

Course notes for participants

Supplementing the ESSENCE good practice document



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The research presented in this publication was carried out with the financial assistance of Canada's International Development Research Centre. *Using the five keys to improving research costing in low- and middle-income countries:*A resource pack for trainers (2014) and *Using the five keys to improving research costing in low- and middle-income countries: Course notes for participants* (2014) by ESSENCE on Health Research is licensed by the IDRC Canada under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License based on work at http://www.who.int/tdr/publications/nontdrpublications/essence-framework.

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Using the five keys to improving research costing in low- and middle-income countries

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PREFACE

ESSENCE on Health Research is an initiative by funding agencies to improve the coordination and harmonization of research capacity investments. Recognizing the particular complexities involved in health related research, ESSENCE members embrace the principles of donor harmonization and country alignment expressed in the 2005 Paris Declaration on Aid Effectiveness and in the 2008 Accra Agenda for Action. Following these principles, we try to align our work with the priorities of the countries in which we work, and aim to harmonize our activities and procedures, to facilitate complementarity among ourselves and to reduce the administrative loads on funding recipients.

In 2012, we published the Five Keys To Improving Research Costing In Low- And Middle-Income Countries in our series of Good Practice Documents. Since then, the Five Keys have been presented to audiences in many parts of the world. In this process, it has become clear that supplementary training materials would enable us to share the message of the Five Keys more widely. The ESSENCE Secretariat therefore supported the production of a Resource Pack for Trainers as well as these Course Notes for Participants. It is our hope that these resources will further empower research practitioners to build strong foundations of knowledge and practice in the area of research management.

But what are some of contextual demands to which this training responds? There are at least two dimensions to this. On the one hand, international funding agencies, including the ESSENCE members, have found that, to ensure the sustainability of many of the research institutions they support, research costing requires strengthening. On the other hand, as these research institutions boost their competitiveness, and are able to accept higher levels of funding, their need for clear policies and guidelines on research costing has grown.

Although funders and research institutions may sometimes find it difficult to agree on what topics or lines of enquiry should be funded, research costing is an area in which collaboration is not only possible, but of benefit to everyone.

These resources are therefore designed to support training related to research costing, and can be used to assist trainers to deliver short presentations as well as more in-depth workshops. The Pack supplements the *Five Keys* document by providing additional examples and activities to guide trainees through various processes that will help them to grapple with and grasp the concepts. We're aiming to help research practitioners, from heads of faculties to new entrants to the research or finance office, to acquire new insights and skills, as well as to equip colleagues who already have experience in this field with the resources they need to teach others.

ACKNOWLEDGEMENTS

ESSENCE acknowledges all the organizations and individuals that participated in the development of these training resources, including the participants that attended the resource evaluation workshop in Cape Town, South Africa, at the Southern African Research and Innovation Management Association conference in October 2013.

Special thanks to the following experts for their contributions: Dr Karin Dyason, Southern African Research and Innovation Management Association; Dr Robin Drennan, University of the Witwatersrand; Pieter du Plessis, University of the Free State; Dr Jose Jackson-Malete, University of Botswana; as well as Karen Noble and Caitlin Cook of the Wellcome Trust and Nicole Généreux of the International Development Research Centre.

ESSENCE especially acknowledges the support from the Wellcome Trust, Canada's International Development Research Centre (IDRC) and the Special Programme for Research and Training in Tropical Diseases (TDR) at the World Health Organization (WHO) for funding the development of this material and Research Africa for preparing the resources. All ESSENCE member agencies, too, are acknowledged for their participation in and support for the project.

INTRODUCTION

These Course Notes have been developed to support research managers from low- and middle-income countries who attend the longer training courses (that is, the three-hour or three-day workshops) on research costing within their institutions or research networks. The contents of the course, and these Course Notes, are an extension of the ESSENCE on Health Research good practice guide, *Five Keys to Improving Research Costing in Low- and Middle-Income Countries*.

If you are attending a three-hour workshop, your facilitator will guide you to the relevant sections of these Course Notes to refer to, as you will probably not have time to cover all of the exercises and videos during your workshop. However, should you feel inspired to complete the exercises and role-plays or to view the full suite of video interviews, to cement the key concepts covered by your facilitator, you are encouraged to do so by accessing the materials from the ESSENCE on Health Research website (http://www.who.int/tdr/publications/five_keys/en/index.html).

So why is research costing a critical issue for researchers, research administrators, and financial controllers at research institutions? Because the success and sustainability of research relies on adequate financial resources being available to support both the research projects and the research institutions within which the projects are conducted. Therefore, it is essential that researchers and research managers, as well as the relevant management and administrative staff, develop a good understanding of what research costing entails, and why it is necessary for research costs to be accurately calculated.

