

IPDET

Handbook

Module 11

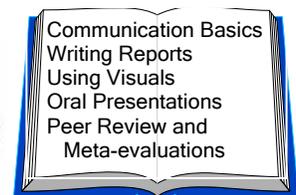
Presenting Results

Introduction

Now that you have asked questions, identified your evaluation methodologies, and analyzed your data, you are ready to present it to an audience. In this module, you will learn about ways to present your information both in written reports and audio presentations.

This module has five topics. They are:

- Communication Basics
- Writing Evaluation Reports for Your Audience
- Using Visual Information
- Making Oral Presentations
- Peer Review and Meta-evaluations.



**Presenting
Results**



Learning Objectives

By the end of the module, you should be able to:

- describe ways to develop a communication strategy
- describe how to write an executive summary
- describe how to write a report aimed at your audience
- describe when and how to use pictures, illustrations, charts, graphs, and tables
- describe how to make oral presentations.



Key Words

You will find the following key words or phrases in this module. Watch for these and make sure that you understand what they mean and how they are used in the course.

executive summary

charts

organization chart

graphs

horizontal or x-axis

vertical or y-axis

origin

coordinates

line graph

bar graph

pie chart

scatter diagram

data table

classification table or matrix

oral presentations

peer review

meta-evaluation



Communication Basics

An evaluation that is not used to inform decisions is of little value. When you design an evaluation, it helps to begin with the end (the ultimate goal) in mind: *to provide usable information to stakeholders that lead to program improvements, funding decisions, accountability, and/or learning*. Therefore, it is essential that the results of an evaluation be communicated clearly, accurately, and appropriately for the audience to make use of the information. A communication strategy is an essential ingredient in development evaluation. It is helpful to involve the stakeholders in planning the evaluation as well as to engage them in developing a process for feedback and communication. Always remember:

- that the goal is to communicate, not to impress
- to make it easy for your reader to get your point
- To keep your purpose and audience in mind.

Choose your words and visuals wisely. The real meaning of an evaluation report is not in the writer's words (or visuals) themselves but in the mind of the audience. If you want successful communication to occur, the words you use in the message must be the same in the minds of both the writer and the reader.

People interpret messages based upon their past experiences and perceptions. Different people can understand the same words or visuals differently. For this reason, you need to know as much as possible about your audience and write your report in a style that is based upon what you know about their past experience and perceptions.

Try to put yourself in your audience's place. How would you like to have this message given if you were in the audience? Did you explain everything clearly, or did you take too much for granted?

Use words that are:

- simple
- active
- positive
- short and concise
- conversational
- familiar
- direct.



Communication Strategy

The whole point of evaluation is to provide knowledge that can support decision-making such as policymaking, program changes, or program replication. When planning your evaluation, you will want to develop a communication strategy. This strategy should identify who needs to receive the results of your evaluation, in what format, and when they should receive it.

You may find that you need several different communication tools. A donor, for example, might want to receive an in-depth formal report, but your local stakeholders want to receive a shorter report with a briefing. Finally, the participants themselves might want to receive a presentation.

Use a checklist as shown in Table 11.1. to organize the communication tools you need to create, and for whom, etc..

Table 11.1: Checklist for Communication Strategy.

Audience	Product	Who is responsible	Due date
Donor	Formal Report	Team leader	6/1
Advisory board	Oral Briefing	Team member A	6/1
Local stakeholders	Executive Summary Oral Briefing	Team member B	6/1
Program staff	Copy of formal report Executive summary	Team member C	6/1
Local government officials	Oral briefing	Team leader	6/5
Participants	Oral briefing	Team leader	6/5
Development Evaluation Community	Article for publication	Team leader	8/1

If possible, you should develop your communication strategy before the evaluation to ensure that everyone involved understands what will be required or provided. During the evaluation, make sure that everyone is kept informed of the progress of your evaluation. You can use informal communications such as phone, email, faxes, and conversations during the evaluation. For your final report, you will need to choose from communications that are more formal; such as briefings, presentations, and written reports.



Be sure to include a feedback process to bring stakeholders and evaluators together to discuss the findings, insights, alternative actions, and next steps. If you plan to use large group discussions, be sure to consider all the stakeholders connected with your program and to identify any challenges in communicating evaluation results to different stakeholders.

Writing Evaluation Reports for Your Audience

The following are keys to writing a good evaluation report.

- Keep it simple.
- Avoid acronyms.
- Provide enough information about your research methods so others can judge its credibility, but do note the limitations of the evaluation.
- Place technical information in an appendix.
- Be clear about the limitations of the evaluation and caution the audience about interpreting the findings in ways that may not be valid
- Limit background information to that which is needed to introduce your report, and that makes it clear that you have an understanding of its context.
- Organize your report material into sections that relate to addressing major themes or answering research questions.
- Place major points first in each section, minor points later in the section. Open each paragraph by stating the point it addresses.
- Leave time to revise, revise, and revise!!
- Support conclusions and recommendations with evidence.
- Find a person to proof read your draft who has not seen any of this material before. Ideally, this should be a detail-oriented person, who is looking to make sure every "i" is dotted and every "t" is crossed. Ask your proofreader to tell you when you have left things out or where things are not clear.
- If possible, ask a colleague who is familiar with the evaluation process review your final draft – what is called “peer review” – and suggest any final changes to the document before you present it.



Writing the Evaluation Report

An evaluation report will usually contain an **executive summary** followed by the remainder of the report (which we call **the body of the report**).

Keep in mind that the headings you use also appear in the Table of Contents at the beginning of the report. Use descriptive headings for actual chapter and section headings. Many readers will scan the Table of Contents to quickly gain a sense of the contents by its chapter and section headings.

The Executive Summary

An executive summary provides a quick overview of the study: the issues studied, questions asked, methods used, and a brief summary of findings and recommendations. It provides a way for the reader to quickly grasp the major highlights and points. The executive summary is not just a condensed version of the “conclusions” section, nor should it be a “teaser” that promises to reveal information later. The client should be able to read the executive summary and know all the basic facts about the evaluation, and be able to find supporting data for those facts easily by using the table of contents.

According to Michael Scriven¹, the aim of the executive summary is to summarize the results and not just the process. section,

Through the whole process of evaluation, keep asking yourself how the overall summary is going to look, based on what you have learned so far, and how it relates to the client’s and stakeholders’ and audiences’ needs; this helps you to focus on what still needs to be done to learn about what matters most.

Check with your client to see if they have a particular format they prefer, and use the format that the client or audience prefers.

Length

The executive summary should be short: two pages are great and more than four are too much.

¹ Michael Scriven, *Key Evaluation Checklist*, October 23, 2005. p. 1.
http://www.wmich.edu/evalctr/checklists/kec_october05.pdf



Indented Text, Headings to the Left

Indent (space over) narrative text like this paragraph. Headings should remain tight to the left margin where they are visible, so it is easy for the reader to scan the report.

Basic Components of an Executive Summary

- Brief overview or introductory paragraph, stating:
 - purpose of the study, and the situation or issue of concern, written in such a way as to grab your reader's attention, if possible.
- Description of the evaluation, stating:
 - the major questions addressed, plus a brief statement about how the evaluation was conducted.
- Background, providing:
 - only enough information to place the study in context.
- Summary of major findings:
 - ensure that your major findings relate to your purpose or research questions as stated in the introduction. Use your judgment: what would your audience think is most important or interesting?
 - you can present individual findings in bullet format, or in a narrative
 - use simple, clear, jargon-free language
 - refer readers to the text or to an appendix for more detail, especially technical detail.
- Summary of conclusions and recommendations:
 - conclusions and recommendations should clearly relate to your findings
 - present the key evidence that supports each conclusion or recommendation.

Keep in mind, there is no single format for an executive summary; it will depend upon your audience.



The Body of the Report

The body of an evaluation report should contain the following components, usually divided into chapters (or sections of a shorter report).

- introduction
- description of the evaluation
- findings
- conclusions
- recommendations.

Introduction

The introduction to the report will discuss the purpose of the report and questions that will be answered. The introduction should create interest using what writers call a “hook” – a way of attracting attention or interest – that draws the reader into the body of the report. The following is a list of components that will be found in an introduction:

- purpose of the report
- background of the program
- program goals and objectives
- evaluation questions and goals.

