Gathering and interpreting evidence

This chapter suggests which evidence gathering methods will tell you what you need to know, how to gather that evidence, and what that evidence is telling you. We then offer a warning about confusing evidence with advocacy.

Let us start with a precept: all evidence-gathering methods have inherent weaknesses, so it is important to employ a range of methods if you want to build up a good picture – this is known in the research jargon as triangulation.

Since it is probably better to adapt a research tool (such as a questionnaire, checklist or observation schedule) for your own purposes rather than start from scratch, we have prepared or selected a range of research tools for use in different types of libraries. These tools can be found at www.facetpublishing.co.uk/evaluatingimpact.

Even if you are adapting an existing research tool there are a number of things that you should bear in mind when using them to gather evidence. These are considered below.

9.1 Observation

At first sight, it is surprising that library and information research borrows heavily on two of the social science research approaches (asking questions and making inferences) but largely neglects systematic observation as a research method. It is easy to understand this under-use in large-scale research, since systematic observation is time-consuming and can generate huge amounts of data. However, even when people take on small-scale evaluation they usually gravitate towards the questionnaire and the focus group, almost regardless of whether these will provide the sorts of information required.

This is a pity, because in the immortal words of the American baseball player and coach Lawrence 'Yogi' Berra, 'You can observe a lot by watching.' We know from our own experience that observation is a great way to develop ideas about how people use information, how library systems and services can be improved or how people can improve their teaching, training or interaction with service users. It is also one of the best ways of finding out whether your services are really making an impact.
There are at least four types of observation that may prove useful in evaluating the impact of your services.

9.1.1 Small-scale systematic observation
If you are interested in specific aspects of service use, such as how users find things in your library, or what they actually use your computers or wireless links for, a time-series study may be the answer. This involves gathering small amounts of information at predetermined times, spread over different times of day, week, term or year (depending on how much variation you think is likely). The advantage of this approach is that it only involves a member of your staff remembering (and if necessary being prompted) to collect and record a small amount of information at any one time. This recording can be done by making notes of what is happening from any convenient viewing point, or doing a tour of the relevant part of the library to see, for example, what is showing on computer screens. These records will soon build up into a fairly detailed picture of use, which may differ interestingly from what you predict. There are of course ethical issues involved here, and your organization may have a code of ethics or a research ethics committee that will have to be taken into account. In any case, individuals should not be identified in your observation records without their permission.

A variation on this theme is to record interesting events as they happen. For example, if a particular group of potential users makes little use of your service, and becomes the target for service development, any instance of use by members of that group is relevant evidence.

Although large-scale observation will be too expensive to be feasible, focused and systematic observation of student activity in the library is certainly possible. You could consider watching students doing a library-based assignment; more general observation at prescribed intervals would be useful too. To get real evidence in this way you will need to use an observation schedule designed, for example, to assess the information skills of students. (See sections 9.9 and 9.10 for access to a range of tools to help.)

9.1.2 Informal observation
Front-line library staff and their managers spend a large part of their time in observing what is going on, but there is usually little incentive to note what is happening, even if there is time to do so. All this changes when you focus on particular areas of service impact. Suddenly all observations about that part of the service are 'grist to the mill'. All that is needed is to alert colleagues to the fact that these aspects of service are now being looked at and to invite them to record anything that they see that they feel may be of interest as evidence (ideally for an agreed and limited time period). For this to work, you need to share with them what you are interested in finding out more about and why, so that they are in the picture and can include you in the part of the picture that they see.
9.1.3 Peer observation

This approach is much favoured in educational settings as a way of giving immediately relevant feedback to teachers in the classroom. You can adopt a broadly similar approach in looking at interaction with library users, as a way of stimulating reflection and improving professional practice. At a minimum all that is needed is two willing participants and sufficient time to allow one to observe the other in action and give feedback afterwards. The participants will need to agree on what aspects of the interaction they will look at, will probably need to secure permission from service users immediately affected by the observation, and some should have some ground rules for feedback (such as ‘positive comments first’).

If you work in higher education and your institution has a formal teaching-staff appraisal programme, you may like to follow the example of one college that we have worked with and adapt it to include encounters between students and library staff at the enquiry desk. Peer observation is now accepted practice in higher education and most universities have criteria in place to support the process. Find out who is managing academic peer review in your institution and see what they can provide to help you.

9.1.4 Accompanied visits

This activity is regularly used by museums education staff who want to find out how people are really responding to their exhibitions. If you conduct an exit interview and ask people whether they felt lost at all when going round the exhibition, nobody ever admits to it. But if you accompany people round an exhibition, observe what they do and ask a few discreet questions, you will find that most people are confused about where they are and where the exhibition is leading them most of the time! Transferred to a library context the accompanied visit can provide a valuable picture of the interaction between the user (especially the new user) and the institution. Accompanying new users of the service on their first visit may throw some light on the phenomenon identified by former UK Education Inspector Trevor Dickenson who described the library experience as ‘intimidation by furniture’.

9.1.5 Taking pictures

Although this is not a separate category of observation, there may be times when taking still or moving pictures of an event or activity will add a lot to the evidence of the impact of what you are doing. Remember not to do this with children without getting written permission from parents or guardians in advance.

9.1.6 Observation for other reasons – work shadowing

Since we are observation enthusiasts, we hope that we will be forgiven for adding that observation is not just useful in collecting evidence of impact. One particular form of mutual observation, work shadowing, can be used to focus on or raise questions about
aspects of library processes and procedures that staff have come to take for granted. This can be done by 'parachuting in' library-service managers from elsewhere, to look at what you do and give you feedback in agreed areas (before you do the same for them).

Work shadowing is useful in any library setting where users have particular ways of working that library staff need to know about. Arranging work shadowing with managers, professional staff (such as the legal professions), researchers or teachers should help library staff to work more closely with them and to understand their information worlds and priorities. Better yet, this type of reciprocal observation exchange frequently leads to closer co-operation between the people involved around projects and work programmes.

A variation on this approach is to change work roles. A UK public library service recently introduced a 'Back to front' programme, in which senior managers spent time in front-line library roles (and vice versa). When the county librarian spends a day at a branch library enquiry point, she finds that staff spend more time looking at the computer screen than interacting with enquirers. As a direct result she makes sure that the new computer screens being purchased can readily be swivelled so that the enquirer can see what is being found. All the staff in this programme (including managers from the chief executive's office and other parts of the local authority) have to write an evaluation report focused on the part of the service that they have looked at.

Work shadowing may also give rise to ideas for improving your services so that they have even more impact.

9.2 Asking questions

'Asking questions' encompasses the ubiquitous questionnaire survey, individual or group interviews, focus groups and such hybrid activities as getting interview respondents to look at a website and relay their thoughts and feelings to the interviewer via the telephone or face-to-face.

9.2.1 Questionnaire surveys

We have put these first because this is the method that library-service managers tend to go for if they start to think about impact – unfortunately!

Public library services have traditionally relied heavily on service-performance (usually output) statistics, such as enrolments and loans, backed by the occasional questionnaire survey. We have viewed hundreds of library-service questionnaires and this may be the time to offer some comments:

- Many questions are too general and too bland to do more than show that libraries are well regarded by users.
- Others overreach themselves by trying to gather complex information that is more appropriate for interviews.
Many are poorly designed – with embedded library jargon, sloppy wording and little variety of task.
• Very few are adequately pilot-tested to iron out problems before they are used.
• Most show evidence that they were produced in too much of a hurry. Constructing and testing a properly designed questionnaire from scratch takes at least one person-week.