Research costing is a critical issue for researchers, research administrators, and financial controllers at research institutions. Why? Because the success and sustainability of research relies on adequate financial resources being available to support both the research projects and the research institutions within which the projects are conducted. Therefore, it is essential that researchers and research managers, as well as the relevant management and administrative staff, develop a good understanding of what research costing entails, and why it is necessary for research costs to be accurately calculated.

What you will learn in a five keys training workshop

By reading the *Five Keys* document, and participating in this training workshop, you will:

- Learn about the Five Keys, and how implementing them has helped to improve research-costing practices in some research institutions.
- Deepen your understanding of research costing and work through some practical examples and calculations.
- Have time to consider if applying the Five Keys might benefit your institution, project, or research network.

How to use these notes

The notes have been put together to give you:

- Some practical examples to work through.
- Some notes that you will need for group activities.
- A quick quiz that you can use during or after the course to check your knowledge and understanding.
- The solutions to some of the practical examples that may be discussed during the course.
- Some reminders about the main points made in the video/s, and space to make notes about new information that you might learn.
- Reminders of the main points made in slide presentations, and space to add your own notes about these.

THREE-HOUR SEMINAR:

Designed for 5 to 15 participants to:

- Develop a basic understanding of the basic concepts in the Five Keys good practice document, including in the case studies.
- Work through a few of the practical examples of research costing given in the Course Notes (done individually or through interaction with other participants).
- Discuss how the Five Keys apply to their institutions, projects, or research networks.

THREE-DAY WORKSHOP:

Designed for between 5 and 15 participants, to:

- Develop a thorough understanding of the contents of the Five Keys document, including the case studies provided with each Key.
- Discuss how the Five Keys apply to their institutions, projects, or research networks.
- Work through practical examples of research costing provided, and some that are drawn from their own institutions.

NOTES ON THE INTRODUCTORY SLIDES *

* Note to participant: The slides included below are identical for the three-hour and three-day courses.

Sustainable research institutions Outputs Inputs Good students Good graduates Good academics Research publications Protected innovations New academics Income New ideas Student fees Knowledge Grant funding Solutions Subsidies Balance is required

This workshop's central questions

- How sustainable is your institution?
- How do your research-costing practices affect your sustainability?



My notes		

NOTES ON KEY 1: DEFINING AND CATEGORIZING DIRECT AND INDIRECT COSTS



Direct costs

- Direct costs are items that are required to implement the project. These costs are incurred as part of the project work plan and therefore can be directly linked to a particular project.
- Direct costs can include:
 - Personnel
 - Equipment
 - · Materials and supplies
 - Travel costs
 - Bursaries

Indirect costs

(overheads, office costs, administrative costs)

Indirect costs are difficult to allocate accurately to a particular project as they are often shared by several projects

They are the less obvious or hidden costs at least to non-accountants

Items allocated to indirect costs differ depending on an organization's structure, programs, and accounting system, but some examples are:

- IT maintenance
- Administrative costs
- Legal services
- Water, electricity, rent, building maintenance
- · Organisational publicity and reputation management

Indirect-cost rates

- Because indirect costs are difficult to allocate accurately to a particular project, organisations calculate a standard rate that is applied to all projects.
- An indirect-cost rate is a method of charging individual projects for their share of indirect costs.
- The rate is usually a ratio between the total indirect expenses and the direct costs.
- The items allocated to indirect costs differ depending on an organization's structure, programs, and accounting system.
- Understanding how your institution's indirect-cost rate is derived is the key to adequate cost recovery, and thus to ensuring your organisation's sustainability.

Calculating an indirect-cost rate

 The ratio of indirect costs to direct costs is calculated as follows:

 $\frac{Indirect\ costs}{Direct\ costs} \times 100 = Indirect\ cost\ rate$

- The indrect-cost rate is the ratio of indirect costs to direct costs expressed as a percentage.
- Indirect costs are usually lower than direct costs.

Consider...



Are the full costs of your research being met by the funds raised for research (irrespective of the source)?

If YES:

- How are indirect costs being recovered by the organization?
 - How is the organization distributing the recovered costs?

If NO:

- Does your organization have an indirect-cost rate that is applied to all research projects?
- Does your organization have criteria or processes for deciding whether to submit research proposals to funders that do not cover the full indirect-cost rate?

