of learners? If it is significantly different, why and is this a problem?
- ▶ How long is it taking for students to receive marked assignments? How many students are **not** receiving marked assignments back?
- ▶ Why are average completion rates so much lower for the IGCSE than for the JSC? Should anything be done to bring them into alignment or is this discrepancy expected in terms of the way in which each is designed?
- ▶ Why are the development studies and natural economy subjects not available via distance education at JSC level? Is there a market for these subjects?
- ▶ Is a subject with low student enrolments such as accounting at JSC level viable as a distance education course?

Food for thought

Which of these questions do you think could be answered by returning to the programme monitoring system data?

Note: you need to differentiate between research questions that can be answered using programme monitoring data and those that require different kinds of research.

Dropout among NAMCOL JSC learners 2001-2002

In this example, we have the ability – which is unusual in most quantitative research – to compare distance education delivery with that of face-to-face education. It is not unusual to find that levels of dropout are higher in distance education courses than comparable face-to-face courses, but this data provides interesting research opportunities.

The data in Table 3 could be used to answer the following possible research and evaluation questions:

- ▶ What is the level of dropout among NAMCOL JSC learners in 2001 and 2002?
- ▶ How do dropouts compare between distance and face-to-face education in this programme during these two years?
- ▶ How many subject entries were not accounted for during these two years?

In addition, the data in this example made me wonder about the following issues that might justify further research:

- ▶ What factors lead to distance education 'subject enrolments not entered for exam' being higher than those for face-to-face mode? What can be done to reduce this gap?
- ▶ Why are fewer students receiving 'complete' symbols via distance education than via face-to-face mode? What can be done to reduce this gap?
- ▶ Why is the total number of subject entries not accounted for so high in general? Why is it higher in the distance education mode of delivery? What can be done to reduce these percentages?

- Why is the performance worse in 2002 than in 2001 for both distance education and face-to-face mode across most of the indicators? Can anything be done to reverse this trend?

The above example highlights clearly one key concern with research and evaluation, and that is the risk of jumping to conclusions on the basis of limited evidence. Reading the above figures, it may be tempting to argue that the distance education courses are of poorer quality or are less effective because dropout rates are higher. However, it is critical to note that this data only provides direction for **further lines of enquiry**, not space to draw valid comparisons. There may be many contextual factors causing the difference. For example, distance learners may be working full-time and thus able to devote less time to studying (which might undermine their performance); part-time students may be more likely to drop out as new opportunities arise during study that make their studies less relevant; distance education enrolment criteria might be 'looser' than for full-time contact education, which may lead to lower completion rates; and so on. However, in this example, further research seeking to probe the reasons for these numbers will still need to consider the possibility that weaknesses in design of the distance courses **may** be one of the reasons why performance is poorer.

Interestingly, in the above example, some answers might be found by returning to the programme monitoring system. It might, for example, tell us what percentage of students is studying full-time, or whether there are clear differences in the prior learning experience of learners in the different modes of study. Some answers will, however, only emerge through much more detailed research, such as whether there are problems with quality of design of the distance courses.

Before considering a little further how to decide when a programme monitoring system will help us, let's review where we have got to so far.

What questions do you need answered?

Establishing what you need to know

In the activities above, we have explored in some detail how programme monitoring data can be used to help to find answers to specific research questions, as well as how they can lead an enquiring researcher to explore new research questions. What these examples show very clearly is that programme monitoring systems data can be used to answer a diverse array of research and evaluation questions. As importantly, they can create an almost bewildering range of research and evaluation possibilities when you analyse them carefully enough.

This clearly suggests that possibly the most important challenge you will face as a researcher is to make sure that you don't seek to answer every research and evaluation question that can possibly be answered. When using programme monitoring data, it is essential to stay focused and make sure that you find specific data to help you answer well-defined questions. The brief of

this handbook is not to help you define your research questions, but it has hopefully illustrated just why it is so important to be clear what you want to know and why. If you don't have this clarity, you will quickly get swamped by the data you find in a well-functioning programme monitoring system.

If you feel you need more help on defining research questions, you might like to consult Core modules A1 and A2 of this series.

Deciding when programme monitoring systems can help to find answers to research questions

In the examples above, we defined some further research and evaluation questions that emerged from considering samples of data taken from a programme monitoring system. Let's use a few of these to explore further how we might decide whether we think a programme monitoring system will hold useful information for us in our research.

Activity 3 40 mins



For each of the questions below (taken from our second example above), try to decide whether or not you would return to the programme monitoring system to find further answers to our research questions. Then, describe what further information from these systems might be useful. (To help you with this, you might like to consult the extract from *Administration and Management of Programmes Using Distance Education Methods* in your *Resources File*.) If you don't think any further programme monitoring data will be helpful, then explain why you don't believe you will find further answers from the programme monitoring system.

- 1 How does the average assignment completion rate per learner compare with what is expected of learners? If it is significantly different, why and is this a problem?

Possible answers from programme monitoring system:

Yes No

Description/explanation

- 2 How long is it taking for students to receive marked assignments? How many students are not receiving marked assignments back?

Possible answers from programme monitoring system:

Yes No

Description/explanation

- 3 Why are average completion rates so much lower for the IGCSE than for the JSC? Should anything be done to bring them into alignment or is this discrepancy expected in terms of the way in which each is designed?

Possible answers from programme monitoring system:

Yes No

Description/explanation

- 4 Why are the development studies and natural economy subjects not available via distance education at JSC level? Is there a market for these subjects?

Possible answers from programme monitoring system:

Yes No

Description/explanation

Feedback: see note in the next paragraph

Note on feedback

I hope this activity reinforced the point that there is potentially a bewildering array of research possibilities that can be tapped by interrogating programme monitoring data. It is important to remember that, in many instances, programme monitoring data will not always provide the full answer to your research and evaluation questions, but it might provide important pieces of the puzzle. Let's look at each question in turn to see how your answers compare with my thoughts. As always, remember that I will simply be adding my own ideas to what you have already done. You may even disagree with some of my conclusions. There are many different options and possibilities when it comes to using programme monitoring data, and there may well be options I have not considered.

How does the average assignment completion rate per learner compare with what is expected of learners? If it is significantly different, why and is this a problem?

For the first part of this question, I would not really look to a programme monitoring system to help me to find answers. In this instance, I would instead turn to introductory information provided to learners at the beginning of the programme (probably as part of their course materials), as I would expect this to outline and explain to learners what will be expected from them. I would hope that this would tell me how many assignments learners are expected to complete. If I did not find an answer there, then I would probably follow up with a programme or course coordinator to find out what is expected. (I would probably also point out to such a person that they might consider including this information in the course or programme guide.)

The second part of the question only becomes important if we do discover that there are major differences between expected and actual assignment completion rates. If there are, we will need to 'talk' to learners, either through a research questionnaire or interviews, to find out why learners are not completing as many assignments as expected. However, programme monitoring systems data might well come in useful in some ways (depending, of course, on what is being gathered). The following are two examples of how programme monitoring systems might help me to answer this question.