Overall, too many questionnaires unwittingly project the designers' preconceptions out to potential respondents and have them reflected back by nice people who are trying to second guess what the designers mean. Questionnaires are a good method of gathering small amounts of specific information through structured sequences of questions – when you already have an idea of what range of replies is likely and have a feel for the language which the people you are surveying use to discuss the concepts that interest you.

**What about sample sizes and response rates?**
There are no hard and fast rules about the proportion of your total target audience that you need to involve in your survey, although a higher proportion will make it less likely that you will pick up a totally unrepresentative group of respondents. If you want to get an informative response to questions about the impact of specific interventions or parts of the service, 10% of the target group should give you a good picture, if these are selected randomly. (You may want to ensure that your sample is 'stratified' to ensure that you include particular groups within your target audience, for example, a business library may want to ensure that all the main levels of management are included.)

If you are thinking about bigger-scale surveys and you want to gather statistically significant data (e.g. if you are trying to predict likely future demand for services) – you need to get professional advice from people who are expert in conducting surveys.

The most important thing to say about the response rate to a questionnaire survey is that if you get less than 50% of completed questionnaires returned you know nothing at all about the views of more than half of the people that you asked. Making decisions on the basis of a low response rate is another form of guesswork.

### 9.2.2 Towards better questionnaires

Below are some ground rules for designing effective questionnaires.

*Give attention to the structure of the questionnaire*

• Start with a straightforward question to get the recipient to begin replying.
• Try to ensure some variety in the types of question asked (see below).
• Draw skidpaths if there are alternative routes (of the type 'if 'Yes' go on to question x', with a line showing the route) to make sure that every eventuality is covered. Then choose whether to leave these lines in to help people move through the questionnaire.
• Group related topics into modules.
• Move from the general to the specific in each section (usually).
• Make the structure clear to the respondent by using headings.

Choose the question types to fit the purpose

The main options are:

• closed questions. These can be 'yes' and 'no' boxes or a wider range of categories that you offer people to choose from. Make sure that each category is distinct and that all eventualities are covered. If you are completing a questionnaire and find that your preferred response category is not provided, what does this say about the competence of the designers? A useful catch all category is 'Anything else? Please say what', but only if you leave enough space for people to add their own categories.

— Closed questions are becoming more common with the increased use of electronic questionnaires linked to analysis tools that can aggregate replies almost instantly. Unfortunately, the ease of access to such tools can lead to closed questions being set when open questions are more appropriate.
— A common type of closed question involves time periods (e.g. at least weekly, at least monthly, less than once a month) or age ranges (e.g. 1-20, 21-30 etc.). It may sound silly, but a common fault with this type of question is to offer overlapping categories (e.g. up to 20, 20 to 40).

• open questions. At its simplest this may be a 'Why is this?' after a closed question. However you phrase the question, it must be unambiguous – your aim is for the respondents to understand it and to reply in their own words.

— Don't forget that you will have to analyse all the replies to open questions and that categorization of the replies and then synthesis take time.
— There are several research data analysis tools available to help process qualitative information. Even so, there is no substitute for engaging with the 'raw' replies to ensure that you understand what the evidence is telling you.

Example 9.1 The hazards in setting closed questions

This example is from an electronic student self-assessment tool:

Using search engines
If your search gives you too many hits do you:
Use checklists or response scales where appropriate
These are a form of closed question. Most common are:

- **Simple checklists**, for example:

  What was the **main thing** you were doing in the library today?
  
  Working on a course project or assignment
  Reading related to my course
  Other reading
  Exam revision
  Looking for specific information in the library
  Using the internet for coursework
  Using the internet for personal interest
  Photocopying
  Just visiting
  Other: please say what!

  Please tick one box only

- **Likert scales**: a set of choices to record strength of agreement/disagreement, for example:

  By 2010 sophisticated subject-focused search engines will be the normal method of gaining access to internet resources.

  Highly likely
  Highly desirable
  Highly unlikely
  Highly undesirable

  Please tick one box only

- **Thurstone scales**: forced choice to agree/disagree, for example:

  Are you confident when using **health websites**?  
  Yes  No
• **Semantic differential**: seeking quantitative measures in areas that are usually addressed through qualitative means, by offering scales between extremes, for example:

<table>
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<td></td>
<td>Unreliable</td>
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</tbody>
</table>

*Please tick one box only in each row*

These scales have to be carefully constructed to be effective. It is probably better to use ready-made versions than to invent your own.

• **Guttman scales**: statements arranged in sequence to gauge the strength of the respondent's view, for example:

Within your subject discipline:

- Electronic journals will completely replace paper-based journals within ten years
- Electronic journals will gradually replace paper-based journals
- There will continue to be a place for paper-based journals alongside e-journals
- Paper-based journals will be preferred to e-journals for the foreseeable future
- There will be a reaction against e-journals in favour of paper-based journals

*Please tick the box that most accurately reflects your own view.*

**Instructions and wording**

It is important to heed the following advice:

- Offer clear and consistent instructions for completing the questionnaire (this is easily forgotten if questions are considered individually). For closed questions, do you want people to choose one box (e.g. the most important category for their work) or all relevant boxes?
• Pay attention to question wording (avoid ambiguities; negative statements in the question; jargon, except that of the respondents; and enmeshing two or more questions together).

To summarize, the overall aim of the evaluation questionnaire is to obtain relevant information efficiently. You need active co-operation from your target group when doing this. Anything that will help people to co-operate with you by carefully completing and returning your questionnaire should be actively encouraged. This takes time, planning and attention to detail – even before you reach the data-analysis stage.

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Questionnaire surveys are ideal for projecting the compiler’s preconceptions and prejudices and having them confirmed by an invisible audience. They are also quite useful for collecting small amounts of information from a sample of respondents or all respondents within a target group.

### 9.3 Interviewing

According to Michael Brenner (Brenner, Brown and Canter, 1985) ‘the research interview is an artificial conversation designed to collect research-relevant data.’ The element of artifice is provided by the fact that one person is answering all the questions and the other one is asking these questions and recording all the answers. As to data collection, it follows that anything (within reason) that helps to achieve this end is desirable and that all other behaviour is not. As we show below, respondents sometimes have to be taught their role as respondents, especially if they are inclined to be flippant or to wander from the question.

There are four main types of research interview:

• In the **structured interview**, all questions are asked in a predetermined order from a prepared schedule and each time a question is asked this should be done in the same way and with the same emphasis. This type of interview is probably the norm in library-service evaluation.

• In the **exploratory interview**, the question areas are predetermined but the respondents are allowed some latitude to answer in their own way. The interviewer may probe for more information in promising areas. The exploratory interview is particularly valuable at the early stages of evidence-gathering to identify issues and find out what concepts and terminology various groups of people use. (For example, ‘information literacy’ is a good word to use with education librarians but not with lecturers – in the UK they prefer ‘study skills’, ‘library skills’ or even ‘problem-solving skills’ – elsewhere you can find out the preferred terms by doing exploratory interviews.)