My notes

NOTES ON KEY 2: DETERMINING INDIRECT-COST RATES



Calculating an indirect-cost rate

Calculations need to be

- Accurate
- Defensible based on audited financial results
- Updated regularly (annually)
- Flexible enough to suit the requirements of different funders

It is probably best to calculate one rate for the whole institution but, in large institutions, it may be necessary to vary the rate across faculties

Four approaches to calculating IRC

Based on the

- 1. Total direct costs
- 2. Modified (or reduced) total direct costs
- 3. Remuneration costs only (even more modified than 2)
- 4. Facility costs only



Using the appropriate methodology

- Different methods might be better for dfferent contexts
- Sometimes you want to keep things simple
- Sometimes you are willing to keep the budget low to help you establish a relationship with a new funder or a prestigious research partner
- Sometimes a method is determined by a funder or by your institution's management team

My notes

Costing versus pricing

- The cost of a project is not necessarily the same as the price charged to the client for the project
- The price will depend on the type of project, the funding stream, the reasons for doing the project, etc.
- · Thus, there may be reasons to conduct a project
 - for profit (price is more than the cost)
 - on a breakeven basis (the price is equal to the cost)
 - at a loss (price is less than the cost)

Reasons for pricing projects differently

FOR PROFIT	BREAKEVEN	LOSS
(Price > Cost)	(Price = Cost)	(Price < Cost)
Contract research Consulting	Research grants Donations	Research grants Donations
Clients benefit from the prestige of your institution Profits are allowed	Funding stream does not allow any profit to be made by the institution but the research benefits the institution	The project brings other benefits, such as students, equipment, capacity, etc.

My notes	

NOTES ON KEY 3: INSTITUTIONAL MANAGEMENT OF EXTERNAL RESEARCH GRANTS



Pre-gra	nt period	Post-grant period
Grant development Identify funding opportunities Disseminate information Liaise with funders Help with proposals and budgets	Grant submission Facilitate peer and ethics reviews Facilitate institutional sign-off Send and follow up on proposals	Grant implementation and stewardship Ensure financial compliance Monitor progress Facilitate financial reporting Project closure

Consider...

- Considering the complexity and competition of the funding environment, can individual researchers manage their own research as well as apply for and manage research grants?
- What is currently in place to support researchers in the pre- and post-award processes? Is this sufficient?
- What organisational changes could strengthen the coordination and management of research funding in my institution?

NOTES ON KEY 4: DEVELOPING THE RELEVANT SKILLS AND COMPETENCIES



General responsibilities

- Develop policies and procedures
- Develop processes, systems and supporting tools
- · Drive policy implementation
- In-house training to build research capacity
- Build relationships and networks to advance research
- Pre-award grants management (proposal development, including budget development and proposal submission)
- Award negotiation and acceptance
- Post-awards grants management (grant implementation and stewardship)

Skills and competencies

- Understanding of the institution's strategic priorities and processes
- Awareness of research processes and of what motivates researchers
- Ability to formulate policies, and to design and implement effective workflow processes and procedures
- Thorough understanding of how direct and indirect costs are defined, calculated, charged, and allocated
- Capacity to monitor and apply institutional and funder regulations
- Ability to coordinate and document institutional approval for grant proposals
- Awareness and experience of grant-seeking techniques and tools

Skills and competencies (continued)

- The ability to assess project budgets, and master the relevant financial-management skills
- Strong organizational, analytical and project-management skills
- Good interpersonal and negotiating skills, including the ability to foster respect for cultural and individual differences
- · The ability to communicate technical and budgetary details
- The ability to multi-task and meet deadlines

NOTES ON KEY 5: BRIDGING THE GAPS BETWEEN FUNDERS AND RESEARCH INSTITUTIONS



The gap between funders and grantees

- Policies and practices Research institutions among funders, or in some cases even within funding organisations, differ vastly when it comes to funding indirect research costs.
 - in low- to middleincome countries could benefit significantly if they were more successful at recovering indirect costs.

Consider...



- What do funders expect?
- · What are we not doing that they want us to do?
- · How are we currently managing relationships (strategically and operationally)?
- · Where can we improve?

My notes		

Dr. Garry Aslanyan, Coordinator, ESSENCE on Health Research initiative, Special Program the Special Programme for Research and Training in Tropical Diseases, TDR, World Health Organization, Switzerland

- Why research costing is important for the sustainability of research now and in future
- The challenges of research costing in low- and middle-income countries
- How funders and research institutions are changing the way they think about research costing
- The importance of research professionals being aware of the concepts in the Five Keys
- Where to find more information

My notes	

Dr Robin Drennan, University of Witwatersrand, South Africa

- Why accurate research costing is important for sustainable research institutions
- Why the budget is a critical part of a research project proposal
- The building blocks of a good project budget
- The difference between direct and indirect costs
- How an indirect-cost rate is applied to a research project budget