- ▶ By providing collated feedback from standardised learner questionnaires that may have been circulated to establish reasons why assignments have not been completed. Although one might argue that such questionnaires form part of an evaluation process, a well designed programme monitoring system might well incorporate systems to gather information from standardised questionnaires on different learner cohorts.
- ▶ By providing information on the prior learning records of learners. If I discover that completion rates are significantly lower than expected, then it will be useful to look at whether or not enrolled learners have the requisite learning experience to cope with these courses. The programme monitoring system should hopefully have information on learners' prior

learning records which I can compare with entry requirements. I might find discrepancies here, which would suggest that enrolment procedures are not all they should be.

How long is it taking for students to receive marked assignments? How many students are **not** receiving marked assignments back?

In this example, a programme monitoring system really **ought** to be able to provide us the answer to this question. Assignments are an important element of learner support in distance education programmes, and often the only meaningful way in which learners are able to assess the progress they are making with their work. So, I would consider it a weakness in the design of the programme monitoring system if there was not some regular mechanism in place for finding out what the turnaround time on assignments is, i.e. the time between when a learner sends an assignment to the institution and when s/he receives it back after assessment. A good programme monitoring system should then be storing the results of this mechanism so that it is possible to detect any trends in these turnaround times. This data should also give us some insight into how many students do not receive marked assignments back from the institution, although it may require further research to establish **why** they were not received.

Of course, if the programme monitoring system cannot provide this data, then the best solution is probably to send questionnaires to learners to find out the answers to these questions.

Why are average completion rates so much lower for the IGCSE than for the JSC? Should anything be done to bring them into alignment or is this discrepancy expected in terms of the way in which each is designed?

This question is really an extension of the first question, and requires a similar line of enquiry. The only difference in this case is that we are now comparing the assignment completion rates of two programmes. Thus, I would imagine the uses for programme monitoring systems to be similar to those I outlined for the first question.

Why are the development studies and natural economy subjects not available via distance education at JSC level? Is there a market for these subjects?

On the face of it, one would assume that there is no role here for programme monitoring systems. Indeed, to answer this question meaningfully, it is critical to conduct some form of market research to assess the possible market for these subjects. Another line of enquiry would also be to establish from institutional personnel why the subjects are not currently offered by distance education? Was a decision taken that they were too complex to offer at a distance? Or were there problems with institutional capacity?

However, there is at least one way in which programme monitoring systems might provide some useful information, and that is by reviewing demographic data on students. If the programme monitoring system is capturing some data on the background of students enrolled in the JSC programme and their interests, then it might provide some initial clues as to whether there is a potential distance education market for the subjects.

Reflecting on the discussion

The examples provided above have hopefully illustrated the following critical points:

- ▶ If one has clear, well-defined research questions, it is much easier to establish whether or not programme monitoring systems can play a role in finding answers to those questions, and what those roles might be.
- ▶ Even where research questions do not seem, on the face of it, to warrant tapping into programme monitoring systems, there is – surprisingly often – a possibility that programme monitoring data can play some role (albeit sometimes a small one) in finding answers. As a researcher, it is thus critical that you always consider how programme monitoring systems can help you to find answers.
- ▶ Despite the analysis above, there are no guarantees that a programme monitoring system will be run well enough or designed in a comprehensive enough way for it to provide all of the answers that you think it ought to. When this happens, you will need to find alternative research approaches to answer your questions. (We will return to this issue in the following unit.)

Reading – Resources file



Baseline student statistics and regular monitoring studies

Now that you have gone through a few examples to explore how and where programme monitoring systems data can support research and evaluation, I'd like you to take some time out to read extracts from Calder (1994). These are in your *Resources File* as *Calder1* and *Calder2*.

These readings build on the work we have done above by exploring further possible applications for data you might find in a programme monitoring system. As you read through the chapter, think about the issues we have explored so far during this unit. In each example she provides, try to visualise the programme monitoring system from which you might draw the kinds of data she mentions.

Measuring change over time

The final issue we will explore briefly in this unit is that of measuring change over time. What do you think this means in practice?

Activity 4 30 mins



- ▶ Which of the examples that you explored in Activity 2 provided an opportunity for measuring change over time? What were the limitations of this example?

- ▶ Write down three more specific meaningful ways in which you think programme monitoring systems can be used to measure change over time. As you write your answers, make a note of why you are convinced that your example is meaningful enough to justify measuring.

Example 1

Example 2

Example 3

There is no feedback to this activity

Monitoring over time

Programme monitoring systems should allow us to compare what has happened in different years, assuming of course that the system is designed in such a way that the information is stored.

We have already explored at least one simple example of this when we compared dropout rates of students in two different years. This enabled us to note that dropout rates were higher in 2002 than in 2001, which might be cause for concern. There are limitations to this example in terms of the research conclusions we can draw though. We can conclusively state that dropout rates were higher in 2002 than in 2001, but using this data we cannot yet identify whether or not this constitutes a trend. In order to do this, we need more than two years of data. If the dropout rates in 2000 were

Longitudinal study

A longitudinal study is one that tracks changes over time.

lower than in 2001, then there is clearly a trend of growing dropout rates, and this would be cause for concern. However, if dropout rates were higher in 2000 than in 2001, then there it may be that 2001 students simply performed unusually well, and so there is no cause for concern in the patterns.

This simple example illustrates that programme monitoring data can be used to measure change over time. The more years for which we have data, the more conclusive our research conclusions are likely to be. Well-designed programme monitoring systems allow a range of people – including researchers and evaluators – to compare data from different years.

Activity 5 45 mins



Table 5, Table 6 and Table 7 show sample data taken from a *Report of the Athabasca University Historical Student and Registration Profile from 1997-98 to 2001-02*. These show how data can be used to measure change over time.

- How do these examples compare with the ideas you generated in activity 13? You may well have come up with different ideas, which is not at all surprising. In essence, if it is possible to extract data from a programme monitoring system to answer research questions, it should be possible to compare this data with data from previous years to measure change over time.

For each example, write a brief research summary of the key points that can be made about the data in the table.