• A **semi-structured interview** is a one-sided conversation in which the respondent is allowed free rein as long as the interviewer considers that what is being said is, or might be, relevant. This works well with experts, who usually have a strong
9.3.1 Designing an interview schedule

If you are going to use structured or semi-structured interviews, first you will have to choose or design your interview schedule. Here are some of the ground rules for interview-schedule design. Most of them also apply to planning your question areas for semi-structured interviews:

- Ease the respondent into the interview. For example, you can start with a question about their work responsibilities to get them talking comfortably, assuming that this information is relevant. Don’t ask for personal information early in an interview.
- Adopt a logical structure by grouping questions into sections and proceeding from the general to the specific.
- Share this structure with the respondents so that they know where the conversation is going. Offer a brief introductory outline of the areas to be covered; this can be reinforced as each new section is reached (e.g. ‘Now I’m going to ask you some questions about how you use information at work’).
- Vary the bill of fare. You can combine closed questions (such as ‘Do you ever go to the company information centre?’) and open questions (e.g. ‘What kinds of use do you make of that service?’). You can vary the respondents’ task further by, for instance, asking them to select replies and tick boxes on response cards or to choose one of a set of descriptive vignettes that matches their own information-related behaviour; or again you may want to show people an information publication and ask them for comments.
- Make sure that the questions are clear and in spoken English, rather than the more formal written version, which sounds stilted when it is read: (Which form is being used here?) Try to avoid using negatives in questions (they can be confusing); and choose any jargon deliberately to reflect respondents’ usage. Library and information
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talk. The increased sequence. It usually users, and service. In these may ase there, all this there is a You will e are now anism for t, ideally, jargon should be avoided (asking lecturers about serials has been known to elicit strange responses!).

Test out the schedule in pilot interviews. Try to avoid:

- questions that are difficult to ask (too many questions in one, sentences that are too long, tongue-twisters)
- questions that are difficult to answer (e.g. that contain unfamiliar words or phrases, that ask for generalizations or abstractions, hypothetical questions; don’t ask busy operational staff about how they divide up their time – they probably don’t)
- questions that invite distortion (leading questions that carry assumptions that the people interviewed may not share; don’t ask respondents about the opinions or behaviour of other people).

Most of the principles outlined here also apply to questionnaire design.

9.3.2 Setting up and administering the interview

Let us assume that your ‘victim’ has agreed to be interviewed. What next?

- Choose a neutral venue if possible (a meeting room or spare office is ideal). If you have to use your respondent’s office, avoid the ‘client chair’ on the other side of the desk: if necessary move it to one end of the desk so that you are not in the usual ‘grilling position’.
- Check that the interview is still convenient (this is especially important for telephone interviews – anything may be happening at the other end!). If there is a problem, reschedule the interview. You want a respondent who is concentrating on your interview.
- Ask if any telephone calls can be diverted to save time (if you think this will work).
- Make sure that the respondent knows who you are and what you are trying to find out in general terms (an introductory letter is usual but a reminder may still be needed).
- Explain that the respondent can refuse to answer any question if they wish.
- Explain whether the interview is confidential: a common phrase is ‘We will not be reporting anything in a form that could lead to your replies being identifiable.’ If a respondent later baulks at a question, it may be enough to remind them that the interview is confidential to get a reply.
- If you wish to record (on tape or electronically), ask permission and say how you will use the recording. Position the recorder where your respondent can reach it and show them how to turn it off if they want to say anything off the record.

If you have organized and conducted the interview well, it is very rare for people to curtail the process. Only a few respondents will cavil at particular questions and only one or two interviews turn out to be useless.
9.3.3 Doing the interview

Once you have chosen the type of interview, you can do a lot to create good interview conditions, 'train' the respondents to perform their task and reduce incomprehension or resistance. In the end, though, to be a good interviewer you need be effective in the five main areas of research interviewing:

- **ask the question.** Read the question at 'slow normal' speed and in a neutral tone, but with emphasis on certain words to help the respondent understand the question.
- **listen to the reply.** This is usually the easy bit because the replies should be interesting if your questions are good. Don't get distracted if the respondent sounds boring: the most monotonous replies can turn out to be full and revealing.

The other three areas: non-directive probes and prompts; recording answers; and feeding back complex replies are covered in more detail below.

*Non-directive probes and prompts*

Ensure that the respondent **answers in full** by using non-directive probes or prompts. The aim here is to get answers to the question without influencing the answers accidentally by putting words into people's mouths or directing them towards one kind of answer.

**Non-directive probes**

If you want someone to answer a question in more depth, try a **non-directive probe**, such as:

- **the silent probe.** You ask a question and get a superficial or cryptic answer. Wait, with pen poised. This is all that is usually needed to get the respondent to elaborate. Even a ten-second pause can feel like eternity if you are on the receiving end.
- **the encouragement probe** (semi-verbal). You make a noise to show that you are listening and interested - such as 'ahah' or 'erhem'. This is a concession to the one-sided nature of the conversation. It can be disconcerting if you are being interviewed and are talking away but getting no response at all. The sorts of grunts advocated here seem ludicrous when written down but work well in practice. As soon as you move away from non-verbal cues you are in danger of influencing people's answers. For example, if you say 'yes' from time to time, are you agreeing with the respondent?
- **the elaboration probe.** You can ask a respondent to explain an answer, but take care not to offer your own interpretation in case they just take the easy way out and agree to your version. Often, all you have to do to get someone to be clearer is to repeat the part of the answer that puzzles you. If that doesn't work, add 'What did you mean by that please?'
Non-directive prompts

You ask a question and the respondent doesn’t answer. Try one of the following non-directive prompts:

- **give time** for the person to answer. Strictly speaking, this is not a prompt, but remember that your respondents are hearing your question for the first time. They may need time to think; keep silent to encourage them to do so.
- **dealing with a challenge**. If the respondent asks whether your question means A or B you have a quick decision to make. Your main options are:
  - **repetition**. If you think that the respondent hasn’t fully grasped the question, you should repeat it.
  - **interpretation**. If the respondent asks which meaning is intended, try saying ‘Whatever it means to you’. This usually works (but make a note of the problem – you may have to revise the question later).
  - **neutral adjudication**. If the respondent is still struggling, reword the question (and make a note of your exact words so that you can review the question and answer afterwards, and if necessary discard both).

- **predetermined prompts**. Pilot the interview questions properly in advance to make sure you are aware of potential hazards. You are then in a position to prepare definitions or clarifications in advance and give them when asked.
- **challenge prompts**. People aren’t always consistent in their replies during an interview. If you think that a reply is inconsistent with something said earlier, refer back to the previous answer and remind the respondent what he or she said. This is usually enough to get an explanation.

**Record the answers**

The huge beginner’s mistake is to forget to do this (we have large amounts of videotape evidence to prove it!). You should take notes even if you are recording the interview as this will help you to make sense of the replies at the time and give you a quick route into the interview. Remember that it takes about five hours to transcribe fully one hour of a recording. If you are not recording by other means, try to capture as much as possible of what people say in their own words. This should be the hard job. If you are finding it easy you are probably not probing enough – so why bother interviewing?

**Feed back complex replies**

You should do this to make sure that you have understood them and to prompt further comment. This takes confidence but is well worth doing.

All of these areas can cause difficulties, but most people can get to perform better in each one through focused training and reflection on their own performance.
Points to watch while interviewing

- **Body language.** You can convey alertness as well as interest in what is being said (or the opposite) through your posture. More specifically, you can show that you are listening by establishing eye contact. To signal that you have 'switched off' (if someone is talking too much or wandering from the point) simultaneously look down and stop writing.
- **Pace.** You can control your own speed of speech as well as the length of the pause after your respondent has finished a sentence before you ask the next question. Aim for a relaxed, deliberate and thoughtful tone to the encounter.
- **Neutrality.** Do not show agreement, disagreement, approval or disapproval at anything the respondent says. Over-concern with establishing a friendly relationship can reduce an interview to a sociable chat.