My notes	

Pieter du Plessis, University of Free State, South Africa

- Why accurate research costing is important
- How one university developed its approach to recovering indirect-costs
- How one university calculates its indirect-cost rate
- The difference between research costing and research pricing, and the university's approach to full cost recovery

My notes	

Dr Jose Jackson-Malete, University of Botswana, Botswana

- How the University of Botswana encourages researchers to submit new grant applications
- When the university recognized research costing as a policy issue
- How the university defines direct and indirect costs
- What the university does with the revenue it recovers from research projects for indirect costs
- How research grants are managed and the challenges involved
- Who sets the guidelines, policies and procedures for grant management

My notes	

Karin Noble and Caitlin Cook, Wellcome Trust, UK

- What the Wellcome Trust is
- Why the *Five Keys* document is important to funders, and the research institutions they support
- The Wellcome Trust's approach to the funding of overheads or indirect costs
- How research institutions can communicate with funding agencies if there are differing approaches to the funding or recovery of indirect costs

My notes	

Nicole Généreux, International Development Research Centre, Canada

- What the International Development Research Centre is
- Why the *Five Keys* document is important to funders, and the research institutions they support
- The International Development Research Centre's approach to the funding of overheads or indirect costs
- Key tips for developing a project budget
- How research institutions can bridge the gap with funding agencies if there are differing approaches to the funding or recovery of indirect costs

My notes	

ROLE-PLAY

The Interview

Wanted: Grants Manager

The Research Support Office at the University of DC requires the services of a grants manager to oversee the portfolio of research contracts at the university, and to support researchers to identify new funding opportunities.

The successful candidate will work on tasks related to both the preand post-award phases of research development, and help to build the institution's capacity to manage locally and internationally funded grants efficiently and effectively. Our portfolio of research grants includes private foundations and public funding agencies, and covers the full range of research disciplines in the university's faculties and centers.

For more information about this position, contact theinterviewer@udc.org.

QUESTION	RESPONSE (jot notes here)
Why do you think universities and research institutes conduct research?	
What do you consider to be the main roles of a research-support office in a university?	
What specific knowledge, skills, and abilities do you have that will help our research-support office to improve the performance of our university's researchers?	
Describe the key support roles that you think a research manager can play before and after a research grant is awarded; that is, in the pre- and post-award periods?	
What are some of the personal qualities or attributes that you think an effective research manager needs?	

ROLE-PLAY

A dialogue between funders and research institutions

Three major global research funders have co-designed a new research-funding program and have identified three successful research proposals for receipt of the first funding tranche. At a pre-award consultative meeting between the funders and the three successful project coordinators, one agenda item concerns the indirect-cost recovery rate put forward by the funders in the call document. The funders have agreed that their rate for the re-imbursement of indirect costs will amount to 9 per cent of personnel costs only, and that recipients will not be able to include the costs of items such as equipment purchased, travel and subsistence, consultancies used, or conferences attended when calculating their indirect-cost percentage. After serious complaints from one of the project coordinators, which threatened to derail the launch of the research program, the funders agreed to meet with the recipients to discuss the terms and conditions of the funding.

Working in groups, each representing a different party in the discussion, you will be given some information about your own group's position. Prepare a short submission for the meeting. Each group will have a maximum of two minutes to present their case. Then you will have about ten minutes to discuss the merits of the different arguments and try to reach a solution. The aim of the role-play is to see how close you can get to a negotiated agreement on an appropriate rate or find an alternative proposal that will help the group to reach consensus.



A QUICK QUIZ TO TEST YOUR KNOWLEDGE OF THE FIVE KEYS

- 1. Which of the following is *not* one of the five keys?
 - A. Defining and categorizing indirect costs
 - B. Budgeting for effective research outputs
 - C. Developing relevant skills and competencies
 - D. Determining indirect-cost rates
- 2. Which of the following makes the recovery of indirect-costs difficult?
 - A. Funders have diverse policies and practices related to the reimbursement of indirect costs
 - B. The value of indirect costs are negligible compared with direct costs
 - C. Indirect costs are easily calculated and are uniform for all research institutions
 - D. All of the above
- 3. In one of the case studies related to Key 1 (p.11 in the *Five Keys* document), the International Development Research Centre (IDRC) is noted to support indirect costs. Indicate which costs they cover by marking either true or false for each item in the list below.

Item	True	False
Computer equipment used for recording grant disbursements		
Safety and security		
Stationery and other office supplies		
Building maintenance		

- 4. Which approach should be used to determine indirect costs on an IDRC-funded project?
 - A. Using remuneration only
 - B. Using modified total direct costs
 - C. Using total direct costs
- 5. Using the University of the Free State case study as a guide, match the following costs to the correct classification.