Description of the Evaluation

After the introduction, you will present a *brief* description of the evaluation. It will include the following components:

- evaluation focus
- evaluation design
- evaluation questions
- methodology and strategy for analysis
- limitations of the methodology
- who was involved in the evaluation and their timeframes.

Further technical details should be contained in an appendix.



Findings

Now that your audience has the “big picture” of the evaluation you can go on to present your findings. Be sure to:

- present data so that your audience can understand them
- present data selectively: what are your most important points?
- organize the findings around study questions, major themes, or program components
- use charts and tables, or other ways to illustrate findings, to help highlight your major points.

Conclusions and Recommendations

The final part of your report will be the conclusions and recommendations. The main goal of writing your report is drawing conclusions and making recommendations. The conclusions and recommendations are often the part of your report readers go to, in order to understand the meaning of the whole report.

Conclusions

Conclusions need to be based on the evidence you present in the body of your report. When writing conclusions, consider the following²:

- Keep conclusions short (usually a couple paragraphs).
- Write using simple terms; do NOT use jargon or many technological terms.
- Emphasize what the report means.
 - focus on the main results and what they mean
 - put the analyses of hour results together
 - interpret the overall meaning of your results for the reader
 - explain the inferences you want readers to draw from your report
- Add no new details.
- Do not merely summarize the report.

² Phil Druker (2006). *Advanced Technical Writing*. Course from University of Idaho. Online at: http://www.class.uidaho.edu/adv_tech_wrt/week14/conclusion_recommendation_final_report.htm



Your conclusions must connect your findings to your research questions or evaluation focus by clearly stating the key evidence that supports those conclusions.

Recommendations

Similarly, if you have been asked to provide recommendations, you must present the evidence to support these recommendations. They should be clear and specific, identifying who should do what and when it should be done, for example, but most importantly why such recommendation should be implemented.

If you plan to make recommendations from your evaluation, include a section on recommendations. Sometimes, recommendations appear in the conclusion section; other times the recommendations form a separate section.

In a recommendation section you should answer these questions:

- What do you want the reader to do?
- What action(s) should be taken?

To make your recommendations work, you should:

- Base your recommendations on your conclusions.
- Keep them simple.
- Use a list for emphasis if you have two or more recommendations.
- Consider tone. Remember that *reports do not make decisions; people do.*

Recommendation Tracking System

If an evaluation will serve any purpose, the recommendations need to be acted upon. One way to do this is establish a recommendation tracking system (RTS). An RTS is a technique that allows stakeholders to check the implementation of evaluation recommendations. The RTS is a matrix that tracks each recommendation from an evaluation and the progress being made to implement the recommendation. The matrix tracks the following information for each recommendation:

- date of the recommendation
- who is responsible for taking action
- response/progress.



Table 11.2 shows a matrix that can be used for a recommendation tracking system.

Table 11.2: Recommendation Tracking System (RTS)

Recommendation	Date	Who is Responsible	Response/Progress
1.			
2.			
3.			
4.			

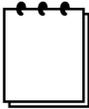
Summary of Report Writing

Table 11.3 summarizes important information about writing reports.

Table 11.3: Summary of General Guidelines for Writing Reports.

General Guideline
1. Keep the report simple, clear, and easy to understand.
2. Avoid using acronyms and jargon.
3. Provide the minimum of background to establish the context.
4. Present the most important material.
5. Place major points at the beginning of a section.
6. Organize your findings and recommendations (if any) around research questions or themes.
7. Put detailed data analysis material in a technical appendix.
8. Leave time to revise, revise, and revise.
9. Have a proofreader review a preliminary draft of the report.
10. Have a knowledgeable reader review the draft.

Case11-1 shows an example from the OET/MILIEV Programme in China. The example shows a list of the planned products that were a part of the evaluation. Notice that different audiences receive different report products based upon their needs.



Case 11-1: The ORET/MILIEV Programme in China

The plan for this evaluation included the following products as a part of the evaluation³:

- Main evaluation written report
- Field study report and desk study report
- Results from the stakeholder dialogue approach workshops
- Annexes
 - glossary of terms
 - terms of reference
 - additional statistical tables and background materials
 - notes on the evaluation methodology
 - evaluation process (procedures, persons interviewed)
 - bibliographic references
 - database for the programme
 - the Policy and Operation Evaluation Department (IOB)
 - National Centre for Science and Technology Evaluation (NCSTE).

The main evaluation report will be produced in both Chinese and English.

The evaluation report will be officially presented to:

- Dutch parliament
- National People's Congress of China
- Ministry of Finance of China
- Ministry of Foreign Affairs of the Netherlands.

Copies of the report will also be disseminated to:

- State Development and Reform Commission of China
- Ministry of Foreign Affairs of China
- Ministry of Commerce China
- Ministry of Science and Technology of China
- local financial administrations in China
- Netherlands Development Finance Company
- end users
- suppliers
- related banks
- industry associations
- research institutes
- other stakeholders.

³ Chinese National Centre for Science and Technology Evaluation (NCSTE) (China) and Policy and Operations Evaluation Department (IOB) (the Netherlands) (2006). *Country-led Joint Evaluation of the ORET/MILIEV Programme in China*. Amsterdam: Aksant Academic Publishers. p.166-167.



Using Visual Information

They say, “A picture is worth 1,000 words.” In many cases is this very true. Harry Cummings⁴ describes the following reasons to use graphics:

- add interest
- communicate information more clearly and effectively
- can be used to “lighten” the density of continuous text
- provide a focal point—attract your audience to key points.

Good graphics are:

- simple
- communicate information without needing text
- easily reproduced
- clearly labeled
- illustrate patterns that can be easily distinguished
- culturally appropriate
- correctly placed in the text
- consistently numbered and titled
- provided with correct references (sources).

When you use visual aids in a report, you must also include a list of figures (maps, graphics, tables, charts) at the beginning (or end) of the document, called the “index of tables, figures, etc.” Each individual figure or table must have:

- a title that clearly describes what idea the visual aid is attempting to communicate to the reader
- a number and name of the figure/table within the section

You will find it helpful to use visual aids to enhance your reports. Visual aids include:

- pictures and illustrations
- charts, graphs, and data charts
- tables.

⁴ Harry Cummings, *Using graphics in development evaluations*. Presentation at IPDET, July 10, 2003. Section 3, slides 2-3.



Pictures and Illustrations

Levin, Anglin, and Carney⁵ (1987) summarized key information about using pictures and illustrations in materials. They concluded two things about the effects that pictures have on the process of learning from prose.

- When the illustrations are relevant to the content, then moderate to substantial gains can be expected in learning.
- When illustrations are NOT relevant to the content, or even worse, conflicting, you can expect NO gain in learning and maybe even confusion.

When you apply this research to choosing pictures and illustrations for your reports, be sure that any pictures or illustrations that you decide to use are relevant to the content of the report. Within the report, they should be used for a reason, not just for decoration. You may want to use a picture or illustration on the cover of your report for decoration, but pictures used within the report should have a reason for being there.

If you decide to use a picture or illustration in the report, you need to use the narrative of the report to tell the learner what they are supposed to see in the picture. Direct them to the picture and tell them what to look for.

The following are examples of pictures or illustrations that you might choose to use in a report:

- maps
- sketches
- line drawings
- photographs
- graphic art.

⁵ J.R. Levin, G. J. Anglin, and R.N. Carney (1987). "On empirically validating functions of pictures in prose," in D.A. Willows and H.A. Houghton (Ed) *The psychology of illustration*, Volume 1. Hong Kong: Springer-Verlag.



Maps

According to Cummings⁶ the following are purposes to use maps to display information in a report:

- to indicate the geographic location of a program
- to provide context
- to indicate the geographic reach or spread of a program
- to serve as a basis for a sampling system for surveys (for example, populations within 5 km of a water source)
- to indicate rates or level of a phenomenon across the topography of an area using patterns or isolines (flooding, for example, or spread of a new strain of disease).

For maps to display information in a report, they must be easy to read and understand. For this reason, Cummings suggests the following guidelines for displaying information using maps:

- When maps indicate different areas, be sure the graphic patterns or colors used to show those areas can be clearly distinguished.
- If you are printing in black and white only, use different textures (dots vs. stripes, for example)
- Plan for the expenses of color printing if you want to use color to distinguish areas.