Table 5 Undergraduate students by age range

Mode/ fiscal year	1997-98		1998-99		1999-00		2000-01		2001-02	
	n	%	n	%	n	%	n	%	n	%
Less than 25	10,754	41.7	12,624	43.0	14,663	42.2	16,271	43.5	17,681	45.3
25 to 34	9170	35.6	10,484	35.7	12,649	36.4	12,891	34.5	13,199	33.8
35 to 44	4525	17.6	4811	16.4	5664	16.3	6222	16.6	6159	15.8
45 to 54	1173	4.6	1330	4.5	1598	4.6	1800	4.8	1804	4.6
55 to 64	109	0.4	106	0.4	154	0.4	181	0.5	138	0.4
65 plus	39	0.2	32	0.1	32	0.1	37	0.1	23	0.1
Total number	25,770		29,387		34,760		37,402		39,004	

Research summary for Table 5

Table 6 Undergraduate registrations by programme

Programme/ fiscal year	1997-98		1998-99		1999-00		2000-01		2001-02	
	n	%	n	%	n	%	n	%	n	%
Degree programmes										
BA 4-year	1170	4.5	1008	3.4	995	2.9	1043	2.8	1084	2.8
BA 3- year	268	1.0	356	1.2	430	1.2	593	1.6	740	1.9
BAAD	95	0.4	99	0.3	114	0.3	123	0.3	70	0.2
BAdmn	1279	5.0	1412	4.8	1339	3.9	1357	3.6	1182	3.0
BAdmn PD	115	0.4	468	1.6	526	1.5	763	2.0	890	2.3
BComm	915	3.6	876	3.0	776	2.2	735	2.0	829	2.1
BGS	784	3.0	759	2.6	799	2.3	666	1.8	532	1.4
BGSAD	20	0.1	21	0.1	12	0.0	18	0.0	11	0.0
BNursing	720	2.8	701	2.4	656	1.9	613	1.6	681	1.7
BProfArts	178	0.7	376	1.3	371	1.1	423	1.1	570	1.5
BSc	114	0.4	157	0.5	212	0.6	246	0.7	217	0.6
BScCIS	291	1.1	390	1.3	566	1.6	626	1.7	523	1.3
Total U/G degree	5949	23.1	6623	22.5	6796	19.6	7206	19.3	7329	18.8

Research summary for Table 6

Table 7 Graduate students by gender

Gender/ fiscal year	Students 1997-98		Students 1998-99		Students 1999-00		Students 2000-01		Students 2001-02	
	n	%	n	%	n	%	n	%	n	%
Female	319	36.7	445	38.8	710	44.0	915	48.6	1099	51.9
Male	550	63.3	702	61.2	904	56.0	966	51.4	1018	48.1
Total	869		1147		1614		1881		2117	

Research summary for Table 7

The feedback to this activity is at the end of the unit ►

At the end of this unit, you will find summary statements drawn from the report of this data. You might like to take a moment to compare those summaries with yours!

This activity brings us to the end of the unit, and on to the most exciting part of the handbook – your opportunity to take all of the ideas with which you have engaged and implement them in practice. Our project research task for this unit focuses on using programme monitoring data to answer specific research questions.

In this activity, you had a good opportunity to look at some simple data taken from programme monitoring systems, which can easily be used to measure changes over time. How did you do with writing research summaries of each of the tables? It is often difficult to write simple, concise summaries of data like this, but it is an important skill to learn, as just presenting the data itself is often no use from a research or evaluation perspective. It needs to be summarised and made simple to understand for readers of research and evaluation reports.

Summary

This has been quite a wide-ranging unit, which has attempted to show you some examples of the kinds of data you might expect to extract from programme monitoring systems, and ways in which that data can be used to answer research questions. It is difficult to summarise this, but I hope that the following points have emerged clearly:

- ▶ Programme monitoring systems data can be used to answer – in full or in part – a very wide range of research and evaluation questions. As such, you should always consider the possible use of such data in research and evaluation plans. This applies particularly to quantitative research data.
- ▶ To get the most out of programme monitoring systems, you need to be clear and precise about what questions you wish to answer before you look at programme monitoring data. If your questions are not clear, you might well become overwhelmed by vast quantities of unhelpful information.
- ▶ Programme monitoring data does not always come in a pre-prepared format that can be inserted, as it is, into your research or evaluation reports. Usually, you will need to spend some time summarizing and synthesizing this data. In many instances, this will require basic mathematical and/or statistical skills.

Programme monitoring data comes alive when it is used to measure change over time, as this is when it becomes possible to analyse trends in programme performance. The longer the period over which changes are measured, the more reliable the results are likely to be.

Project task Part 3



Defining and answering research questions

In Part 1 of your project, you identified a programme and attempted to describe its programme monitoring system. In Part 2, you returned to the example you found to evaluate it in more detail. With this knowledge in mind, I would now like you to find answers to specific research questions, some of which I have already defined for you and some of which you will define for yourself.

Step 1: Defining the research questions

I have generated the first two questions using ideas from our case studies, one from *Kabir's* and one from *Abida's*:

- 1 What are the completion rates on the programme you are reviewing? (i.e. of students who enrol for a specific programme, how many successfully completed the programme – not just passed individual courses – within a specified time frame?)
- 2 What patterns are there regarding submission of assignments by enrolled students?

In addition, you need to define two further research questions of your own. For each question, you will need to ensure that the questions you have posed are significant enough both in their depth and in the answers they will yield to justify research. If you need further guidance in this exercise, you can refer to the core modules of this series.

Step 2: Answering the research questions

Once you are clear about your research questions, complete the following tasks:

- 1 Write a brief summary of the kinds of programme monitoring data you will need in order to construct a meaningful, substantiated answer to your research question.
- 2 Prepare a request to your contact to ask for the data you have identified that you need.
- 3 Once you have received the data, write a one to two page response to each question. If you cannot find the data you need to write the response, write a description of the problems you experienced and explain how you think these problems could be solved.

References

Calder, J. 1994 *Programme evaluation and quality*, London: Kogan Page (Calder 1 extract pp 45-45; Calder 2 extract 134-137)

NAMCOL. 2003 *The Statistical Digest of the Namibian College for Open Learning (NAMCOL) for 2002*, Windhoek: NAMCOL

Feedback to selected activities



Feedback to Activity 1

Hopefully, two clear points emerged from this brief exercise:

- ▶ programme monitoring data is of critical importance in finding meaningful, quantifiable answers to certain research and evaluation questions in distance education
- ▶ more often than not, review of programme monitoring data – when done carefully – raises research questions that justify further consideration.

Below, I have provided my responses to the above questions. See how they compare with what you thought. Remember that, as with everything, the ideas below are only for comparison. You may well have considered issues that I missed.

Enrolments by gender and level of study, 2002

The data in Table 1 could be used to answer the following possible research and evaluation questions:

- ▶ How many students are enrolled in the different programmes offered?
- ▶ What is the gender breakdown in programme enrolments?

In addition, this data made me wonder about the following issues that might justify further research:

- ▶ How do programme enrolments compare with national requirements? (Note: to answer this question, one would need to work out a mechanism for quantifying national requirements.)
- ▶ Why are there more women than men enrolled in all of the programmes? Is this a problem? Is there anything that can be done from a marketing perspective to increase male enrolments?
- ▶ Why are programme enrolments so low in the Certificate for Education for Development? Is this programme financially viable? What can be done to increase enrolments in this programme?

Assignments submitted by DE learners for marking by subject and level, 2002

Here, the data gets more complex, as we start reviewing patterns with submission of assignments in distance education courses.