Cost
Research development personnel costs
Council funded activities
Specifically funded activities
Inefficiencies

Classification
Restricted funds
Indirect costs directly related to research
% adjustment up or down
Unrestricted funds

- 6. Which of the following were key management lessons for Stellenbosch University in the implementation of its full-costing model?
 - A. Researchers and clients need to be 'educated'
 - B. Researchers fear being priced 'out of the market'
 - C. No 'one-size-fits-all' solution available
 - D. All of the above
- 7. Which of the following statements below best describes the purpose of the grant management function?
 - A. The grant management function ensures that externally-funded research contracts are delivered on time and to budget
 - B. The purpose of the grant management function is the auditing of project accounts, liaison with funders, and the management of research performance
 - C. The grant management function forms part of the organizational design of the institution, and aims to build effective policy and good practice in the management and development of the institution's research funding framework
 - D. The grant management function is intended to ensure all indirect costs are recovered from donor-funded research projects
- 8. Which one of the following statements is true?
 - A. All funders use a standard approach to indirect-cost recovery
 - B. Indirect-cost recovery rates are typically set once and revised every 10 years
 - C. Indirect costs of a university or research institution can be calculated using the organization's financial statements
 - D. Costing approaches have been effectively coordinated throughout the European Union
- 9. Using the skills-development case study (p. 24 of the *Five Keys* document), indicate which of the following are the main objectives of the Medical Education Partnership Initiative by marking the following statements either true or false.

Item	True	False
Improve the quality of clinical education and care		
Offer assistance in locating potential partners		
Enhance the recruitment and retention of qualified academic staff		
Encourage qualified students to stay in their home countries		

10. What skills or abilities in the list below are characteristic of an effective grant manager?

- A. The ability to assess project budgets, and mastery of relevant accounting, invoicing and financial-management skills
- B. Good interpersonal and negotiating skills, plus an ability to foster an atmosphere which recognizes and respects cultural differences
- C. The capacity to monitor and apply institutional and funder regulations
- D. All of the above

DOING THE CALCULATIONS

The calculations included in this section provide a set of graded practical examples for trainers to work through with participants. The level of difficulty increases from one example to the next. The examples and solutions that follow are included in the Participant's Notes.

Example 1: Calculating indirect costs using a given indirect-cost rate

Scenario

You are developing a research project budget. For this project, personnel costs (including US\$8,000 for PhD bursaries) amount to US\$10,500. Operating costs consist of:

- US\$1,000 for a survey
- US\$500 for access to some rare historical papers
- The open access journal you aim to publish research in charge US\$300
- Office space is provided free of charge by the university

There are no capital costs.

The institution's indirect-cost recovery rate is 25%.

Task

Calculate the full cost of the project.



Example 2: Applying an indirect-cost recovery rate

Scenario

Imagine you are a participant in a large multi-partner project funded by the European Union. According to the rules of the program, participants that calculate indirect costs at a rate of 20% will be eligible to recover only 35% of the that amount from their EU grant. Furthermore, indirect costs cannot be claimed for work that is subcontracted or carried out away from your premises. You have calculated that your participation in the project for the first financial year includes the following costs:

Personnel (A)	£45,567
Subcontracting (B)	€30,000
Researcher from a nearby university contracted to work on the project <i>on</i> your premises (C)	€10,000
Researcher from a nearby university contracted to work the project off your premises (D)	€10,000
Travel (E)	€23,489
Equipment/capital costs (F)	€190,000
Total	€309,056

Task

Calculate how much your institution is entitled to claim for indirect costs.

Example 3: Calculating a project budget

Scenario

Imagine you are supporting a principal investigator to prepare a budget for a two-year research project.

The principal investigator has given you the following information and instructions:

Four staff members will be assigned to the project for its duration, and their salaries will be allocated to the project as follows: one senior researcher (100%); two junior researchers (75%); one administrative assistant (25%). For budgeting purposes, a standard salary of US\$5,000 per month is applied for all staff assigned to the project.

The project's travel schedule in each year is as follows: 3 trips to Europe (US\$4,000 per trip all inclusive); 1 to West Africa (US\$2,000 per trip all inclusive); 12 trips in southern Africa (US\$1,000 per trip all inclusive).

The project requires two new computers with software (US\$3,000). The project's website is anticipated to cost US\$500 per year. A video camera is required for fieldwork (US\$2,000).