9.3.4 The critical incident interview

This special form of structured interview is most useful to find out about interactions between library-service users and the services used. It is especially useful as a way to evaluate enquiry services. The standard approach is to select 20 to 50 substantial enquiries (not requests for contact addresses etc.) which form the critical incidents. Then:

1. Arrange telephone interviews with the enquirers.
2. At the beginning of the interview, remind the enquirer about the particular contact with your service (using the enquiry record completed at the time). Two difficulties here are:
   - The enquirer may only have hazy recall of the particular incident (options: proceed and hope that memory returns or negotiate discussion of a more recent and memorable enquiry).
   - The enquirer may not think of the chosen enquiry as an enquiry at all! They may think that it was a conversational gambit or part of an information exchange with library staff (if this is the case, proceed but record the different interpretation of what was going on).
3. Glean contextual information. Ask the enquirers why they were seeking that information at that time (what triggered them to make the contact, what was happening in their organization or in their own life that brought this to the fore). Also ask what other information sources were tried and why.
4. Evaluation: what useful information, if any, did the enquirer get from any of the sources tried and why was it useful? (And if relevant, how did your response compare with other people’s?)
5. Quality assurance: how well and how politely did your staff respond? (People do tend to remember outstandingly good treatment as well as the opposite.)
6. Impact: did the enquirer use the information provided by your service and, if so, did anything happen as a result?
7. General comments on the enquirer’s experience of your services.

This way of looking at enquiries tends to give a better picture of how the service fits into the evolving world of a range of users, as well as of the main factors that lead people to make enquiries. The approach also provides a way for enquirers to make direct comparisons of services (including such elements as format and presentation). It can produce occasional but powerful information about the real impact of information on people’s life and work, because it offers a very specific and direct focus for the user to make a judgement.

More strategically, you can readily translate sets of interviews into case studies as evidence. Perhaps most importantly, service managers report that they find this type of information useful in evaluating and then fine tuning their services in ways that traditional evaluation approaches don’t touch.

9.3.5 Conducting a semi-structured interview

All the tactics outlined in section 9.3.3 apply equally to semi-structured interviews. In addition, you can use directional probes to obtain:

- retrospective elaboration or clarification. Refer back to earlier remarks made by the respondent but in neutral terms, such as: ‘Earlier you said . . . could you tell me more about that?’ (elaboration) or ‘What did you do as a result?’ (clarification).

This tactic should be used sparingly. Try to use the respondent’s own words whenever you refer to something said earlier.

9.3.6 Telephone interviews

The individual face-to-face interview offers the most straightforward route to gathering relevant information. You can explore issues in depth and can note and analyse the fine points of people’s responses. Unfortunately, the face-to-face interview is expensive of your time, especially if the likely respondents are geographically scattered.

Telephone interviews offer many, but not all, of the advantages of the face-to-face encounter and can be more efficient to organize and carry through. They can also be an effective means of garnering evidence, as long as the ground rules are observed. Most of the preparatory steps are the same as for the face-to-face interview. The following guidelines are important:

- Explain to the potential respondent what you are trying to achieve and why, preferably in the initial contact letter (or e-mail).
• Suggest how contact should be established. If you write to introduce yourself and your project, say that you will phone to find out whether the recipient is willing to be interviewed and when is a convenient time.

• Always follow up by phone within the period that you specify. The aim at this point is to allay any concerns about being interviewed and to arrange a convenient interview time. Try to offer a realistic estimate of the amount of time required for the interview (based on your pilot tests of the interview). Be ready to do the interview on the spot if that is what the respondent strongly prefers.

• When dealing with people at work, it will take two to three contact calls on average to catch up with your potential ‘victim’ if that person is at operational or middle-management level. In general, the more strategic the respondent, the higher the average number of contact calls required.

• Always phone when you said you would phone, reintroduce yourself (you are only one of many voices at the other end of the line) and check to see that the timing is still convenient. If it isn’t, reschedule the call.

• The main irritant here is that the respondent may not be playing by the same rules! Relatively few people book telephone interviews into their diary in the same way as face-to-face interviews. They may have completely forgotten the appointment and be away from the office or even on vacation when you dutifully phone up. The good news is that if they do miss the appointment a plaintive message to say that you phoned as promised is usually enough to get better co-operation next time. Be ready for the conscience-stricken respondent who phones back as soon as they return to the office, all ready to talk.

• Try to avoid interviewing people on their mobile phone. Apart from the obvious matter of cost, this kind of contact diminishes any influence that you might have over the environment in which the respondent is trying to concentrate on (or even to hear) your questions.

• Conversely, phoning someone at their office or home should ensure a reasonable environment for the conversation and is the best possible way of reducing the effects of the ‘Great Interrupter’ – the telephone! (Even so, the occasional respondent will interrupt the call to field another one.)

Conducting the interview again follows the lines of the face-to-face version but with several constraints. Naturally, unless you have the latest in cellular technology, you can’t see your respondent. This means that you miss all of the small clues of body language and facial expression that add texture to the interview. Similarly, the respondent can’t see you. Any pause at the other end of the telephone line feels much more lengthy than it actually is, so, if you are taking detailed notes (and if not, why are you bothering at all?), tell the respondent what you are doing.

Although respondents usually appear to concentrate quite carefully during telephone interviews, a lengthy interview will feel longer. The ideal length for a telephone interview is probably about 30 minutes, whereas a 45-minute version face-to-face would probably not feel long.
9.4 Getting impact information from people in groups

One way to get at impact is to bring together a group of users of the service to pool their thoughts on how your services affect them. Don’t let this turn into a test of who has the loudest voice or most articulate opinions.

9.4.1 Brainstorming

Two ways to pick people’s brains and still retain control over the process are individual and structured brainstorming.

**Individual brainstorming**

Group participants round a table and invite them to think about their answers to a carefully chosen question, such as ‘What are the key improvements that need to be made to the library website to ensure that people take notice of it?’ Ask them to write their individual replies on sticky notes, using one sheet for each idea, and to pool the results in the middle of the table. Then invite them to cluster the sheets in whatever way they think works (there will be overlaps; get participants to stick these together), sorting out what the statements mean as they go along and labelling each cluster themselves (this will tell you how they describe the concept.) You can then focus discussion on each of these clusters in turn, using open questions such as ‘What are the issues or concerns here?’

General points to remember:

- Focus the discussion on the clusters and listen carefully to each person in turn.
- Ensure that someone is recording the discussion – you are too busy!

Just because people are assembled as a group doesn’t mean that you have to work with them as a group.

**Structured brainstorming**

To carry out structured brainstorming (such as the Nominal Group Technique outlined here), seat participants (ideally about 7–12 people) in a horseshoe formation around a table, with you and a flip-chart stand at the open end. Ask them to record their responses to your evaluation question (as for individual brainstorming above). However, this time you ask them to record their answers in short phrases on their own note pads.
Don’t give way to the temptation to rush this stage. Allow a good five minutes for them to come up with ideas. When people stop writing, ask each person in turn to offer one item to the pooled list. Write these in their words on the flip chart, numbering each one. Keep going round until people run out of ideas (usually 30–60 ideas). Be inclusive; if in doubt, write it up on the flip-chart. Display all the sheets as you go along. Put off any discussion of the ideas until the next stage.

Sooner or later someone will buck the rules and try to launch into a long explanation of their idea. Ask that person to summarize the idea in a short phrase and say you will collect it next time around, then move on to the next person. This is a good process control mechanism to ensure that the group stays nominal (a group in name only)!