The data in Table 2 could be used to answer the following possible research and evaluation questions:

- ▶ How many students are enrolled in each subject offered in the respective programmes of JSC and IGCSE?

- ▶ How many assignments have been marked during delivery of each programme?
- ▶ What is the average assignment completion rate per learner in each subject?
- ▶ What are comparative enrolments of subjects between the JSC and IGCSE?
- ▶ What is the comparative completion rate of assignments between the JSC and IGCSE?

Answering a few of these questions might require you to do some work on the data, so you cannot simply assume that the data you have received is ready for use as it is. For example, when comparing subject enrolments, it will probably be inadequate from a research perspective simply to list the enrolment figures, as this does not help us to compare the data in a meaningful way. Here, some calculations will be required. We shall pursue that in our next activity.

Feedback to Activity 2

To present this data in a more meaningful form, I think it is important to present a number that illustrates the comparative enrolments rates. To do this, it is important that I undertake the same calculation on each piece of data in order to return a result that will be comparable across all items. This is very important to ensure that anyone reading the table is comparing the same thing across the table. There are different ways of doing this. For example, we can express the data as a ratio or as a percentage. Here, I decided to express the relationship as a percentage, by indicating the percentage in IGCSE enrolments compared to the JSC enrolments. How would this work?

Well, a simple way to do this would be to express the enrolments in IGCSE as a percentage of JSC enrolments. To do this, I simply need to divide IGCSE enrolments by JSC enrolments, and then multiply the result by 100. For example, accounting I would divide 622 by 165 and then multiply the result by 100 to know that IGCSE enrolments in Accounting are 376.97% of JSC enrolments.

If I repeat this calculation down the entire table, then I will be able to compare at a glance the differences in enrolments across the two programmes, as per the table below.

Table 7 Representation of the data with percentages

Subject	JSC enrolments	IGCSE enrolments	IGCSE enrolments as % of JSC enrolments
Accounting	165	622	377
Biology/life science	2,402	2,862	119
Business mgm't/studies	2,033	1,411	69
English, 2nd language	1,215	4,825	397
Geography	1,130	984	87
History	1,279	934	73
Mathematics	431	1,147	266
Physical science	836	963	115

Reflecting the results as a percentage as I have done above affords us the opportunity to see at a glance how much bigger (or smaller) enrolments in Grade 12 are for specific subjects than Grade 10. This then raises questions about why there are such discrepancies. Note that I could just as easily have expressed JSC enrolments as a percentage of IGSCSE enrolments by reversing my division calculation. You might like to try it, to see if it adds anything useful to presentation of the data.

Feedback to Activity 3

I hope this activity reinforced the point that there is potentially a bewildering array of research possibilities that can be tapped by interrogating programme monitoring data. It is important to remember that, in many instances, programme monitoring data will not always provide the full answer to your research and evaluation questions, but it might provide important pieces of the puzzle. Let's look at each question in turn to see how your answers compare with my thoughts. As always, remember that I will simply be adding my own ideas to what you have already done. You may even disagree with some of my conclusions. There are many different options and possibilities when it comes to using programme monitoring data, and there may well be options I have not considered.

How does the average assignment completion rate per learner compare with what is expected of learners? If it is significantly different, why and is this a problem?

For the first part of this question, I would not really look to a programme monitoring system to help me to find answers. In this instance, I would instead turn to introductory information provided to learners at the beginning of the programme (probably as part of their course materials), as I would expect this to outline and explain to learners what will be expected from them. I would hope that this would tell me how many assignments learners are expected to complete. If I did not find an answer there, then I would probably follow up with a programme or course coordinator to find out what is expected.

(I would probably also point out to such a person that they might consider including this information in the course or programme guide.)

The second part of the question only becomes important if we do discover that there are major differences between expected and actual assignment completion rates. If there are, we will need to 'talk' to learners, either through a research questionnaire or interviews, to find out why learners are not completing as many assignments as expected. However, programme monitoring systems data might well come in useful in some ways (depending, of course, on what is being gathered). The following are two examples of how programme monitoring systems might help me to answer this question.

- 1 By providing collated feedback from standardised learner questionnaires that may have been circulated to establish reasons why assignments have not been completed. Although one might argue that such questionnaires form part of an evaluation process, a well designed programme monitoring system might well incorporate systems to gather information from standardised questionnaires on different learner cohorts.
- 2 By providing information on the prior learning records of learners. If I discover that completion rates are significantly lower than expected, then it will be useful to look at whether or not enrolled learners have the requisite learning experience to cope with these courses. The programme monitoring system should hopefully have information on learners' prior learning records which I can compare with entry requirements. I might find discrepancies here, which would suggest that enrolment procedures are not all they should be.

How long is it taking for students to receive marked assignments? How many students are **not** receiving marked assignments back?

In this example, a programme monitoring system really **ought** to be able to provide us the answer to this question. Assignments are an important element of learner support in distance education programmes, and often the only meaningful way in which learners are able to assess the progress they are making with their work. So, I would consider it a weakness in the design of the programme monitoring system if there was not some regular mechanism in place for finding out what the turnaround time on assignments is, i.e. the time between when a learner sends an assignment to the institution and when s/he receives it back after assessment. A good programme monitoring system should then be storing the results of this mechanism so that it is possible to detect any trends in these turnaround times. This data should also give us some insight into how many students do not receive marked assignments back from the institution, although it may require further research to establish **why** they were not received.

Of course, if the programme monitoring system cannot provide this data, then the best solution is probably to send questionnaires to learners to find out the answers to these questions.

Why are average completion rates so much lower for the IGCSE than for the JSC? Should anything be done to bring them into alignment or is this discrepancy expected in terms of the way in which each is designed?

This question is really an extension of the first question, and requires a similar line of enquiry. The only difference in this case is that we are now comparing the assignment completion rates of two programmes. Thus, I would imagine the uses for programme monitoring systems to be similar to those I outlined for the first question.

Why are the development studies and natural economy subjects not available via distance education at JSC level? Is there a market for these subjects?

On the face of it, one would assume that there is no role here for programme monitoring systems. Indeed, to answer this question meaningfully, it is critical to conduct some form of market research to assess the possible market for these subjects. Another line of enquiry would also be to establish from institutional personnel why the subjects are not currently offered by distance education? Was a decision taken that they were too complex to offer at a distance? Or were there problems with institutional capacity?

However, there is at least one way in which programme monitoring systems might provide some useful information, and that is by reviewing demographic data on students. If the programme monitoring system is capturing some data on the background of students enrolled in the JSC programme and their interests, then it might provide some initial clues as to whether there is a potential distance education market for the subjects.

Feedback to Activity 5

Note: These summaries are taken directly from the *Report of the Athabasca University Historical Student and Registration Profile from 1997-98 to 2001-02*. You may have found more items than those noted by Athabasca in its report.