Two offices will be needed to accommodate the project in your institution. A breakdown of annual office costs provided by your office administrator is as follows:

Office costs	Year 1 (US\$)	Year 2 (US\$)	Total (US\$)
Office rent (for two university offices)	3,500	3,850	7,350
Consumables	400	440	840
Other services	2,000	2,200	4,200

- The project expects to host two seminars per year, each of which will cost US\$10,000.
- Survey costs are expected to amount to US\$8,000
- Five policy briefs will be published US\$2,000 per brief.
- Allow for evaluation costs of US\$10,000, and auditing costs of US\$4,000.
- Allow for a 5% contingency reserve.
- The maximum indirect-cost rate is 7%.

Task

Develop a two-year project budget using the template provided

	Description	Units	Unit cost (US\$)	Costs (US\$)	Notes
	'	(A)	(B)	(A) x (B)	
1. Salaries (gross)		1 ,,		.,,,,	
Senior researcher (1 person at 100%)	Salary				
Junior researcher (2 persons at 75%)	Salary				
Administrative staff (assistant at 25%)	Salary				
Subtotal					
2. Travel					
In Europe	All inclusive				
In West Africa	All inclusive				
In southern Africa	All inclusive				
Subtotal					
3. Equipment and supp	olies				
Computer equipment					
Other					
Web hosting service					
Subtotal					
4. Office costs					
Rent					
Consumables					
Other services					
Subtotal					
5. Other costs / service	es				
Conferences/seminars					
Survey costs					
Publications					
Evaluation costs					
Auditing costs					
Subtotal					
6. Subtotal of eligible of	direct costs				
7. Provision for conting	gency reserve				
8. Total eligible direct	costs				
9. Administrative costs	5				
Total eligible costs					

Example 4: Calculating an indirect-cost recovery rate

The figures in this example are taken from those used in Video 3. Terms and processes used are explained in a little more detail here so doing this example will reinforce lessons learned from the video.

Scenario

Imagine you have been appointed as Research Manager at Stellenbosch University in South Africa and you want to check that the indirect-cost recovery rate you have been given by the financial manager is accurate.

Task

Use the annual audited financial statement shown below to calculate the amount spent on the university's indirect-costs, then set the percentage that you think would make a reasonable indirect-cost recovery rate.

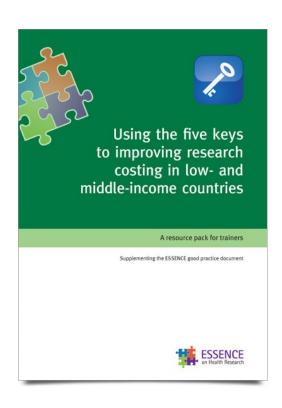
CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 December 2010							
	Unrestricted funds	Restricted funds	Accommodation	Consolidated			
TOTAL INCOME	777,600	341,000	43,650	1,162,250			
Recurrent revenue	775,000	341,000	43,500	1,159,500			
State subsidies and grants	500,000	100,000	-	600,000			
Student fee revenue	200,000	2,000	40,000	242,000			
Income from contracts	15,000	200,000	-	215,000			
For research	10,000	150,000	-	160,000			
For other activities	5,000	50,000	-	55,000			
Other service revenue	2,000	1,000	1,000	4,000			
Private gifts and grants	1,000	20,000	-	21,000			
Other recurrent income	40,000	12,000	2,500	54,500			
Sub-total	758,000	335,000	43,500	1,136,500			
Interest received	15,000	5,000	-	20,000			
Dividends received	2,000	1,000	-	3,000			

	Unrestricted funds	Restricted funds	Accommodation	Consolidated
TOTAL EXPENDITURE	707,350	270,000	42,000	1,019,350
Recurrent items	707,000	270,000	42,000	1,019,000
Personnel	520,000	130,000	30,000	680,000
Academic	280,000	50,000	-	330,000
Other	240,000	80,000	30,000	350,000
Other operating expenses	140,000	140,000	10,000	290,000
Depreciation	40,000	-	2,000	42,000
Sub-total	700,000	270,000	42,000	1,012,000
Finance costs	7,000	-	-	7,000
Non-recurrent items	350	-	-	350
Personnel	-	-	-	=
Realised loss on disposal of marketable securities	350	-	-	350
Post-employment-fund surpluses	-	-	-	-
Net surplus / (deficit)	70,250	71,000	1,650	142,900

My notes	

COULD YOU BE A TRAINER TOO?

If you are experienced in matters of research costing and financial planning for research institutions, and are interested in facilitating training workshops on research costing, you can! The training materials that you have been exposed to, including these Course Notes, are available on the ESSENCE on Health Research website (http://www.who.int/tdr/publications/five_keys/en/index.html/). The full Resource Pack for Trainers provides detailed facilitation notes, course outlines and slide presentations that you can adapt for use in your own institution, as well as six videos that help to explain the basic concepts.