When all the ideas are in, look at each flip-chart sheet in turn and ask the group to see if they are sure what each phrase means (some ideas may be too cryptic). Stress that you don’t want them to say if they agree or disagree with the propositions at this stage. Then the group may wish to link a few overlapping ideas. Next, invite people to choose the five most important items from the list (important for them individually, or for your service – you decide beforehand). When they have all chosen the appropriate numbers, either get them to tick their five choices on the displayed sheets, or you record their numbers in priority order (most important first – use a different coloured pen) by writing numbers 1–5 for each person on the displayed sheets. (You may then like to weight these scores from first choice = 5 points, downwards, using another different colour, and add up the total points for each idea.) You are now ready to discuss participants’ high priority items.

General points to remember:

- Actively discourage discussion until after the prioritization stage.
- Timings: individual recording of ideas 5–10 minutes (this will feel like 5 hours the first time around, but you must give people time to think); round up of ideas c.30 minutes; ranking 5 minutes; scoring (ticking, or you writing) 5 minutes; ranking (offer a break while you do this) 5 minutes; discussion c.30 minutes.

Both the activities just described can work well as part of a focus group.

There are literally thousands of tried and tested group activities, including many that are specifically designed to collect and prioritize information. Consult a friendly trainer about what sorts of impact information you are trying to obtain. Most trainers have a good repertoire of group activities for particular purposes.

9.4.2 Card sort activities

Meanwhile, if you want to get people to try to prioritize and discuss propositions, various types of card-sort activity should give you focused information (and they are fun to do).

To stimulate discussion about general service impact or the effect of specific services on users, generate your own set of key propositions in relation to your theme; then type and stick each proposition on 5in. x 3in. cards or sticky notes (about 20–24 propositions are ideal; number them to help in de-briefing later). Divide people into small groups...
(not more than four people); then ask them to sort one set of the cards per group in response to your research question. Your question should be about the impact of the service on them as users. You can get them to do this in one of several ways, such as through a self-directed or more structured nine-diamond task:

- **Self-directed task** – ask people to organize the cards into a meaningful pattern, shape or flowchart, adding their own ideas on blank sheets if they wish. Then de-brief each group in turn by asking them to explain what they have produced and why, picking up on points of similarity and difference between groups.

- **Nine-diamond task** – ask people to reject all but nine of the cards (they can substitute their own ideas on blank cards at this point) and arrange the chosen nine in diamond formation (the words below each represent one card) in descending order of importance or priority:

  FIRST
  SECOND TIER
  THE THIRD TIER
  FOURTH TIER
  FIFTH

The idea of this nine-diamond activity is to encourage people to prioritize without wasting time over the ‘in-between’ rank order (for example, by trying to exactly rank the three items in the third tier). De-brief across the groups by asking what people placed first and why, what went into the second tier and why; what people threw out easily and why; and what they added in (if anything) and why.

When the process is complete, the diamonds can be ‘translated’ into weighted scores (and the totals for each item added to represent the overall priorities across the participants) as follows:

- Items on Tier 1–5 points
- Items on Tier 2–4 points
- Items on Tier 3–3 points
- Items on Tier 4–2 points
- Items on Tier 5–1 point.

You can then compare the results of different groups doing the same exercise, and thus gather information about the impact of services.

General points to remember:

- You will need one set of cards per group and a ‘master’ list for yourself.
- Allow ample time (25–30 minutes) for people to sort their cards (including small group discussion).
- If members of a group can’t agree on priorities, ask them to remember and report back what they disagreed about at the de-briefing stage.
PART 2: EVALUATING IMPACT

- If you are working with several groups, wait until the second one finishes, from there on invite the groups as they finish to look at each others’ output – but keep them away from groups that are still working.
- When all the groups have finished, start the de-briefing. Allow ample time for de-briefing (a rule of thumb is 15 minutes if there are two groups, then 5 more for each additional group).
- Use a flip chart to catch most of the content and, if possible, get a colleague to take notes of the discussion.

This exercise is a good way of equipping people with the concepts that they might not otherwise have. This will enable them to discuss the chosen question in a general way.

Requirements for the nine-diamond activity:

- space for participants to work in small groups
- enough time (c. one hour) to conduct the activity
- a facilitator for the activity (following the steps set out above)
- a note taker to record the feedback from groups
- sets of slips/cards
- a flipchart and working pens.

Example 9.1 A set of nine-diamond concepts used in an education library

In this case the aim is to get students to say which of the following elements of the service make any difference to them when they are studying:

1. Books borrowed from the library
2. Reference books in the library
3. CD-ROMs in the library
4. Internet access from the library
5. Project folders
6. Magazines/journals
7. The library enquiries/help desk (use locally preferred term)
8. Library induction
9. Photocopying
10. Being shown how to use PCs to find things by a librarian
11. Sessions by a librarian on how to use the library/search for information
12. Current newspapers
13. Old newspapers
14. Videos
15. Interlibrary loans
16. The library catalogue
17. Leaflets/handouts from organizations (e.g. voluntary organizations; local council; tourist boards; political parties) collected by the library
18–20 Blank cards for students to add their own thoughts.
Evaluation rationale
The approach is designed to throw light on which library services make any difference to students and why. This should enable students to convey whether and how they are functioning as independent learners and whether the library is recognized as encouraging this approach.

9.4.3 Structured focus groups
The main problem in working with groups is other people’s time. You know what questions you want answered, but the people you want to talk to are usually busy and may not see library service development as their main concern – especially if they are generally happy with the service now on offer.

Participants in focus groups often complain that they don’t have enough cohesion, or, in other words, the events lack sufficient structure to allow people to focus on the task in hand. The answer is to design and facilitate the activities carefully to help people give you the impact information you want.

You can overcome both these problems through the right choice of activity and a flexible approach. The people targeted for your questions may be busy but they probably come together in groups for meetings, education or training purposes. If so, the prospect of doing something a bit different may be intriguing.

Most evaluation calls for focus groups to be made up of various categories of potential service user; in other cases the expertise of the participants is at a premium.

• How easy is it to get a representative group together to focus on impact? This depends on whether people see your evaluation question as intrinsically interesting. If not, your best bet may be to link up with another activity that brings some or all of your target group together, or you may have to resort to offering incentives to participate. You may also wish to ‘pick off’ parts of your target group in different sessions if, for example, you want to involve high and low status people and if this difference is likely to get in the way of everybody contributing. However, choosing the right activities may remove the need for this type of separation.

• With expert groups, people will get involved if they see your topic as relevant and as a high enough priority (you will have to make the case and the initial approach carefully, explaining why they are the best people to get involved and what the benefits to them will be). A way forward is to identify one or more ‘champions’ who will be sufficiently interested in your evaluation to pave the way to other people. Setting up strategic focus groups requires a longer timescale to prepare the ground and to get into people’s diaries.
9.4.4 Putting the spine into focus groups

The two key elements in running focus groups that work are setting up the conditions that enable people to concentrate on the job in hand and choosing the right activities. We have already said that good trainers will have a repertoire of structured activities to call upon. In talking to trainers about what you want it is important to remember the main difference between an evaluation focus group and a professional development event. Your main concern is to pick the brains of your participants rather than to give them a positive learning experience, although the two are not mutually exclusive.

A general rule for effective focus groups might be 'the less opportunity for unstructured discussion the better’. As to activities, options include brainstorming or card sort activities, as already described. In addition, you could try small group generation of cartoons, diagrams, posters or bullet points encapsulating their responses to carefully worded questions. As with card sorts, these provide opportunities for plenary exploration of issues, but there is also scope to get small groups to explain their ideas to each other (tape the discussions), or for them to write in sufficient detail for the next group to be able to understand and add to what the first group produced (doing your recording job for you). Unlike general discussions, all these activities will give you concrete impact information which has been fully endorsed by the participants.