Undergraduate students by age range

The proportion of students under age 25 has increased by 3 percent in the past five years, from 42 percent in 1997-98 to 45 percent in 2001-02.

Seventy-six percent of undergraduate students were under 34 years old in 2001-02.

Undergraduate registrations by programme

Registrations in five degree programs – Bachelor of Administration (Post Diploma), Bachelor of Professional Arts, Three Year Bachelor of Arts, Bachelor of Science, and Bachelor of Science CIS increased, while those in all other seven programs decreased, though registrations in some programs fluctuated over the past five years. After declining for three years, the registrations in the

Bachelor of Nursing program increased by 11 percent in the past year. Although the Bachelor of Administration program registrations have declined by 13 percent last year, the growth in the Post Diploma and Bachelor of Commerce have resulted in a slight increase for undergraduate business degree registrations.

Graduate students by gender

This is the first year that there have been more women than men registered in the graduate programs. The proportion of women graduate students grew steadily in the past five years from 37 percent in 1997-98 to 52 percent in 2001-02.

The politics and logistics of using programme monitoring systems in research and evaluation



Unit overview

By now, I hope you have a clearer sense of what it is that programme monitoring systems do, and of how you can use the data they contain to support a wide range of research and evaluation functions. As I have noted, it is really not possible to cover all of the possible research uses of such data – there are simply too many, and it would make for very tedious reading going through all of them!

In this unit, we will turn our attention to the logistics of using programme monitoring systems in research and evaluation. In the previous units, we have worked on the assumption that the programme monitoring systems we are using are well maintained and contain the information we need. We have also assumed that people running the programme are willing to work with researchers. However, life is usually more complicated than this, and so, at times, we encounter impediments to our research. This unit considers some of the problems you might face, and encourages you to think about how you might resolve them.

Again, because this is a vast topic, the purpose here is not to provide you with a comprehensive troubleshooting manual, but rather to encourage you and to forewarn you of such problems.

For those of you completing the project tasks, you will use the working relationship you have created with a distance education programme to identify such logistical problems and implement a strategy to solve them in order to achieve your research objectives.

This unit should take you about 7 hours to complete, made up of about 3 hours reading, 2 hours of activity and associated readings, and 2 hours for the project.

Much of what we will cover in this unit relates to planning and implementing research of any kind. We are only able to touch on a few of the key issues facing you as a researcher in this unit. On most topics you will find more detail in the core modules.

Food for thought

What unique problems do you think you might experience as a distance education researcher that researchers in face-to-face education might not encounter?

The politics of sourcing monitoring information for research and evaluation purposes

Case study



Let's start by re-considering the research predicament in which *Kabir* finds himself. As we noted, he is keen to establish whether or not the distance education systems in his institution are inefficient. As we noted in the previous unit, a key research question he needs answered, therefore, is:

What are the completion rates on selected distance education programmes at his institution? (i.e. of students who enrol for a specific programme, how many have successfully completed the programme – and not just passed individual courses – within a specified time frame?)

I have mentioned that at the OUU – where *Kabir* works – access to institutional data is limited, if not impossible. For the most part, lecturers have limited interaction with students at the OUU and there is little work on course development (given the lack of financing for such activities). Often staff members at OUU fail to turn up for work.

Let's start thinking about *Kabir's* research predicament by considering a few critical questions. As you answer these questions for *Kabir*, think how they might also apply to other contexts, such as *Abida's* or *Fancy's* research context.

Activity 1 15 mins



Who do you think might be able to help *Kabir* find answers to his research questions? Provide two agents who could help with providing this information. For each person or agency or department, indicate what concerns you think they might have in providing information to *Kabir* for his research.

Person/agency/department 1

Possible concerns about research

Person/agency/department 2

Possible concerns about research

Feedback: see note in the next paragraph

Note on feedback

What did the above exercise reveal for you? I hope it gave you an opportunity – once you are clear what research questions you want to answer and how you think programme monitoring data might help you – to explore how critical it is to try to work out who has control over that information. Without their support, you are unlikely to get very far in your research or evaluation work.

Also, I wanted you to think about why these people might be worried about the research questions you are asking. It is important to remember that not everybody sees things from your perspective and they have concerns about what you are doing. If you have not considered these possibilities before you ask for information, they may well become uncooperative and then you will not get what you need.

Concerns of central administrators

Kabir's situation is quite an extreme one from this perspective, but not necessarily uncommon. He could start by approaching the central administration to get information on programme enrolments and completion rates. In a well-functioning institution, this would be the logical starting point for his quest, as central administrative systems should typically be gathering and archiving information of this kind. So, what concerns might these people have if *Kabir* approached them? I would suspect the following might apply:

The data is not available

The central administration might simply be unable to answer *Kabir's* question because they have not been running the system properly. Given the situation in which *Kabir* is operating, this would appear to be a plausible scenario. So, if *Kabir* is too persistent in his questioning, it might reveal to others that the central administration have not been doing its job properly. In such scenarios, people tend to be uncooperative in order to hide their omissions and mistakes.

Work needs to be done on the data

The central administration might have the data, but might still need to do some work in order to compile it into a useful format. For example, they might have programme enrolment and completion rates per year, but might not have been keeping track of when students from specific years completed

the programmes. In many ODL institutions, students can complete programmes over anything from one to ten years (or more). The central administration might need to correlate student completions with specific cohorts of students. Thus, they might be concerned about the time needed for this work. This concern could be because the staff are too lazy to do the work (possible) or just too busy with other tasks.

Concern about bad publicity

The data might reveal what *Kabir* has been suspecting – namely, that throughput rates are so low that, measured by the cost of successful students, the institution is less efficient than a traditional face-to-face one at producing graduates. The central administration might be concerned that, if *Kabir* publishes his research, then the heads of the institution will censure them for having provided information that reflects poorly on the institution. Depending on the situation, it may actually be the case that central administration would be happy to work with *Kabir*, but have already been given explicit instructions not to release 'sensitive' data of this kind.

That all sounds pretty serious. But that it is the kind of reality you might face. Better to be prepared by thinking ahead than to get stuck because you did not predict how someone might respond to your request.

Concerns of programme coordinators

A second option open to *Kabir* would be to approach programme coordinators to find out if they are running their own programme monitoring systems in addition to the central administrative systems. Of course, in a well-functioning institution, the responsibility for gathering and storing data of different kinds would be planned to avoid duplication. However, in many of the institutions I have worked with, central administrative systems are so unreliable that people working at programme level tend to duplicate the data that ought to be available centrally. The case studies you explored in Unit 2 were good examples of this. So what concerns might programme coordinators have if *Kabir* approaches them? Well, the list is quite similar to that above, although people at this level might have some additional concerns:

- ▶ they might be concerned that, if they cannot provide the data that *Kabir* wants, it will reflect poorly on them and the extent to which they are doing their jobs
- ▶ they might be worried that *Kabir's* request will add to their workloads, again either because they might simply not want to do extra work or because they are under-resourced
- ▶ they might be concerned about complaints from senior managers if data is released that reflects poorly on the institution

- in the case of programme coordinators, *Kabir's* research – if it proves his hypothesis – may well lead to internal enquires about why certain programmes are under-performing. In *Kabir's* research scenario, this might well prove to be his biggest problem. The repercussions of compiling programme monitoring data that reflect very low throughputs rates for specific programmes could be enormously damaging in the long term to the programmes and to the individuals responsible for running them.