APPENDICES

Appendix: Answers to the Quiz

- **1.** B
- **2.** A

3.	Item	True	False
	Computer equipment used for recording grant disbursements	Х	
	Safety and security		Х
	Stationery and other office supplies	Х	
	Building maintenance		Х

4. B

5.	Cost	Classification
	Research development personnel costs	Restricted funds
	Council funded activities	Indirect costs directly related to research
	Specifically funded activities	% adjustment up or down
	Inefficiencies	Unrestricted funds

Explanation:

- Research development personnel costs are not directly attributable to a project, so they fall under indirect costs for research, and get apportioned as part of the indirect-cost recovery percentage levied on top of project budgets.
- Council-funded activities are activities funded by the university budget, and as such are unrestricted.
- Specifically funded activities are funds that come into the institution from, external donors,
 and are dedicated to a particular project/output. Thus they can be classified as restricted funds
- Inefficiencies are impossible to cost accurately (!), so they may necessitate an upward or downward adjustment to a project budget.
- **6.** D
- **7.** C. While all the statements given are true in part, C is the most effective description. Refer to p. 17 of the *Five Keys*.
- **8.** C

9.	Item	True	False
	Improve the quality of clinical education and care	Х	
	Offer assistance in locating potential partners		Х
	Enhance the recruitment and retention of qualified academic staff	Х	
	Encourage qualified students to stay in their home countries	Х	

Appendix: Solutions to the financial calculations

Example 1

Category	Description	Label	Formula	Amount (US\$)
	Salaries	Α		2,500
Direct costs	Bursaries	В		8,000
	Operating	С		1,800
	Sub-total	D	A+B+C	12,300
Capital costs	Equipment	F		0
Indirect-cost rate	25%	E	ExD	3,075
Full cost			D+E+F	15,375

Example 2

Solution

Step 1. Work out how much of the indirect costs of the project amount to.

Personnel (A)	£45,567
Subcontracting (B)	€30,000
Researcher from a nearby university seconded to work on the project from your premises (C)	€10,000
Researcher from a nearby university contracted for a short period to work on the project who does not work at your premises (D)	€10,000
Travel (E)	€23,489
Equipment/capital costs (F)	€190,000
Total	€309,056

Step 2. Subtract the subcontracting and the contract research not done on the premises of the beneficiary because these are not allowable under the terms of the grant:

Step 3. Multiply the amended total by 20%.

Step 4. Multiply the result (quotient) by 35%.

Your institution is entitled to claim €18,533.92 in indirect costs for this project.

Example 3

Project budget for two years (1 January 2011 to 30 December 2012)					
	Description	Units	Unit cost (US\$)	Costs (US\$)	Notes
		(A)	(B)	(A) x (B)	
1. Salaries (gross)					
Senior researcher (1 person at 100%)	Salary	2	5,000	10,000	1 staff member for 2 years x the annual salary rate
Junior researcher (2 persons at 75%)	Salary	4	5,000	15,000	2 staff members for 2 years x 75% of the annual salary rate
Administrative staff (assistant at 25%)	Salary	2	5,000	2,500	1 staff member for 2 years x 25% of the annual salary rate
Subtotal				27,500	
2. Travel					
In Europe	All inclusive	6	4,000	24,000	
In West Africa	All inclusive	2	2,000	4,000	No. of trips x cost per trip
In southern Africa	All inclusive	24	1,000	24,000	
Subtotal				52,000	
3. Equipment and supp	olies				
Computer equipment	Computers & software	2	3,000	6,000	No. of units x cost per unit
Other	Video	1	2,000	2,000	No. of units x cost per unit
Web hosting service	Annual fee	2	5,000	1,000	
Subtotal				9,000	
4. Office costs					
Rent	Two offices			7,350	
Consumables				840	
Other services	Cleaning, etc.			4,200	
Subtotal				12,390	
5. Other costs / service	es				
Conferences/seminars		4	10,000	40,000	
Survey costs		1	8,000	8,000	
Publications		5	2,000	10,000	No. of publications x unit cost
Evaluation costs		1	10,000	10,000	
Auditing costs		1	4,000	4,000	
Subtotal				72,000	
6. Subtotal of eligible	direct costs			172,890.00	Add subtotals of items 1–5
7. Provision for conting	gency reserve			8,644.50	(5% of item 6)
8. Total eligible direct	costs			181,534.50	(6 + 7)
9. Administrative costs	5			12 ,707.42	(max 7% of item 8)
Total eligible costs				195 365.42	(9+10)

Example 4

Step 1. Calculate the percentage of externally-funded research as a proportion of total expenses