Make sure you include:

- The source of the map
- a compass arrow indicating North
- the scale (1cm = 1 km, for example).

At the front of the report, provide a list of the figures, maps, and tables.

⁶ Cummings, Using graphics in development evaluation, Section 6 slides 2-3. Presented at IPDET, Ottawa, ON, Canada, June 2005.



Sketches

As a part of data collection, some evaluators collect sketches made by participants showing their impressions.

Cummings offers the following considerations for using sketches:

- can add interest
- can personalize a report
- may be part of certain methodological approaches
- may work in situations where technical capacity does not exist to create more sophisticated illustrations
- may depend on the talent of the author
- a way of introducing humor
- may give participants a voice that would not otherwise be heard in such detail.

Remember; use sketches only if they are relevant to the content. Also remember, when you use a sketch you will also need to provide a description of what they are supposed to see in the sketch.

Figure 11.1 shows an example of a sketch drawn for one project. This sketch shows a child's impression of life before and after MICAH. In this study, drawing exercises were a part of the qualitative evaluation.



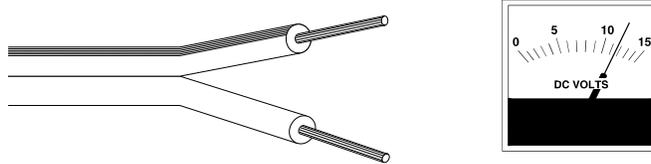
Source: Nine-year old child involved in MICAN.

Fig. 11.1: Example of a Sketch Used in an Evaluation Report.



Line Drawings

You may need to use a line drawing in a report to illustrate how something operates or how one object relates to another you may want to use a line drawing. Line drawings show the objects with simple lines and eliminate unimportant data. They simplify the situation and the objects so that the reader can focus on the key details. Figure 11.2 shows a line drawing.



Source: Electronic Journal

Fig. 11.2: Example of a Line Drawing Used in an Evaluation Report (Components of an Electrical Testing Monitor)

Photographs

Now, with the availability of digital cameras, it is easier to include digital photographs in written reports. As you probably recall from earlier in this section, choose photographs only if they are relevant to the data and add information. They should not be used for decoration alone.

Cummings⁷ suggests that photographs are best used:

- to provide context
- to indicate the extent of field work (progress)
- as a tool for direct observation (e.g., house types, crowded conditions in a neighborhoods)
- to familiarize the audience with the field situation
- to provide evidence for an evaluation.

Figure 11.3 shows an example of a photograph that might be used in an evaluation. It shows a group of secondary school children in a Community Day Secondary School involved in a cooperative learning assignment.

⁷Cummings, *Using graphics in development evaluations*. Section 6, slide 7. Presented at IPDET, Ottawa, ON, Canada, June 2005



Source: SSTEP, Malawi, (photo by D.S. Novak).

Fig.11.3: Example of a Photograph Used in an Evaluation Report (Students Working on a Cooperative Learning Assignment)

Charts and Graphs

Charts and graphs are among the many graphics that can be used very effectively to present your findings. They provide a visual representation of size, proportionality, and relationships between diverse sets of data, for example. If properly created, they will require no text to enhance their meaning. However, like all illustrative tools, they must be clearly titled, referenced, and indexed.

Descriptions of some types of charts and graphs follow.

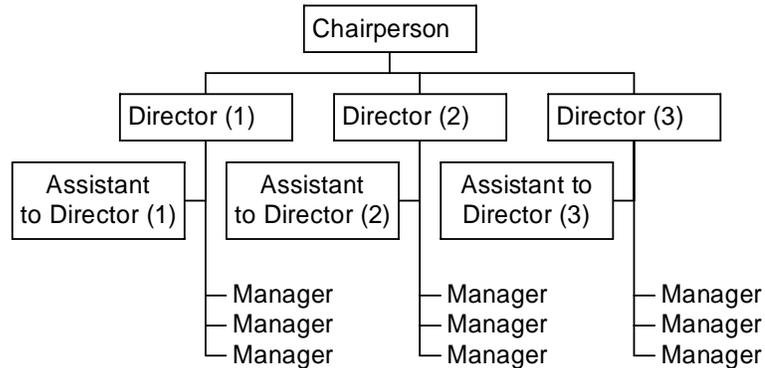
Organization Charts

You may have need to use an **organization chart** in a report to illustrate the structure of the organization you have studied. Understanding that structure may be the first step to understanding a program – for evaluators and audience alike. Organizations are often studied to determine how efficiently or effectively they operate, and such an analysis requires a clear idea of responsibilities, reporting structure, and so on, which can be clearly and concisely represented in an organization chart.

Most word processors have a feature that you can use to quickly create and revise organization charts.



Figure 11.4 gives an example of an organization chart.



Source: Fabricated information

Fig. 11.4. Example of Organization Chart.

Gantt Charts

Gantt charts are used to illustrate a time line associated with a program or an evaluation. Gantt charts are often used for planning. One of the tools often available in computer software programs, you will find Gantt charts useful for project management – especially as you plan the project. Figure 11.5 shows an example of a Gantt chart.



Activity	May	June	July	Aug	Sept	Oct	Nov	Dec
Acquisition of baseline and survey data								
Sorting, tabulating, and analyzing data								
Field work preparation								
Field work overseas								
Analysis and report writing								

Source: Fabricated information

Fig. 11.5: Example of a Gantt Chart.



Graphs and Data Charts

In our context, charts will refer to graph-like displays, such as: line charts, pie charts, and bar charts.

A **graph** is a visual representation of a relationship between, but not restricted to, two variables. A graph generally takes the form of a one- or two-dimensional figure such as a scatter diagram. Although three-dimensional graphs are possible, they are usually considered too complex to understand easily.

The Parts of Graphs

All graphs have component parts. Table 11.3 describes each of the parts of a graph or chart.

Table 11.3: Parts of Graphs

Name of Part	Description
title	All graphs and charts should have titles so that the audience can see at a glance what information is in the table
horizontal or x axis	The horizontal or x-axis is the horizontal line of a line or bar chart, representing one variable (e.g., time)
vertical or y axis	The vertical or y-axis is the vertical line of a line or bar chart, representing a second variable (e.g., costs)
origin	The origin is the point where the vertical and horizontal axis meet.
grid lines	Many charts include grid lines to help compare data by clearly showing levels. Only a limited number of grid lines should be used to avoid a cluttered look.
axis titles	The x-axis and y-axis titles are very important. They identify what is being measured and the units of measurement (years, meters, pounds, square miles, cubic tons, dollars, degrees, etc.). For example: <ul style="list-style-type: none">• Costs (in USD)• Distance (in km)
axis scales	The x-axis and y-axis need appropriate scales to show values. Chose your scale carefully to include the full range of values of your data. Chose the proportions between axis scales to best illustrate the relationship between the variables.
actual values	Many graphs and charts also include the actual values for the entries, shown as additional text within the graphic. These additions are helpful to the reader in grasping the real situation.
coordinate	A coordinate is the point on a graph where the x-value of the data meets the y-value - how this is represented (a point, a peak, the top of a bar, etc.) will depend on the type of graphic you choose.



A point on a graph represents a relationship between the two variables represented by the axes. A pair of numbers defines each point containing two co-ordinates (x and y).

Figure 11.6 illustrates the parts of a graph.