Example 9.2 The short, sharp focus group

A series of short structured focus groups is used in a UK health service region as part of the review of its library services.

We target various groups of staff and consult administrators to find out where and when these people meet as part of their normal work. Then we contact the meeting convenors and ask for half an hour at their next meeting. The offer we make is that if they give us time to help review recent library service provision we will guarantee two things – we will finish within half an hour and people will find the activity interesting.

Steps:

1. Arrive with a set of 20–25 cards, each identifying a specific library service or aspect of provision, such as:

   - ‘Ready access to photocopy facilities when studying/researching’
   - ‘Being able to browse contents pages of journals and request copies of articles of interest’.

2. Clear a table and position it so that people can stand round it. Explain the purpose and invite people to help identify where the library makes a difference and areas where it needs to have more impact.

   If the group size is appropriate (5–12 people):
• Deal out the cards to the participants as though they are playing cards.
• Explain that the table will be used to prioritize, with the top end as high success and the bottom as needing attention.
• Ask people individually (and all together) to put down 'their' cards anywhere on the table according to their view of its success.
• When this starts, tell them that they can put items above, below or beside cards that are already there but not move anything that is there.

This usually takes three or four minutes.

3 Now ask all the participants to look at the card layout and challenge anything that they think is placed too high or low by turning it face down. If anyone is unsure about what a card means (since they all consist of short phrases) they should turn it over too.

This usually takes another three to four minutes and results in about five to eight cards turned over. Record the remainder of the session (tape recorder or a colleague taking notes).

4 Starting at the top of the table, turn over the highest face-down item, read it out to the group and ask why it was turned over. You know that:

• someone wants an explanation – in which case ask the group what they think it means (important: don't offer your own explanation – you are there as an evaluator not as an expert); or
• there are at least two views about the relative importance of the item – invite a discussion and see if you can get a group consensus about where the item should be placed. If not, put it on one side and record that the group can't agree about it.

5 Continue working down the table until all the items are face up.

Through this process you lead a focused discussion about recent service impact, concentrating entirely on areas of difference or lack of understanding. The participants are equipped with a set of concepts through which to consider library service performance (probably for the first time ever). They agree on a ranking list of relative success, to which you can fairly easily assign scores so that you can compare results from different groups. They almost certainly find the activity interesting – and you have done the whole thing in half an hour or less. If the group finishes early, complete the task by asking them: 'If only one of these items can be addressed over the next three years, which should it be and why?'

9.5 Action research

What is action research? McKernan (1991) claims that:
Action research is carried out by practitioners seeking to improve their understanding of events, situations and problems so as to increase the effectiveness of their practice. Such research does not have the writing of research reports and other publications as a primary goal.

Action research aims at feeding the practical judgement of actors in problematic situations. The validity of the concepts, models and results it generates depends not so much on scientific tests of truth as on their utility in helping practitioners to act more effectively, skilfully and intelligently.

This is only one view of what can vary from cheap research conducted by practitioners dragooned into undertaking fieldwork on behalf of academic colleagues, through to real professional development based on the idea of the reflective practitioner focusing on service impact.

Action research makes the direct link between process and impact. It is essentially a cycle of reflecting, theorising and acting. The people involved move through stages. You

- identify a problem or challenge
- gather evidence
- then interpret this evidence together
- look for ideas on what changes to make
- make changes to the services
- then collect further evidence about the impact of these changes

and so on until you feel that you have made enough progress.

Through action research, practitioners get evidence to discern what is happening at the moment and how well it is being received. This gives them scope to develop ideas about how to improve the situation and then turn them into new strategies and activities, which are evaluated in their turn. This cycle leads practitioners into exploring the different effects of various processes.

When it is done well, action research keeps practitioners focused on what they are trying to achieve. This approach should work in any library context; we have been able to see it working in various settings, from a semi-formal work group of health library managers to a formal impact evaluation programme involving 22 university library teams (Markless and Streatfield, 2005). Another instance is described below.

Action research is especially valuable when you are looking at ‘messy’ areas where there are no clear ways forward yet. With all the continuing developments in e-information, e-learning and information literacy work there is no shortage of such areas in libraries. The usual impact evaluation approach of comparing progress against a baseline starts to break down when the services provided to try to move on from the baseline are themselves changing and evolving rapidly. Action research enables you to engage in a rolling evaluation programme that accepts that yesterday’s baseline is just history. With this approach you can change where you start from (your baseline) as well as where you are trying to get to (target) with each round of activity.
Since your rounds of activity are dictated by what you are finding out and wanting to change, they are not usually locked into the annual planning cycle – so it follows that your baseline and targets do not automatically tie in to any annual planning or reporting cycle. It is important to make this point if you are called upon to make an annual report on any action research programme that does not follow an annual cycle.

Example 9.3 Education librarians as action researchers

A small group of UK professionals (a school teacher, school librarians, further education lecturers and a college librarian) who recently completed their MA in Education discuss how they can continue to develop their practice. They want to keep up the momentum gathered during their Masters studies. The group feels that attending short staff development courses won’t do: these tend to be too superficial. Reading may be interesting but won’t necessarily galvanize the group into activity or provide the links between theory and practice that they want. They decide to set up an informal action research group and asked their MA tutor to facilitate termly meetings.

A year later, individuals in the group have:

- enhanced the after-hours support that they provide
- developed approaches to extended reading for adults with learning difficulties
- collaborated with colleagues to integrate the teaching of ‘learning strategies’ into subject courses
- enhanced the handling of groupwork differentiated according to the ability of the students in the college library.

The group meetings are held on Saturdays and attendance levels are high. Group members are clear that these improvements in their educational practice are due to adopting action research strategies.

Group members encourage each other to investigate aspects of their practice in a carefully structured and focused way; they read relevant research but are also supported while they question its relevance to their own contexts and develop their own ideas out about what they read. They use a variety of data-gathering techniques both in their initial investigations and when evaluating the impact of their changed practices. Group members openly report their difficulties and hold up their own development and their emerging ideas to critical scrutiny.

Despite working in difficult contexts, faced with increasing demands on their time and, in some cases, with decreasing budgets, engagement in action research has stopped group members from feeling powerless and de-professionalized. They are able to enhance the quality of their work in areas that they care about and in ways that accord with their educational values. Action research provided these practitioners with an effective tool for their own professional development and a way of improving the quality of education within their institutions. (Markless, 2003)
9.6 Doing it!

The actual evidence gathering is relatively straightforward, once you have decided what you want to collect and how. Don’t forget that you are not the only people in the evidence collection business.

9.6.1 Getting help

Can you use partners to help you to collect evidence? Here are some ideas:

- If you want people to give you feedback about how resources are used by others, tell them what you would like them to look out for in advance, then ask for that information later (this is particularly important if you are asking busy teachers to help).
- Some strategic managers monitor impact evaluation developments; others write reports that may be useful if you can tap into them.
- Corporate performance monitoring teams in your wider organization may be collecting evidence themselves – can you ‘ride on their coat tails’ by getting them to ask questions that you want answered?
- Some people (librarians in your own and other sectors, booksellers? museums staff?) share some goals with your service and may be ready to collaborate over information gathering. Other libraries are likely to be looking at the same impact issues. Why not collaborate with them to produce better tools?
- Other people may have directly relevant evaluation expertise. For example, many trainers rely on the Kirkpatrick evaluation model, a four-level framework devised by Donald Kirkpatrick and presented in four journal articles published in 1959–60. This model has been the subject of a great deal of analysis and testing – any professional trainer is likely to have useful views on evaluation.