Cost items	Label	Formula	Expenditure
Recurrent unrestricted, excluding residences ¹	Α		707,000
Recurrent restricted, excluding residences ²	В		270,000
Total expenditure ³	С	A + B	977,000
Percentage of total expenses obtained from external funders 4	D	B / C	28%

Notes

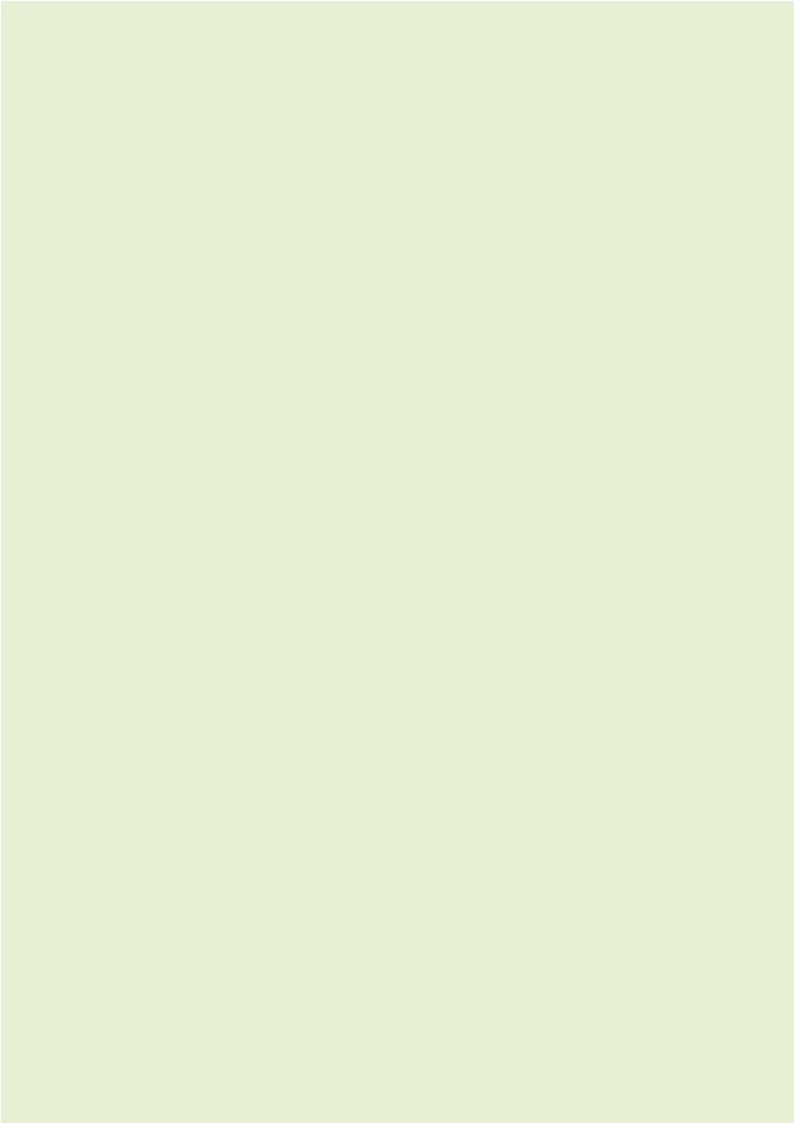
- ¹ This represents expenditure incurred as the institution carries out its operational teaching and learning mandate. The funds used to cover these costs are known as 'unrestricted', that is they are not ring-fenced by the state or donors for research or other specific purposes. These expenses also exclude student accommodation costs.
- This represents expenditure incurred by the institution as it carries out its research mandate. The funds used are 'restricted', that is, they are obtained from external funders and can be used to pay for research projects and programmes only, as specified by those funders.
- ³ This is the sum of unrestricted and restricted expenditure.
- 4 This is the percentage of restricted expenditure as a proportion of total expenditure.

Step 2. Calculate the indirect cost recovery rate

	Label	Formula	Expenditure
Determine total expenditure from support departments ¹	E		230,000
Indirect cost attributable to restricted funds ²	F	DxE	63,562
Research-support costs ³	G		4,000
Total indirect costs (research related)	Н	F+G	67,562
The indirect-cost recovery rate ⁴	I	H / B	25%

Notes

- Support costs are central administration costs and can be obtained from management accounts. Exclude line items that are unrelated to research support such as expenditure on sport, security and undergraduatestudent services as these are added in separately below.
- ² Proportion as derived for D in the previous table.
- ³ Research-support costs include the personnel and operating costs of running the institution's research office (obtain these from management accounts).
- ⁴ The indirect-cost recovery rate represents the indirect costs expressed as a percentage of restricted expenditure.





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