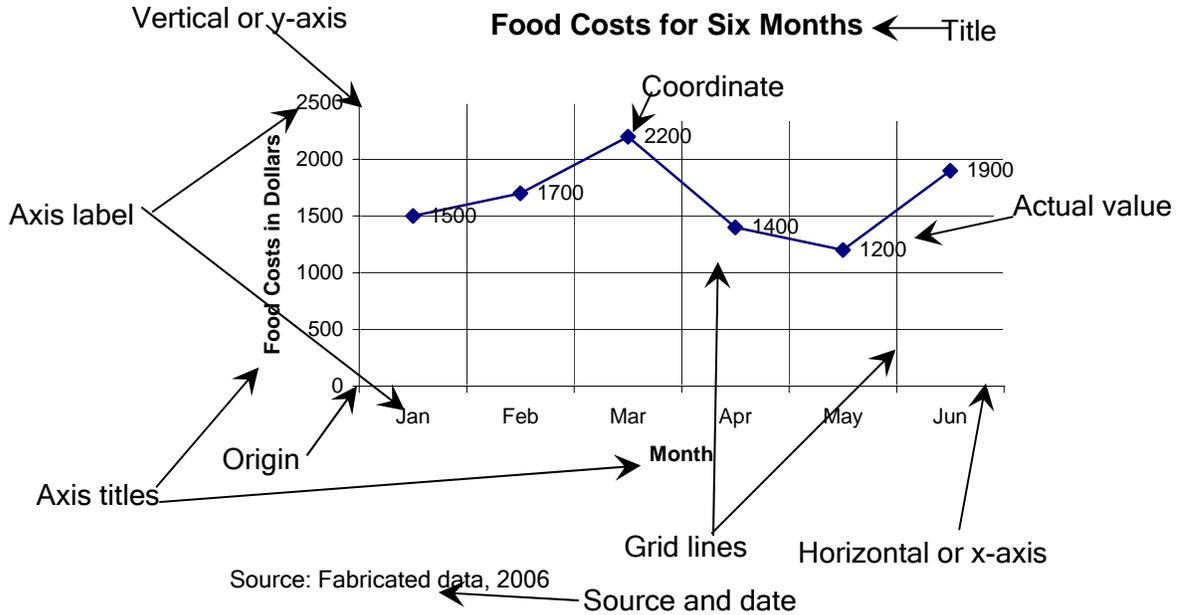


Fig. 11.6: The Parts of a Graph

The following list of standards to following when preparing graphs is adapted from Cummings⁸.

Graphs must have:

- a standard title and number
- the source clearly indicated
- the year the data was collected clearly indicated
- data in chronological order wherever possible
- data portrayed using comparable definitions where possible.

⁸Cummings, *Using graphics in development evaluations*. Section 8, slides 2-4. Presented at IPDET, Ottawa, ON, Canada, June 2005



Standards for format style of data graphics include:

- no overlapping categories (i.e., 1-19, 20-39 instead of 1-20, 20-30, etc.)
- patterns (visual textures) that are clear even when photocopied
- patterns that are clearly labelled as to meaning (use a separate **legend** or “key” outside the graph to explain (see Fig.13.8, for example)
- have no extra lines and patterns – only what is necessary
- avoid areas of black – it is difficult to reproduce accurately
- font size no smaller than 10 point, if possible, for legibility and reading ease.

Types of Graphs

There are at least three types of graphs/charts that might be useful to you for presenting your data. They are:

- line graph
- bar graph
- pie graph or pie chart.

Line Graphs

Line graphs are a way to summarize how two pieces of information are related and how they vary depending on one another.

Line graphs are usually used to show how data changes over time. For example, you might use line graph to show costs for food rising or falling over the months of the year, population changes over many years, or student grades each day over a six-week term.

Line graphs can show one item or multiple items as they change over the same period of time.

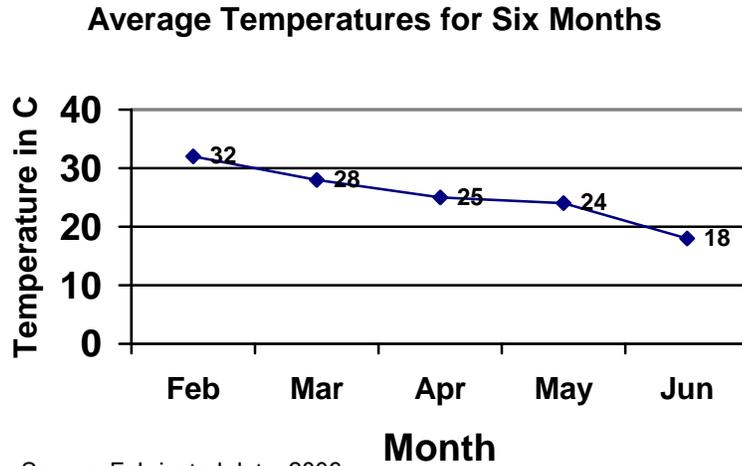
Line graphs are a good way to show continuous data, that is, data that is interval or ratio data.

Interval data are data that are divided into ranges and in which the distance between the intervals is meaningful. Examples of interval data are counts, such as counts of income, years of education, or number of votes.

Ratio data are interval data which also have a true zero point. Income is ratio because zero dollars is truly “no income.”



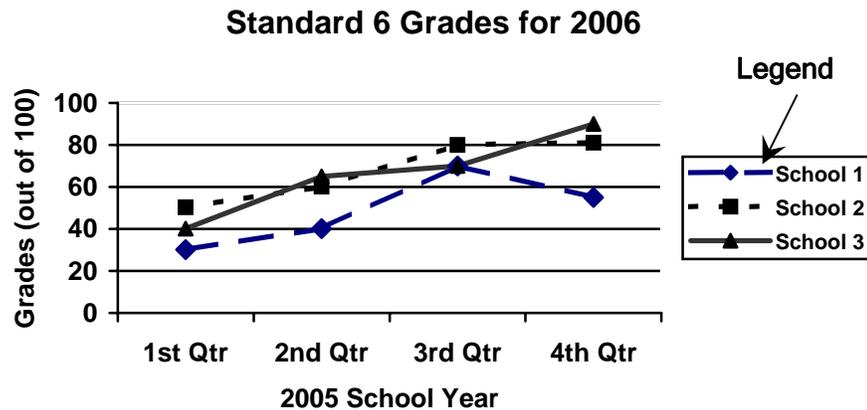
Figure 11.7 shows a line graph with one kind of data plotted over time



Source: Fabricated data, 2006

Fig. 11.7: Example of Line Graph for One Kind of Data over Time

If you want to compare more than one kind of data to a common time frame, you can also use a line graph, but you should vary the line type (dotted, broken, etc.) and add a legend to help your audience understand the information better. Figure 11.8 shows a multiple line chart and with a legend.



N=523
Source: Fabricated data, 2006

Fig. 11.8: Example of Multiple Line Chart with Legend



Bar Graphs

Bar graphs use bars (elongated rectangles) to represent quantities and let us compare numbers. They should be carefully titled to ensure that the reader understands what factors are being represented.

There are two kinds of bar graphs; single bar graphs that show information about a single variable, and multiple bar graphs that give information for more than one variable. The bars can be formatted vertically or horizontally.

Use a multiple bar graph when you are interested in two groups' data on the same topic. If you wanted to compare number of land mines recovered over time, for example, you might use a double bar graph to show the numbers in different areas of the country. For another example, you might use double bar graphs to compare the responses of boys and girls to a questionnaire.

Bar graphs are often used to show nominal or categorical data. Nominal or categorical data has no order, and the assignment of numbers to categories is purely arbitrary (i.e. 1=East, 2=North, 3=South, etc.). These categories must be clearly explained in the legend.

The following are examples of bar graphs. Figure 11.9 shows one data compared to another, in this case the score earned on a parenting test given to four pregnant women. This is an example of the use of horizontal bars.

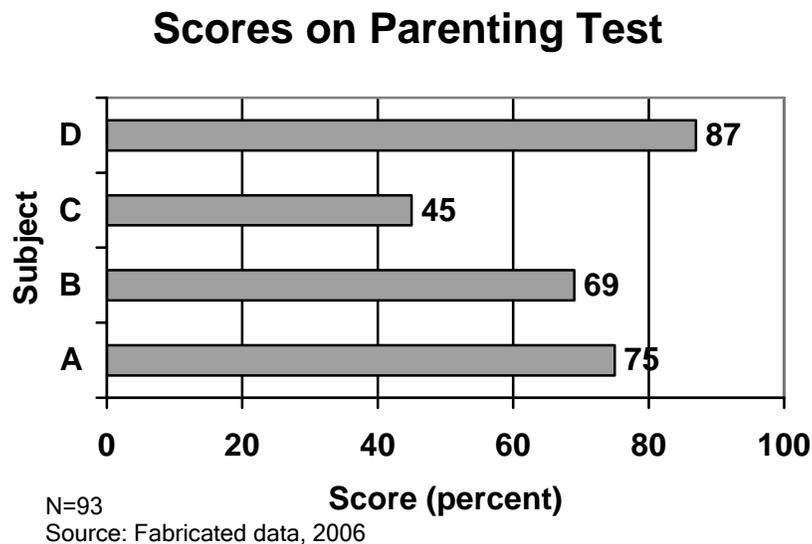


Fig.11.9: Example of Single Bar Graph in Horizontal Format.