9.6.2 Practical difficulties in gathering evidence

There are some of the difficulties that crop up when service managers engage in evidence collection:

- Capturing evidence in busy libraries – this is the most common problem and it cannot be solved, but it can be managed. The problem affects both staff and users: if staff are really busy, any additional evidence collection is likely to be abandoned. From the user point of view, if your service is busy, users are less likely to want to be interrupted by your attempts to gather evidence. A careful balance is needed here – sometimes it is important to collect impact evidence of the service under stress; in other cases evidence from busy times is necessary to give the full picture. If you don’t have to collect evidence at peak periods it obviously makes sense not to; where you have to, explaining to your staff and to users why it is necessary to do so and acknowledging that this creates problems should help you to get support.
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GATHERING AND INTERPRETING EVIDENCE

- Unless you are collecting data on a large scale, impact evidence is different in kind from most traditional library evaluation data. Most impact evaluation involves using qualitative research methods where concerns such as getting a large enough sample of responses are less important than getting robust evidence that meets the resonance test (see section 8.4.3 in the previous chapter). This type of evidence is usually the best that is achievable, not, as is sometimes assumed, a poor second best. Getting this message across to people who are used to traditional busy-ness statistics may be hard work, but can be done.

- One pitfall is in the temptation to try to establish cause and effect relationships – this is much harder than it seems! We can learn something here from another field in which people struggle with demonstrating causal relationships and usually fail – education inspection. You may find it useful to adopt the approach and language of the UK education inspection teams, who look to see whether an activity is 'bearing upon' or is 'linked to' a service objective. A (positive or negative) link can be inferred if there is usually an improvement or decline in a situation when a specific service or activity is introduced or withdrawn.

- Whether you are asking people questions or observing them, it is important to behave in an ethical manner. Difficulties can arise if people don't know what you intend to do with the information they give you or don't like the questions you ask. (You should be safe if you follow our guidance in section 9.3.2.) They may also object to being observed. You can head off complaints by putting up a poster to say what you are doing and (in general terms) why. There are also hazards in collecting evidence from or about children. You may have to obtain prior permission from parents and the organization where you encounter the children may have specific rules about contact. If you have ever tried to photograph 22 children working with library materials when one of them has failed to bring the necessary parental authorization but keeps getting into the picture, you will know how frustrating these necessary rules can be.

- If you work in a health, social care or educational organization, there are likely to be protocols governing all research done there. You will need to check to see whether your evidence gathering falls within the organizational definition of research and, if so, how to get your activity cleared.

**LAWS OF IMPACT EVALUATION**

Effective impact work is not about gathering lots of evidence. It is about focusing on real impact and about rigour in collecting, analysing and reporting data.

9.7 Analysing data

We need to make a distinction here between quantitative data, which is usually fairly easy to organize into tables, and qualitative data, which is inherently more difficult to analyse. There are, of course, plenty of statistical packages and data analysis tools to help with this work. These tools range from the best known statistical aid, the Statistical
Package for the Social Sciences (SPSS) to the new generation of data analysis tools. These newer tools can help in various ways, such as by giving easy access to data and extensive automation of clerical tasks at one extreme, or helping with qualitative analysis by combining 'subtle coding with qualitative linking, shaping, searching and modelling' at the other (e.g. NUD*IST and NVivo respectively).

However helpful these tools are, and some of them are very helpful, there is no substitute for the evaluator developing a thorough understanding of the evidence. One effect of the widespread adoption of data analysis tools is that it is now too easy to do a superficial job of organizing the qualitative evidence and turning the results into a slick report. The reason why we advocate using qualitative methods to gather impact evidence is that this can give you subtle and nuanced evidence as well as powerful testimony in key areas. This can only be achieved if you do enough work with the qualitative evidence to really understand what it is telling you. Unless data analysis tools are used carefully they can get in the way of the real picture. If you are doing relatively small-scale qualitative evidence gathering, you may be better off cutting and pasting pieces of text and (physically or electronically) sorting and re-sorting them until useful patterns start to emerge. We still regard highlighter pens and scissors, as well as plastic or cardboard folders, as useful adjuncts to the evaluation data sense-making process.

When we referred to 'grounded theory' as an alternative to the hypothesis testing approach to research in section 2.4.1, we glossed over what many regard as the main contribution of Glaser and Strauss when proposing this approach – being systematic in analysing qualitative evidence. They identify three kinds of coding as being at the heart of their approach:

- open coding (the initial process of breaking down, analyzing, comparing and categorizing data – labelling, grouping and re-grouping incidents or events to form categories and properties)
- axial coding (teasing out hypothetical relationships between categories and sub-categories)
- selective coding (assembling the categories into the core category that becomes the basis of the grounded theory – which might be described as making sense of the data).

Interestingly, the two authors have since diverged in their approach, with Glaser challenging Strauss and his later collaborators (see Glaser, 1992) for, in his view, forcing data into a preconceived framework. Whether you choose to embrace grounded theory or not, it may be helpful to distinguish between these three types of coding, as well as to be wary about forcing your evidence into predetermined categories.

### 9.8 Interpreting and presenting your evidence

#### 9.8.1 Another difficult area?

According to the respondents to Covey's (2002) survey of US academic libraries:
• Interpreting research findings is a particularly thorny problem, exacerbated when the data are imprecise or in conflict with other data or known trends, and when the research subjects are few or unrepresentative of the campus population.

• Even when evidence is carefully analysed and interpreted, managers may struggle with deciding how to organize and present it to an audience for consideration in decision making and strategic planning.

If you work systematically through the process described in this book you should not be faced with imprecise or conflicting impact evidence. By thinking carefully about who you want to get evidence from, and on how best to get that evidence, you should avoid getting your evidence from the wrong people. This leaves the question of how to present your evidence.

9.8.2 What is the main message?

When reporting findings it is tempting to follow the same sequence as in the interview schedule or questionnaire. This may work, if the original lines of questioning are logical and if they provide a coherent route through the evidence. The question to ask at this point is 'What are the most important findings from this evaluation?'. You may then have to change the way in which you report this evidence to get your message across.

9.8.3 Organize your findings

The key points to consider are:

• Who needs to know? Who do you want to influence with your impact evidence and who else has a right to know?

• Most people tend to take a 'one size fits all' approach to reports of evaluation findings. The usual pattern is start with as much evidence as you can put together, follow this with detailed conclusions and then add recommendations for action. What we know from much work on research dissemination is that this approach works for almost nobody. You need to ask how the key people you want to influence take their information on board. Even in these days of advanced e-communication, people find out a lot by talking to others. Can you boil down your key messages to a set of brief oral proposals and follow this up with an e-mail? Can you get a champion with influence in your organization to speak up for you instead? Is there a decision-making meeting to influence? If so, what is the ideal length and type of report?

• Assuming that you need to produce a written report, the guiding principle is – the shorter the better. Get your messages right. For strategic decision makers: try to put over your key findings on one page, with another page for recommendations for action. For operational managers: again offer key findings, show briefly how you reached them, and tailor your recommendations for action to that level. Make the evidence that informs your findings available for the few people who want it (as an appendix or on a website). Keep the raw evidence to compare it with next time – but don’t
be tempted to show how much work you have done by circulating this.

- Ignore all these ground rules if they won't work in your organization!