What does this all suggest? In the activity below, I offer three general statements about the discussion above.

Activity 2 20 mins



As you read the statements below, please add your own thoughts on what implications each point has for you as a researcher.

Statement 1

It is critical to establish who controls access to the information that you need. Without their support, it will be very difficult to proceed with meaningful research work. It is important to remember that the person or people who **control** access to information might not always be the same as the people who manage it.

Implications for me as a researcher

Statement 2

In the area of programme monitoring, there may well be many possible causes for concern that others will have about granting you (as a researcher) access to information. Programme monitoring systems often contain sensitive data they may not wish to see released because it might reflect poorly on them or their institution. Also, because of the wide range of data that programme monitoring systems might contain, research requests for data can often increase the work load of the person from whom you are requesting the data.

Implications for me as a researcher

Statement 3

Even with the best designed research questions and with clarity about what data you want from a programme monitoring system, there remains a strong possibility that it will not be possible to get this data. The reasons include: the system's design did not take into account

the need to gather the data you are looking for; the system is being too poorly maintained to yield the data you need; or the politics surrounding the data contained in the system make it impossible for you to access the data.

Implications for me as a researcher

There is no feedback to this activity

Dealing with concerns about how data will be used

The case of *Kabir* illustrates clearly that research and evaluation planning needs to consider carefully who controls access to data and why they might **not** want you to have access to it. If you complete this analysis as part of your research planning, you will be less likely to run into difficulties. But – as I asked you to consider above – what implications will this have for you as a researcher? Let's return to *Kabir's* quandaries to consider the answers to this question in a bit more depth.

Activity 3 20 mins



Describe three possible strategies you think *Kabir* might implement to maximise the likelihood of accessing the data he needs to complete his work.

Strategy 1

Strategy 2

Strategy 3

Feedback: see note in the next paragraph

Note on feedback

In *Kabir's* case, I would suggest the following possible options:

Holding informal discussions with relevant parties to explore any concerns during the planning of a research or evaluation project. Very often, people's suspicions about what researchers are doing is a consequence of poor communication. Equally often, the subjects of research feel disempowered by research or evaluation because they are not part of designing or planning research. This problem can often be solved by involving these people in the design of the research or evaluation project. In most cases, this can also contribute to improving the quality of the final design.

Writing to those in control of the data (or possibly their superiors) to request formal permission to access certain kinds of data. As most distance education institutions are large bureaucracies, securing formal permission to get information can often be a good way of ensuring cooperation from those who might be required to do the work you need done. The hierarchical structure of most institutions can be used to advantage by researchers if they get written permission for what they are doing. To do this with success, *Kabir* will need to be careful to put his request in a form that is most likely to secure the permission he requires. We will return to this in the next activity.

Raising funds to cover the costs of any work that has to be done on to abstract the data. As we noted earlier, there may often be additional work to be done before meaningful data can be extracted. If the systems are on paper, this might involve collating data from different sources. If they are driven by electronic databases, some programming work might be required to run particular kinds of queries. If *Kabir* has funds to support this work, these can be used to increase the capacity of those helping you.

Offering to do any collation work needed to get data into the format needed. Often the work that needs to be done to get information from programme monitoring systems need not require specialist skills for which funding must be raised. *Kabir* could, therefore, also offer his personal time in assisting to compile and clear data from systems.

Considering alternative strategies to find the information needed. There comes a point when it becomes clear that there is no possibility that you will receive the programme monitoring systems data you need. In these instances, you will need to devise an alternative strategy. For example, *Kabir* might look for alternative data sources. Already, we have explored two possible sources of the data *Kabir* is looking for. A third option might be to go outside of the institution, for example by trying to get information from government sources. If this doesn't work and given the specific nature of the data that *Kabir* needs, the only remaining option open to him if this fails will be to set up a longitudinal study in which he creates his own data-gathering system to track the data he needs.

Depending on circumstances, of course, some of these strategies may not be implementable. *Kabir* might not be able to find funding, for example, or may not have access to national Education Management Information Systems.

However, by predicting problems and carefully formulating possible strategies to solve these problems will minimise the likelihood of failure.

Strategies to reduce concerns

It is worth noting here that identifying strategies to deal with the concerns that people might have about using programme monitoring data offers no guarantees that you will succeed in your quest for data, but it does significantly minimise the likelihood in failure.

Of course, identifying possible strategies is only the start though, as they still must be carefully and thoughtfully executed. My experience of doing research of this kind is that, in particular, the **way** in which researchers request permission from programme coordinators or central administrators to access monitoring data is critical to success. So let's explore this more closely.

Case study



For the purposes of the next activity, let's assume that *Kabir* has given up on trying to access information from the central administration and decided instead to focus on working with programme coordinators. He suspects that programme coordinators have set up their own programme monitoring systems because of the problems in accessing data from the centre. He realises the importance of securing their permission before continuing with his research, and decides that a letter requesting permission to access programme monitoring data is the most important first step...

Activity 4 1hr



With the knowledge that you now have about what *Kabir* is trying to do and the problems he may face, write a letter for him to be addressed to five programme coordinators at his institution. In this letter, you should formally request permission to have access to the programme monitoring data he needs. As you do this, think carefully about how you will address each of the concerns that we have identified and that they might have about what he is doing.

Do this on a separate sheet of paper.

Feedback: see note in the next paragraph

Note on feedback

What issues did you introduce in your covering letter? Do you feel confident that programme coordinators would respond positively to your letter? Below, I have listed some of the issues that I think need to be addressed and

approaches that need to be adopted to writing the letter. Use this list to assess whether or not your letter is covering everything it should:

- ▶ A letter requesting research support will need to be written in polite, formal tone to ensure that it demonstrates sufficient respect for the addressee. Such a letter should be carefully reviewed to ensure that it does not come across as presumptuous or arrogant.
- ▶ The letter should state what the purpose of the research is and on what principles it will operate, to ensure that the context of the request is clearly understood.
- ▶ It should contain indicative information on the details of what is required, while making it clear that this remains a matter for negotiation. You might like to return to the list of questions we outlined in Unit 3 to see whether or not you covered this in enough detail.
- ▶ Given the possible sensitivity of this research, I would include an undertaking to make sure that the research findings will be presented as anonymous. In other words, the specific names of programmes (and the institution itself) will be removed from any final reports or articles. Here, it might be important to stress that the research is aiming to identify broad patterns and trends in throughput rates rather than to allocate blame.
- ▶ It will probably also be important in this instance to commit to sharing the final research product with the programme coordinator before anything is released publicly or circulated to others.
- ▶ The letter may need to stress an intent to minimise the time implications that the research will have for the programme coordinator and her or his employees. Wherever possible, it should be assuring the programme coordinator that the researcher is willing to do whatever leg work may be necessary to pull information together.