Figure 11.10 shows an example of a multiple bar graph in vertical format.

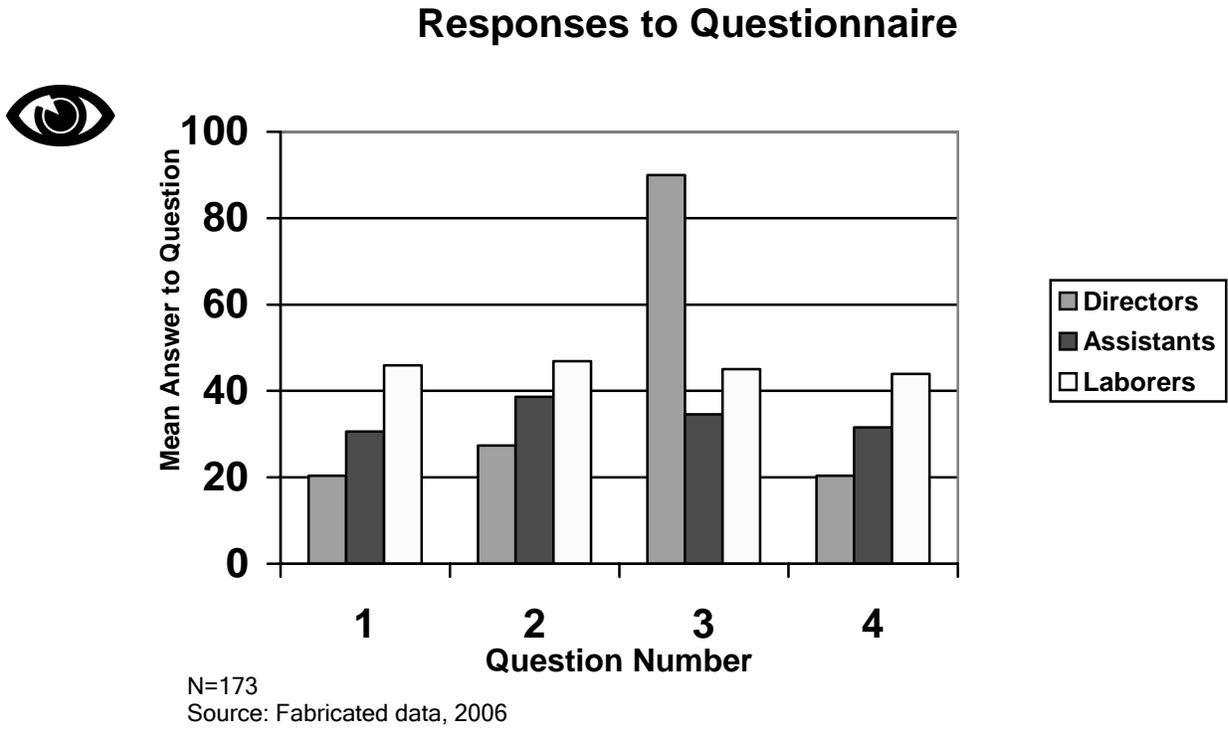


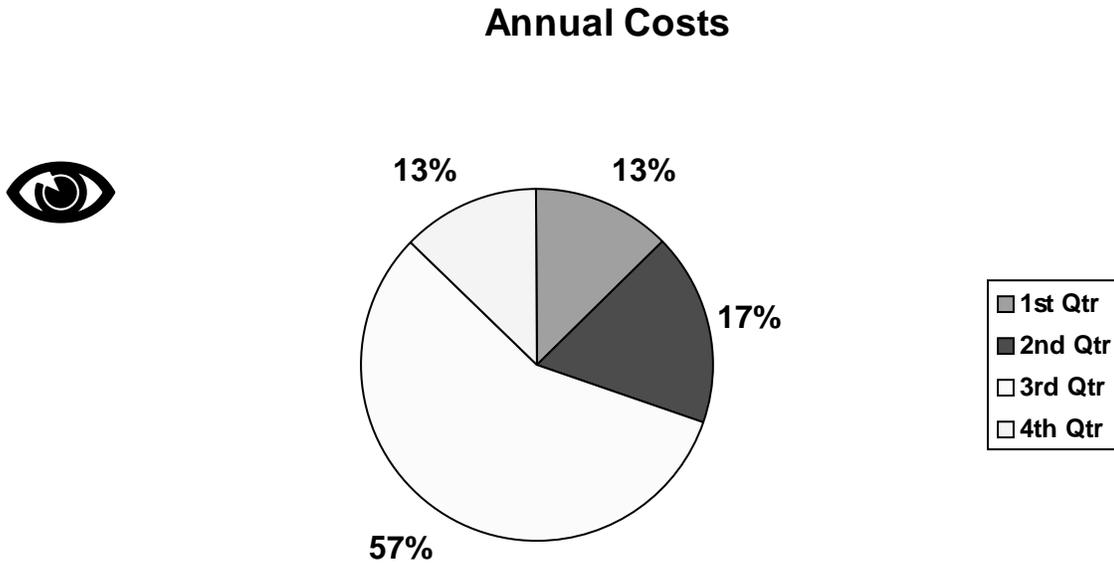
Fig. 11.10: Example of Multiple Bar Graph in Vertical Format



Pie Charts

A **pie chart** is a circle graph divided into pieces. Each piece of the pie displays the size of some related piece of information. Pie charts are used to display the sizes of parts that make up some whole. Pie charts should include a legend. Avoid dividing the pie chart into more than eight sections. Similar to bar charts, pie charts also use categorical or nominal data.

Figure 11.11: shows an example of a pie chart.



Source: Fabricated data, 2006

Fig. 11.11: Example of Pie Chart

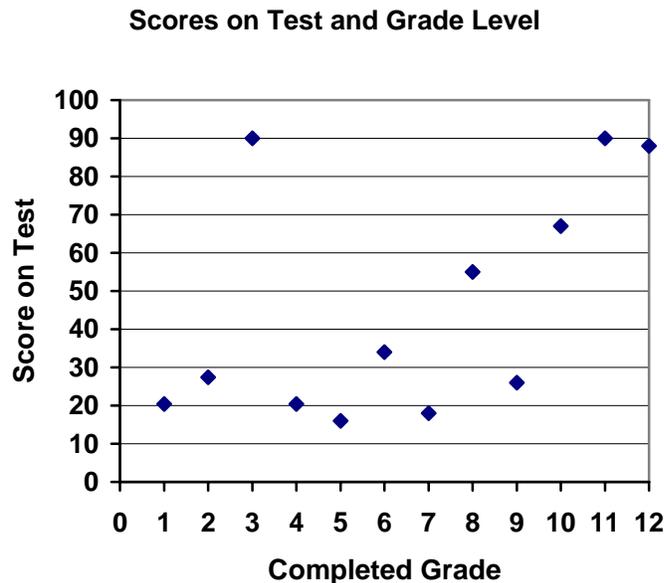


Scatter Diagram

A **scatter diagram** is similar to a line graph, except that coordinates are placed on the graph without any connecting lines. A scatter diagram is used when you want to see if there is a relationship between two different sets of data. For example, suppose a number of people were interviewed and you compared their wages to their educational levels. You can use the educational level as the x-axis. The salary or wages can use the y-axis. When the data is plotted, you should see if there is any relationship.

A scatter diagram can also be useful combined with a line diagram that plots a mean or average over time, for example, or another trend. The graph then communicates the change in the mean while showing the reader the dispersion of data around the mean. In other words, you can use this technique to combine linear and non-linear data.

Figure 11.12 gives an example of a scatter diagram. This diagram shows the scores on a test compared to the grade level the students completed.



N=377
 Source: Fabricated data, 2006

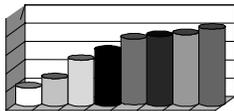
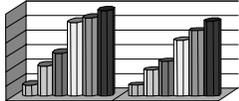
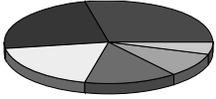
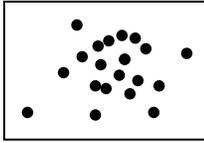
Fig 11.12: Example of Scatter Diagram



Choosing a Chart or Graph Type

Table 11.4 compares types of charts and graphs and when to use each one.