Two final points:

- We said in the previous section that the UK education inspectors side-step the problem of cause and effect relationships when reporting their findings by using particular 'code words'. When they look at providing multimedia resources in schools and whether this changes anything, they report that it has

  a positive bearing upon differentiation (meeting individual pupil needs), motivating pupils, extending learning opportunities for pupils and cost-effective resource management.

They use qualitative evidence (drawn from such activities as lesson observation, interviews with teachers and scrutiny of lesson plans) when deciding whether schools are performing at a satisfactory level. Why not take a leaf from their book (or a word from their repertoire) when reporting your findings?

- We talk about impact evidence as being different in character from traditional library statistics, because it is usually gathered through social science research methods. If you use these methods it should be because you think they will tell you more about impact than traditional methods. If this is not what the people you report to are used to, you have an education job to do in persuading them that qualitative impact evidence is appropriate and, often, the best you can get. This will take time but it has to be done if you are to use such evidence for service accountability, resource negotiation or advocacy.

9.9 Sources on research methods

There are a number of more or less readable general publications on qualitative or quantitative research methods which are of use in evaluating the impact of libraries. Two works that we often recommend are Judith Bell's simple but sound introduction Doing Your Research Project written for the UK Open University (2005) and, for people who have a more specific focus, Robert K. Yin's Case Study Research (2002). If you want a more general round-up of how to design and manage library-focused research projects, Nick Moore's How to Do Research (2006) may help and there are other 'how to do it' guides available, such as Gorman and Clayton's Qualitative Research for the Information Professional (2004) or Ronald H. Powell and Lynn Connaway's Basic Research Methods for Librarians (2004).

If you would like to go into more depth about how to manage evidence, try Liz Orma's Managing Information for Research (1995).
9.10 Finding research methods e-resources

One area of the internet that has blossomed in recent years is the availability of good ‘introductory through to expert’ guidance material on all aspects of research methods, many of which are potentially useful when thinking about managing impact. Online books and journals, such as Mitchell and Jolley’s Research Design Explained or Information Research e-journal are becoming more frequent and, fortunately, this growth has been accompanied by a burgeoning of websites offering guidance to what is available. Here, the range of potentially useful disciplines and methodologies comes into play: a quick round-up of useful sites covers:

- business research (US Academy of Management’s RMWeb website of the Research Methods Division)
- the social sciences generally (Research Resources in the Social Sciences, including its own search engine)
- social research (Bill Trochim’s Center for Social Research Methods, or Resources for Methods in Evaluation and Social Research, selected by two staff at the University of New York, Albany)
- information systems research (Qualitative Research in Information Systems – a subsidiary site of MIS Quarterly, which claims to offer ‘useful information on the conduct, evaluation and publication of qualitative research’)
- educational research (offered by the BUBL Gateway educational research section, which includes some research methods resources, for example covering action research)
- research methodologies (Kay Vandergrift’s Research Methods on the World Wide Web, offering ‘sites selected because they address methodological issues and theories’).

What about the library and information research methods fraternity? Continuing the pattern of useful websites being constructed by individuals we have Researching Librarian, covering ‘resources to assist librarians undertaking research’ maintained by Kerry Smith at Mississippi State University. For the broader information services and systems field there is InformationR.net, covering information management, information science and information systems. This site offers access to a hugely valuable series of free Electronic Resources for Information Research Methods.

For public libraries, the Counting on Results project funded by the Institute of Museum and Library Services in the USA is developing new tools for ‘outcomes-based evaluation’. This project looks at the impact of public libraries on individual patrons/users in six impact areas:

- basic literacy
- business and career information
- libraries as place
- information literacy
- local history and genealogy
- general information.
The same website gives access to the report on the research conducted to produce these materials (Lance et al., 2001).

For library managers interested in reader development, the Their Reading Futures\textsuperscript{15} website has a batch of useful impact evaluation materials and the UK TeacherNet\textsuperscript{16} website has an exhaustive ‘tool kit’ for evaluating the full range of school library services.

Finally, there are additional tools and materials linked to this book. To find them go to www.facetpublishing.co.uk/evaluatingimpact.

9.11 Evidence or advocacy?

There is one danger in how we go about collecting evidence and in looking at what it tells us. Even experienced researchers can get into a mess by confusing advocacy and evidence. When we started doing social science research, one of the best pieces of advice we received was to try to treat each new research situation as ‘anthropologically strange’. To do this you start out by telling yourself that, however familiar a situation seems to be, you do not really know what is going on until you have gathered and looked carefully at the evidence. In other words, we should look at library services in the same way that a social anthropologist is expected to look at a group or tribe, by asking ‘What appears to be going on here and how can I make any sense of it?’

Most of the time this doesn’t create too many problems. If you have worked through the process so far, you should be ready to ask yourself what sorts of evidence will help to show the difference you are making. But evidence-based decision-making can rapidly degenerate into only picking evidence that will support a desired decision. Government bodies are especially likely to blur the distinction between service evaluation and advocacy – but they are not the only culprits, as our own experience shows.

Going back some years to the Effective School Library research project described in Chapter 3, we hit a problem when we reached the evidence analysis stage. Normally, there is a pattern to doing research, whether it is small-scale evaluation of a service or a large national project. After the initial energy buzz from getting the work started, you begin to get anxious (perhaps even depressed) when you see how much evidence is building up – will you ever make sense of it and will it tell you anything useful? Then, by the time you settle down to analyse the evidence and draw out the findings, the evidence speaks to you and the report writing or evidence presentation stage is usually straightforward.

When we reach this stage with the Effective School Library the evidence doesn’t fit together. We start again but still can’t make sense of what we are looking at. Then we start to think about why the analysis isn’t working – and the answer suddenly becomes clear. Because we have worked for several years with school libraries we have unwittingly shifted from a research position to an advocacy stance. Everyone in the school library advocacy field at this time is busy calling for school libraries to be turned into learning resource centres designed to support students as independent learners.\textsuperscript{17} (We now refer to this as the ‘Holy Grail model’ because it is a more or less distant aspiration that
is unlikely to be fully achieved.) As we noted earlier, this approach is fine if the school as a whole is heavily committed to a student-centred approach to learning, but our research evidence clearly shows that this model of library provision won’t work at all if the school puts a strong emphasis on traditional teaching. We want the Holy Grail model to work, but the evidence tells us something else.

As soon as we stop being hopeful advocates and turn back into realistic researchers it becomes clear that a different and more nuanced model is necessary to take account of the evidence that we have gathered. The evidence shows that schools differ in their approaches to teaching and learning and that what works well in supporting these vital activities in one school won’t work at all somewhere else. The result is a ‘horses for courses’ approach to school library development that takes full account of where the school is now, what its teaching and learning priorities are and what level and type of library service can support these priorities. We learn important lessons in this project about the need to base development decisions on the research evidence about impact.

All of which brings us to our next ‘law’:

**LAWS OF IMPACT EVALUATION 10**

Beware of the Holy Grail! To gauge the impact of a service you need to know what change it is making, not what you hope it might do — evidence not aspirations.

We have deliberately not suggested any specific activities (or steps) for you in this chapter because the whole focus is on you doing it!

### Notes

1. www.spss.com/worldwide/
2. www.qsrinternational.com/software.htm
5. www.aom.pace.edu/rmd/
6. www.researchresources.net
10. http://bubl.ac.uk/link/e/educationalresearch.html
11. www.scils.rutgers.edu/~kvander/researchmethods.html
12. www.mstate.edu/~kerjsmit/trl
15. www.theirreadingfutures.org.uk/
16. www.teachernet.gov.uk/schoollibraries