How did your letter compare to this list?

The following is my sample letter, which I hope conforms to the requirements of the list above.

Reading



Dear programme coordinators,

You may know me as a lecturer in the Department of Education here at the Open University of Udaipur. I am proud to say that I have been working as a lecturer here since graduating from our very own Bachelor of Education degree programme 12 years ago.

As part of my ongoing professional development and to enhance the research output of our Department, I have embarked on an ambitious research project, and write to you to request your assistance in completing this research. The task I have set for myself is to analyse the relative efficiency of distance education provision at our institution compared to traditional face-to-face universities in the country. I believe that this research is important in

entrenching the status of distance education in our country and establishing the conditions necessary to make distance education work effectively. I am hopeful that a final copy of the research will be published as an article in a reputable international distance education journal.

To do this, I need to collect historical information about programme completion rates at the institution. In other words, I need to know, of students who enrol for a specific programme, how many have successfully completed the programme – and not just passed individual courses – within a specified time frame.

Given the difficulties that we all experience in sourcing data from central administration, I am approaching programme coordinators to see if I might have access to their own programme monitoring systems to establish answers to this question. Of course, I will be more than willing to do whatever data collation work is required in this task, should any such work be required. I then hope to work with members of your department to establish how much it is costing to offer the programme. To this end, I have prepared a series of costing tools to ensure that the time it takes to do this is kept to a minimum.

I am, of course, aware that data of this kind might be quite sensitive, and so undertake to ensure that the final results presented will remain anonymous – i.e. that it will not be possible to link data back to individuals programmes at OUU. I will also be sure to present you a draft copy of my research before publication to give you an opportunity to correct any errors I make in the research.

I hope you will share my enthusiasm for this ambitious piece of research. I would be grateful if you could respond at your convenience to let me know whether you will be willing to participate in this research work.

Yours sincerely,

Kabir Shastry

The split between research and data management in distance education institutions

In addition to all of the problems we have outlined through the case study of *Kabir Shastry*, there is another important phenomenon worth noting that creates problems when trying to access programme monitoring data for research purposes, and this relates to the historical split between data management and research functions within institutions. This problem is well described in a summary paper by Raza.

Reading – Resources file



The roles of evaluation units and data management

Use the reading *Raza* from your *Resources File*.

This paper discusses the roles of evaluation units and data management within large Asian open universities. It draws on work within these universities funded by DfID's Skills for Development programme. The issues it raises are important because they relate to the quality of ODL systems and to the robustness of the data on which conclusions about their

effectiveness may be drawn. To bring together some of the work that we have done in this unit, I'd like you to take time out to read this paper now.

As you read it, try to reflect on what implications the issues it describes raise for you as a researcher seeking to use programme monitoring data for research or evaluation purposes.

Modifying systems to meet research and evaluation needs

The reading you have just completed raises an obvious question: what are the possibilities of modifying the design of programme monitoring systems to accommodate research and evaluation needs? Clearly, as the previous reading has illustrated, if those responsible for managing programme monitoring systems and those responsible for research and evaluation within ODL institutions work together, programme monitoring systems will better support research and evaluation.

Unfortunately, it is beyond the scope of this handbook to explore how programme monitoring systems might be re-designed to better support research and evaluation. However, as a researcher, you should bear in mind that it might be possible to modify the data systems. If you are a researcher within an ODL setting, I would encourage you to begin a dialogue as soon as possible with the managers of programme monitoring systems in order to begin thinking about possible modifications. Hopefully, the knowledge you have gained in this handbook will help you in structuring this discussion, and give you some guidance about what design changes might be useful.

In a sense, the project work we have done to date – by exploring a practical example of a programme monitoring system and how it can be used to answer research and evaluation questions – has already prepared you for such work. Thus, we turn now to the final project task for this handbook.

Summary

In this final unit, we have explored a few of the logistical and political issues that you might face as a researcher seeking to draw on programme monitoring systems to support your research and evaluation. Below, as a way of summarizing the learning journey we have undertaken during the course of this handbook, I'd like to provide a checklist of steps you could possibly follow when considering the use of programme monitoring systems.

- ▶ Begin by defining as precisely as you can the research and evaluation questions you are seeking to answer. The more precise and focused you are, the more likely you are to be able to answer your questions.
- ▶ Map out carefully where and how you believe that programme monitoring data might be able to contribute to answering the questions you have posed. As you do this, think carefully about what sensitivities there might be about accessing the data you need.

- ▶ Establish who controls access to the data contained in the programme monitoring systems. Think about what (if any) concerns they might have both about the research and evaluation you are conducting, and then use this to secure the permission you need to access programme monitoring data. Note: If you cannot secure permission, you will need to return to your research/evaluation design to assess whether there are alternative sources for the data you need or whether you will need to re-design your project.
- ▶ Assess how much alignment there is between the data currently being captured in the programme monitoring systems you are accessing. The following questions may be useful here:
 - Where are the gaps in data? In other words, what is not being captured by the programme monitoring system that you had hoped to find?
 - What work needs to be done on the data you have to get it to the point where it provides specific answers to the questions you are posing? Can you do this work yourself or do you require expert assistance?
 - Are you confident that the data you are using is reliable? If not, what implications will this have for its use?
- ▶ Based on your analysis of alignment, return to your research/evaluation design and make the necessary modifications. The options open to you are either to modify the questions you can answer based on the limitations you have discovered or to modify the additional research activities you intend to undertake in order to make up for deficiencies you have identified in the programme monitoring system.
- ▶ During or after implementation of research, you might then consider entering into discussion with the manager of the programme monitoring system to explore possible adaptation of the design of the system to support future research and evaluation projects.

Project task Part 4



Analysing the logistical challenges

In this final project task, you will reflect on the project work you have done so far to assess the logistical challenges you faced in working with a programme monitoring system and using it to answer specific research questions.

To do this, you will need to prepare a report that answers the following questions:

- ▶ In the programme with which you worked, who controlled access to the programme monitoring system?

- ▶ What major concerns did you discover that people had about you reviewing their programme monitoring systems? Explain how you tried to allay these concerns when you tried to answer the research questions posed in Part 3 of the project task.
 - ▶ Did the programme monitoring system provide all of the data you needed to do your research? If not, what data could you not get from the system?
 - ▶ Did you consider the data you accessed from the programme monitoring system to be reliable? Why or why not?
 - ▶ Did the data you received come in a format that you found appropriate for answering your research questions? What additional work did you have to do on the data to ensure that it was properly presentable from a research perspective?
 - ▶ What modifications would you have made to the programme monitoring system to make it more useful from a research and evaluation perspective?
-

Conclusion

Well, we have been on quite a learning journey. I hope you have found it interesting and engaging, and that now you have a clearer sense about what programme monitoring systems are and how they can be used to support research and evaluation. Of course, we have just scratched the surface of this potentially vast topic, and you will no doubt learn much more as you continue your career as a researcher in distance education.