Table 11.4: Comparison of Chart and Graph Types.

If you want to:	Then choose this chart type	Example
Show trends over time	Line Chart	
Show percent distribution of a single variable	Single Bar Chart	
Compare several items	Multiple Bar Chart	
Show parts of a whole	Pie Chart	
Show trends or relationships between data. Especially useful for data that is non-linear	Scatter Diagram	



Tables

Tables can be used to present information in an organized manner. There are two types of tables that you might consider using in a report. They are:

- data tables
- classification tables (matrix or matrices).

Data Tables

Tables are often used to present numerical information. You may find it useful to present data information in tables, called **data tables**. Data tables often provide the basis for presenting data in other formats, such as line and bar charts.

Keep in mind what you learned earlier about pictures and illustrations: the audience will not automatically know what to look for in the table. When you title your table, be sure to describe what they should see and how they can relate the information.

Whenever you present data in a table, you should include the sources of the data and the year in which the data were collected.

Ehrenburg⁹ summarizes principles that should help guide you in the design of tables to present information.

- Round-off numbers to no more than *two significant figures*. This helps audience make comparisons.
- Provide sums and averages of rows and columns (as appropriate) to help audience make comparisons of individual cell entries.
- Put the most important data into columns because it allows the reader to easily make comparisons.

When deciding on the format of your table, keep in mind that too many lines (dividing cells of the table) will make it difficult to read. This is shown in the next two tables, where Table 11.5 gives an example of data in a table with many lines. Table 11.6 shows the same data in a table with fewer lines. Notice how the data becomes the focus in the second table, not the lines. Also, notice that the last row of the table shows the average for the columns with data.

⁹ A.S.C. Ehrenberg (1977). *Rudiments of numeracy*. JRSSA, 140:277-9. Also see bibliography.

**Table 11.5: Example of Data in a Table with Many Lines.**

N=10, Source: Fabricated data, 2006

Participant number	Height	Weight	Age	District
1	44	30	7.2	North
2	46	35	7.1	East
3	40	20	7.6	North
4	32	22	7.2	South
5	29	23	7.0	South
6	50	38	7.8	North
7	44	30	7.3	West
8	44	28	7.3	West
9	42	30	7.5	East
10	48	45	7.9	South
Average	38.09	27.36	6.72	

Table 11.6: Example of Data in a Table with Few Lines.

N=10, Source: Fabricated data, 2006

Participant number	Height	Weight	Age	District
1	44	30	7.2	North
2	46	35	7.1	East
3	40	20	7.6	North
4	32	22	7.2	South
5	29	23	7.0	South
6	50	38	7.8	North
7	44	30	7.3	West
8	44	28	7.3	West
9	42	30	7.5	East
10	48	45	7.9	South
Average	38.09	27.36	6.72	

Classification Tables (Matrices)

A classification table, or matrix, has a layout that shows how a list of things has been organized according to different factors. At least two sorting factors indicate similarity or difference among the things that are classified.

You might use a classification table to help illustrate complex information.



Table 11.4 in the Graphs and Charts topic shows an example of a classification table or matrix.



Illustrating Evaluation Concepts

You may also want to use graphics to help you visualize your evaluation concepts. Cummings¹⁰ suggests using graphics for showing research design, impact, and/or program logic charts in graphic form.

Illustrating Research Design

You can illustrate your research design using a diagram. In this case, we used a computer's table drawing feature to create these diagrams. Figure 11.13 shows an experimental design matrix. Figure 11.14 shows a quasi-experimental design. Notice that for this quasi-experimental design, one of the cells in the matrix is removed to show there is no comparison group for baseline data. Figure 11.15 shows a historical or retrospective design approach. This matrix has no comparison group.

	Program Group	Comparison Group
Baseline		
Time + n		

Fig. 11.13: Experimental Design

	Program Group	Comparison Group
Baseline		
Time + n		

Fig. 11.14: Experimental Design

	Program Group
Baseline	
Time + n	

Fig. 11.15: Experimental Design

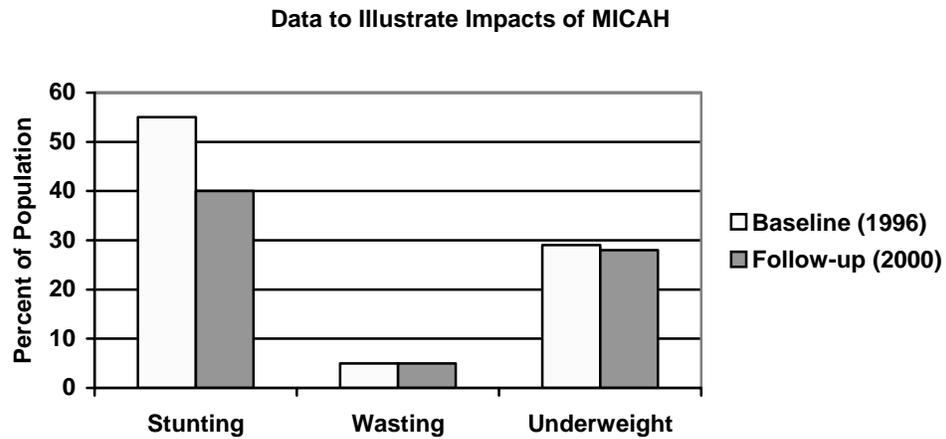
¹⁰ Cummings, *Using graphics in development evaluations*. Section 9, slides 2-13.



Illustrating Impact

You may be able to illustrate impact of an evaluation using a graphic. In this case, you set the graphic up to compare the measurement at the baseline and compare it to the results using a line or bar graph.

Figure 11.16 show a bar chart illustrating the impact of a study.



Source: World Vision, Canada, 2002

Fig. 11.16: Example of Bar Chart Showing Impact

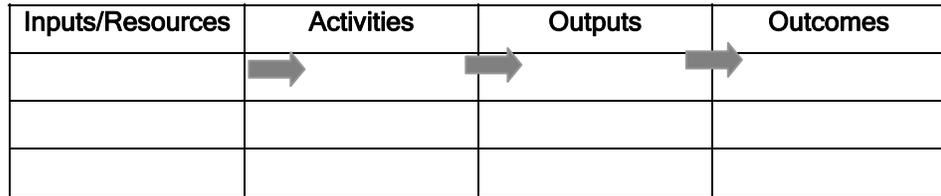
Program Logic Charts

You should include a graphics to diagram your program theory model. The graphics show the program elements and their logical links. A graphic presents a “picture” of the program and the way it is supposed to work.

The graphics can be used as a framework for program descriptions and/or for evaluation reporting.



Figure 11.17 shows an illustration of a results chain.



HCA's Standard Results Chain Model

Fig. 11.17: Example of Graphic of Results Chain

Figure 11.18 shows an example of a graphic illustration of a logic model.

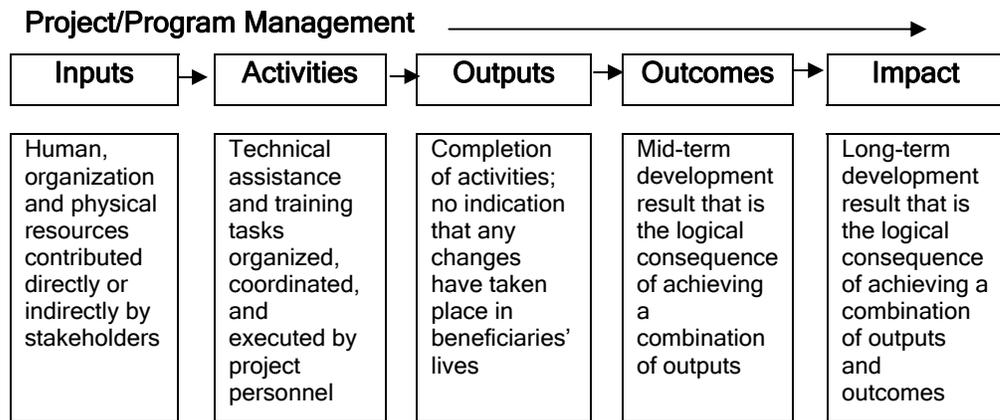


Fig. 11.18: Example of Graphic of Logic Model

Figure 11.19 shows a graphic illustration of a logical framework.

Narrative Summary	Expected Results	Performance Measurement	Assumption / Risk Indicators
Goal	Impact	Performance Indicators	Assumptions Risk Indicators
Purpose	Outcomes	Performance Indicators	
Resources	Outputs	Performance Indicators	

HCA's Recommended Model

Fig. 11.19: Example of Graphic of Logical Framework

Too Much of a Good Thing

Charts and graphics can be a valuable addition to reports and presentations, but they need to be *designed in such a way that they clearly communicate information*. Figure 11.20 shows a chart that is useless because it is trying to show too much information. The result is that it does not assist in communicating information; it may even confuse the audience.



Fig. 11.20: Example of a Useless Chart with Too Much Information



Tips and Tricks for Effective Tables and Charts

The following are important things to remember when using tables and graphs or charts.

- Use a readable typeface (font), no smaller than 10 point in size:
 - use upper and lower case lettering
 - avoid using too many sizes and types of lettering
 - make it easy for audience to read (horizontal orientation if possible, no interference from other elements of the graph).
- Avoid busy and unnecessary patterns.
- Be generous with your use of white space, to provide visual relief.
- Keep scales honest, clearly specified, and appropriately sized.
- Present sufficient data to communicate your message, but limit the amount of data you present in a single graphic.
- Your message (and the graphic that communicates it) should make sense to a reasonable person.
- Include data tables to support your charts, and place those tables in an appendix.
- Indicate the source of the information you are presenting in parentheses, directly below the table, and the right or left margin.



Summary of Graphs, Charts, and Tables

Use charts and tables to:

- Communicate complex ideas clearly, precisely, and efficiently.
- Present data in a way that makes it easy to understand.
- Give your message impact.
- Increase audience acceptance.
- Increase memory retention.
- Show the big picture, patterns, and trends.
- Provide visual relief from narrative.

A table or chart should:

- Show the data simply and accurately.
- Encourage the audience to think about the information.
- Be carefully designed to avoid presenting distorted data or communicating distorted messages about findings.
- Make large data sets *coherent – orderly, logical and, consistent in the relationships among data.*
- Encourage the reader to compare different pieces of the data.
- Enhance the statistical and prose descriptions of the data.
- Serve a clear purpose:
 - to describe
 - to explore
 - to tabulate
 - to elaborate
 - to compare
 - to *elucidate* (to make clear).



Making Oral Presentations

They say that fear of speaking in public is one of the greatest fears of most people. One way to help ease your fear is to be prepared for your presentation. Here, we will look at some of the ways you can do this. We will look at:

- planning for your audience
- preparing your presentation
- enhancing your presentation
- practicing your presentation.

Planning for Your Audience

If you will be presenting your report orally to an audience you will need to make some careful preparations.

Begin by asking the following questions about your audience and the message you want to give them.

- Who is your audience?
- What do they expect? How much detail do they want?
- Are there any specific language or technical challenges to communicating this information to your audience?
- What is the point of the presentation?
 - What are the three things you want the audience to remember?

Next, you will need to consider the logistics for the presentation.

- How much time do you have?
- What are the resources of the room for delivery of your presentation: slides, overheads, PowerPoint, poster boards?



Preparing Your Presentation

Now, you are ready to begin working on the actual presentation, always keeping your audience in mind and the message you want to send.

For your actual presentation, you will find it helpful to follow the simple rule given for making presentations.

1. Tell them what you will tell them.
2. Tell them.
3. Tell them what you told them.

What this means is that you begin your presentation by **introducing** the audience to what you want to tell them. You may want to list the major topics that you will be covering.

Once you have done a quick overview, you then go ahead **delivering** the report with the message you want to deliver to the audience. As a general rule, a short report is always better than a long one. Stick to the key issues.

After delivering the report, finish your presentation by **summarizing and reviewing** the most important information.

Enhancing Your Presentation

You may want to use visual elements to enhance your presentation. If you have key data tables or graphs, you may want to enlarge them to share with the audience.

Depending upon the resources that you have available, you may want to use: slides, overheads, PowerPoint, and/or poster boards.

If you are planning to use visuals or displays to help communicate your message, be sure to have a back-up plan in case the electricity or the equipment fails (full page sized copies included in appendix, for example, or ready to distribute).

It is a good idea to have a *few, well-chosen* handouts. Make copies of the most important information you will be sharing so that your audience can take them away with them. If you have a lot of information on your slides, your audience will appreciate having copies of these. Generally, printing two slides per page is more readable for the audience.



You might want to pass out your handouts when you speak about the information on the handout. Or you might choose to pass them out at the end of the presentation. If you are presenting complex data or tables, hand out the tables as you talk about them. Note, however, that people tend to look ahead in the handouts and you may lose some attention if you hand out presentations before you speak.

Keep the following points in mind when designing both overheads and handouts.

- Use few words.
- Use clear visuals.
- Use lots of white space.
- Limit the amount of text to no more than eight lines, for a single presentation slide or overhead.

When making overheads and handouts, keep in mind that your audience is there to *listen* to your presentation: you do *not* need to put everything into your overheads and handouts. If the audience is reading the overheads or handouts while you are presenting, they may miss important information that you will be sharing. A general rule is that any one overhead or presentation slide should have no more than eight lines of text.

Practicing Your Presentation

One of the best ways to ensure a good presentation is to practice. Rehearse your presentation alone at first, and then rehearse in front of another person or persons. Get feedback from others after your rehearsal. Adjust your presentation based on what you feel and what others have to say.

As you practice, keep track of the time you spend on the presentation. Remember, the presentation should fit into your time slot. Audiences do not like to have presentations that go over the allotted time frame.

During your presentation, talk to your audience, not to your notes. It is important that you try to make eye contact with many people in the audience.



Peer Review and Meta-evaluation

Some evaluations will undergo a **peer review**. Peer review is a process used for checking the work performed by one's equals (peers). The peers evaluate the work based upon specific criteria. Many professional occupations use peer review to allow peers to read through a work looking to identify other's errors quickly and easily, resulting in a better and more accurate final product.

Meta-evaluations¹¹ are evaluations of an evaluation. Meta-evaluations are done to identify the strengths, limitations, and/or other uses of an evaluation.

Meta-evaluations should always be performed as a separate quality control step, as follows:

- by the evaluator after completion of the final draft of any report
- whenever possible *also* by an external evaluator of the evaluation (called the **meta-evaluator**).

The primary criteria of merit for evaluations are:

- validity
- usefulness (usually to clients, audiences, and stakeholders)
- credibility (to select stakeholders, especially sources of funds, regulatory agencies, and usually also to program staff)
- cost-effectiveness
- ethicality (that there are ethical considerations that need to be addressed).

¹¹ Michael Scriven, *Key Evaluation Checklist*. October 23, 2005. p. 7-10.
http://www.wmich.edu/evalctr/checklists/kec_october05.pdf



There are five ways to go about a meta-evaluation: you and then the meta-evaluator can do one or more of the following:

- apply the Key Evaluation Checklist (KEC) list to the evaluation itself
- use a special meta-evaluation checklist (there are several available, the bibliography at the end of this module provides sources)
- replicate the evaluation, doing it in the same way, and compare the results
- do the evaluation using a different methodology and compare the results
- apply the Program Evaluation Standards to it.

It is highly desirable to employ more than one of these approaches.



Ev

Hints for Development Evaluators

Follow these guidelines for writing reports:

- Keep it simple.
- Provide enough information about your research methods so others can judge its credibility.
- Place supporting technical information in an appendix.
- Be clear about the limitations of the evaluation and caution the audience about interpreting the findings in ways that may not be valid
- Provide only the background needed to set up your report.
- Organize around major themes or research questions.
- Place major points up-front. Lead each paragraph with your point.
- Leave time to revise, revise, and revise!!
- Find a person to be a cold reader. Ideally, this should be a detail-oriented person, who is looking to make sure every "i" is dotted and every "t" is crossed. The cold reader can also tell you when you have left things out or where things are not clear. This person should also be a knowledgeable reader.
- Support conclusions and recommendations with evidence.

Mgr

Hints for Development Evaluation Managers

- Read through early drafts of the report.
- If necessary, suggest ways to improve the report by using simpler wording, more logical organization of the information, adding visuals to enhance the report.
- Read through the final draft of the report to ensure that:
 - it is easy to understand, and that major points are given priority and are clearly stated
 - the report answers all of the evaluation questions
 - it clearly states the limitations of the study
 - conclusions and recommendations are supported with evidence.