Reflecting on the achievements

At the beginning of the handbook, I outlined a range of key learning outcomes that I hoped you would achieve as you worked through the units. To refresh your memory, these are presented again below. Underneath each one, I'd encourage you to note whether or not you achieved these outcomes, and what further learning you think you still want in each area. Maybe this can form the basis of your next professional development activity.

Activity 5 30 mins



Below are the proposed learning outcomes for the handbook. Under each, note whether or not you feel you achieved these outcomes. Then, specify what further learning you would still like to undertake – if any – to deepen your understanding in that area.

- 1 Differentiate between monitoring and evaluation.

one level, this seemed quite logical because there is often a close relationship between doing research and evaluation and improving the quality of distance education. In the end, though, I decided not to include this section because it really justifies a full module in its own right. I did not feel that we would be able to engage the topic in enough depth to justify its inclusion in this educational resource.

However, I would really encourage you to pursue this line of thinking as you move forward, as it will only add value to the work you do as a researcher. I imagine the key question to ask is how to use the outputs of basic programme monitoring to improve quality. This would require you to think about the following key questions:

- ▶ What is meant by quality assurance?
- ▶ What is the role of programme monitoring systems in assuring quality?
- ▶ How can research and evaluation support these processes?

Maybe, as a starting point to pursuing these ideas, you might look at other modules in this series to find out if any of them can help you with this.

Saying goodbye

That brings this handbook to an end. Again, I hope you have enjoyed the experience of working through it, and found it to be a useful introduction to the topic. I wish you all the best in your career as a distance education researcher, wherever you may be plying your trade.

Permissions

The publishers, editors and authors of this handbook are very grateful to the following copyright holders and authors for permission to include extracts from their work. We are particularly indebted to those publishers and individuals who supported the project by waiving copyright fees. We have made every effort to track down copyright holders. If you consider we have used material which is your copyright without acknowledgement, please accept our apologies and let COL know so the correction can be put into the next edition.

Unit 1

Oxford University Press for permission to quote from Onions, C. 1987 *Shorter Oxford English Dictionary*, New York: Oxford University Press

Merriam-Webster Incorporated for permission to reproduce various definitions from *Merriam-Webster's Online Dictionary*. 2003, Springfield, MA: Merriam-Webster Inc (www.merriam-webster.com), at <http://www.m-w.com/>

Cambridge University Press for permission to reproduce the link to *Cambridge Advanced Learner's Dictionary*. 2003, Cambridge: Cambridge University Press, at <http://dictionary.cambridge.org>

Open University of the United Kingdom for permission to use quotes from pp 29 and 66 in Dolley, J. 1994 *Planning, monitoring and evaluating learning programmes*, Buckingham: The Open University Press

Ministry for Foreign Affairs in Finland for permission to use a quote from p 45 in Ministry for Foreign Affairs. 1998 *Guidelines for programme design, monitoring and evaluation*, Helsinki: Department for International Development, at <http://global.finland.fi/julkaisut/yleis/pdme/index.html>

Kogan Page for permission to use a quote from p 125 in Birley, M. and Morel, N. 1998 *A practical guide to academic research*, London: Kogan Page

Pitman Publishing for permission to quote from Thorpe, M. 1993 *Evaluating open and distance learning* (2nd edition), Harlow: Longman, cited in D. Rowntree 1998 'Assessing the quality of materials-based teaching and learning', *Open Learning* 13, 2: 12-22. available at: <http://iet.open.ac.uk/pp/D.G.F.Rowntree/assessMBL.html>

Kogan Page for permission to use p 109-135 from Freeman, R. 1997 'Monitoring and evaluation' in *Managing Open Systems*. London: Kogan Page

HarperCollins for permission to quote from p 14 in Schumacher, S. and McMillan, J. 1993 *Research in education: a conceptual introduction*, New York: HarperCollins

Princeton University Press for permission to quote from Keohane, R., King, G. and Verba, S. 1994 *Designing social inquiry – scientific inference in qualitative research*, New Jersey: Princeton University Press

Unwin Hyman for permission to quote from Bryman, A. 1988 *Quality and quantity in social research*, Boston: Unwin Hyman

The African Sociological Review for permission to quote from Macun, I. and Posel, D. 1998 'Focus groups: a South African experience and a methodological reflection' in *African Sociological Review* 1, 2:
http://www.codesria.org/Links/Publications/contents_asr/asr_2_1.htm

Professor Bernadette Robinson for permission to quote from a personal communication sent to the author of the handbook on 27th November 2003

Unit 2

Michael Moore and the American Journal of Distance Education for permission to quote from Moore, M. 1999 ' Editorial: monitoring and evaluation' *American Journal of Distance Education* 13, 2:1

Jenny Glennie of the South African Institute for Distance Education and the Department of Education, South Africa for permission to quote from Department of Education, 1996, *A Distance Education Quality Standards Framework for South Africa*. Pretoria: Department of Education.

Aravali Books International for permission to quote from Powar, K., et al. 2000 *Performance indicators in distance higher education*, New Delhi: Aravali Books International

Doug Shale and the Canadian Association for Distance Education (CADE) for permission to use Shale, D. and Gomes, J. 1998 'Performance indicators and university distance education providers' *Journal of Distance Education* 13, 1:1-20

Jenny Glennie of the South African Institute for Distance Education(www.saide.org.za) for permission to use:

SAIDE. 2003a *Administration and management of programmes using distance education methods*, Johannesburg: SAIDE

SAIDE. 2003b *National Professional Diploma in Education (NPDE): University of South Africa*, Johannesburg: SAIDE

SAIDE. 2003c *Advanced Certificate in Education (ACE): University of the Witwatersrand*, Johannesburg: SAIDE

Kogan Page for permission to use a quote from pp 110 from Freeman, R. 1997 *Managing open systems*, London: Kogan Page

Unit 3

Frances Mensah of the Namibian College for Open Learning (www.namcol.com.na) for permission to use three tables from NAMCOL. 2003 *The Statistical Digest of the Namibian College for Open Learning (NAMCOL) for 2002*, Windhoek: NAMCOL

Kogan Page for permission to use pp 45-65 and 134-137 from Calder, J. 1994 *Programme evaluation and quality*, London: Kogan Page

Unit 4

Dr Reehana Raza for permission to use Raza, R. 2002 *Evaluation research and data management in the south Asian open universities: some initial observations*, Cambridge: International Research Foundation for Open Learning