Summary



In this module, you learned how to present your report.

The following checklist lists what you should have learned in this module. Check the items you have achieved and review those that you have not.

- describe ways to develop a communication strategy
- describe how to write an executive summary
- describe how to write a report aimed at your audience
- describe when and how to use: pictures and illustrations; charts and graphs, and tables
- describe how to make oral presentations.



Quiz Yourself

Answer the following multiple-choice questions to help test your knowledge of the ways to present your information both in written reports and audio presentations.

You will find the answers to the questions on the last page of this module.

1. List the three **communication basics** listed in this module.
2. Which of the following lists the correct **order for the basic components of an executive summary** as given in this module?
 - a. brief overview or introduction, background, major findings, description of the evaluation, conclusions/ recommendations
 - b. brief overview or introduction, description of the evaluation, major findings, background, conclusions/ recommendations
 - c. brief overview or introduction, background, major findings, conclusions/ recommendations, description of the study
 - d. brief overview or introduction, description of the evaluation study, background, major findings, conclusions/ recommendations
3. Which of the following should you include in the **description of your evaluation** in the body of your report?
 - a. purpose of the report, the “hook” evaluation questions, background of the program, program goals and objectives
 - b. evaluation focus, methodology, limitations of the methodology, who was involved and timelines
 - c. connection to your research questions or evaluation focus, evidence to support the recommendations, clear and specific recommendations
 - d. present data so audience can understand; present data selectively; organize around study questions, major themes or program components; use charts and table to help highlight your major points



4. Which of the following should you include in the **findings** in the body of your report?
 - a. purpose of the report, the “hook” evaluation questions, background of the program, program’s goals and objectives
 - b. evaluation focus, methodology, limitations of the methodology, who and when
 - c. connect to your research questions or evaluation focus, evidence to support the recommendations, clear and specific recommendations
 - d. present data so audience can understand; present data selectively; organize around study questions, major themes or program components; use charts and table to help highlight your major points
5. Which of the following should you include in the **introduction** in the body of your report?
 - a. purpose of the report, the “hook” evaluation questions, background of the program, program’s goals and objectives
 - b. evaluation focus, methodology, limitations of the methodology, who was involved and timelines
 - c. connect to your research questions or evaluation focus, evidence to support the recommendations, clear and specific recommendations
 - d. present data so audience can understand; present data selectively; organize around study questions, major themes or program components; use charts and table to help highlight your major points
6. What type of visual is the best to use to display information about **how an organization spent its income for one year**?
 - a. line graph
 - b. bar graph
 - c. pie chart
 - d. scatter diagram
7. What type of visual is the best to use to display information about **number of land mines in different areas of the country over time**?
 - a. concept matrix
 - b. multiple bar graph
 - c. pie chart
 - d. scatter diagram



8. What type of visual is the best to use to show **relationships between/among different concepts**?
 - a. concept matrix
 - b. bar graph
 - c. data table
 - d. scatter diagram
9. What type of visual is the best to use to display information about **pupil attendance percentages, for one class over a year**?
 - a. line graph
 - b. multiple bar chart
 - c. pie chart
 - d. scatter diagram
10. What type of visual is the best to use to display information about **the average age of women when they have their first child**?
 - a. line graph
 - b. bar graph
 - c. pie chart
 - d. scatter diagram

Reflection



Think back about evaluation presentations you have read or have written; or have attended or presented.

- What was the best evaluation report that you have read? What made it the best?
- What have you learned that would help you write a better evaluation report?
- What have you learned that would help you present a better evaluation report?



Application Exercise 11.1

Review Evaluation Reports



Instructions:

Develop a list of criteria for judging an evaluation report in terms of how well it conveys evaluation findings to its intended audience. Ease of reading, clarity, use of tables of charts, and visual appeal might be among these criteria.

Based on those factors, assess a report that has recently been written in your field (in a group, if possible). You should give it an overall grade based on your assessment of each of the criteria you identified: A for excellent, B for very good, C for adequate and NI for needs improvement.

Next, identify the most important improvements that could be made to the report so that it more effectively communicated the evaluation findings.

If possible, present your findings to a group of colleagues.



Application Exercise 11-2 Tailor Reports to Audiences



Instructions:

For the report you reviewed in Exercise 10-1, identify the various audiences that might be interested in the evaluation findings and/or the methodology. What information needs and other characteristics distinguish each audience group you have identified? Consider:

- Which aspects of the evaluation will be of greatest interest to each audience group and why?
- At what point would this information be most useful to them?
- What level of detail will be of interest to each audience group? [Consider the likely levels of expertise in international development, research methods, and evaluation; also the probable time available to peruse the report; you may think of other factors.]
- What is the best way to communicate your findings so that it fits each group's needs and preferences? [Consider literacy level, time available, likelihood of wanting to raise questions, any communication preferences you might be aware of, technical resources and challenges, etc.]

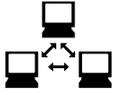
Based on your analysis, create a checklist to show which audiences should receive what kind of report/presentation, when, and from whom.



Further Reading and Resources:



- Cummings, Harry (2003). *Using graphics in development evaluations*. Presentation at IPDET, July 10, 2003.
- Ehrenberg, A. S. C. (1977). *Rudiments of numeracy*. *Journal of the Royal Statistical Society A*, 140, 277-297. Cited by Wright, P. (1982). A user-oriented approach to the design of tables and flowcharts. In D. H. Jonassen (Ed.) *The technology of text: Principles for structuring, designing, and displaying text* (pp317-340). Englewood Cliffs, NJ: Educational Technology Publications.
- Lester, P.M. (2000). *Visual communication – Images with messages* (2nd ed). Canada: Wadsworth.
- Levin, J. R.; Anglin, G. J.; and Carney, R. N. (1987), “On empirically validating functions of pictures in Pprose.” *The Psychology of Illustration: Vol 1*; Willows, D.A. and Houghton, H.A., editors. Hong Kong: Springer-Verlag.
- Torres, R., Preskill, H.S., and Piontek, M.E. (1996). *Evaluation strategies for communicating and reporting*. Thousand Oaks, CA: Sage Publications.
- Tufte, E. R. (2006). *Beautiful Evidence*. Cheshire, CT: Graphics Press.
- Tufte, E. R. (1983). *The visual display of quantitative information*. Cheshire, CT: Graphics Press.
- Tufte, E. R. (1990). *Envisioning information*. Cheshire, CT: Graphics Press.
- Tufte, E. R. (1997). *Visual explanations: Images and quantities, Evidence and narrative*. Cheshire, CT: Graphics Press.
- Wallgren, A. et al (1996). *Graphing Statistics and Data*. Thousand Oaks, CA: Sage Publications.



Websites:

11 Tips for Creating Tables in Word 2002, by Katherine Murray

<http://www.microsoft.com/office/previous/xp/columns/column13.asp>

National Center for Education Statistics. *Create a graph.*

<http://nces.ed.gov/nceskids/Graphing/>

Oldfield, F. (2001) Educational Resources for Adults (ERforA): Learning about Charts and Graphs

<http://www.fodoweb.com/erfora/readtext.asp?txtfile=communications/charts.toc>

OSHA Office of Training and Education (1996, May). *Presenting effective presentations with visual aids.* U.S. Department of Labor. Online:

<http://www.osha-slc.gov/doc/outreachtraining/htmlfiles/traintec.html>

Scriven, Michael, *Key Evaluation Checklist*

http://www.wmich.edu/evalctr/checklists/kec_october05.pdf

Statistics Canada: Using Graphs

<http://www.statcan.ca/english/edu/power/ch9/using/using.htm>

Zawitz, M. W. (2000). Washington Statistical Society Methodology Seminars Data Presentation: A guide to good graphics, Bureau of Justice Statistics.

<http://www.science.gmu.edu/~wss/methods/zawitz>



Answers to Quiz Yourself



1.
 - The goal is to communicate, not to impress.
 - Make it easy for your reader to get your point.
 - Keep your purpose and audience in mind.
2. d
3. b
4. d
5. a
6. c
7. b
8. a
9. a
10. d

 To continue on to this
 **Module's Presentation Slides** click here

 To continue on to the
 **Next Module** click here

 To return to the
 **Table of Contents** click here