Academy of ICT Essentials for Government Leaders

Monitoring & Evaluation Toolkit

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The Academy of ICT Essentials for Government Leaders

Monitoring & Evaluation Toolkit

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PREFACE

In an increasingly digital and inter-connected global environment, understanding how information and communication technologies (ICTs) can be harnessed to achieve national development goals is critical for government officials and policymakers. For this reason, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) established the Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT).

The *Academy of ICT Essentials for Government Leaders* (*Academy*) is APCICT's flagship programme that aims to strengthen the ICT for development (ICTD) human and institutional capacity of the 62 ESCAP member States. The *Academy* programme is designed to equip government officials with the knowledge and skills to fully leverage ICT for socio-economic development. It consists of 11 stand-alone modules ranging from basic to more advanced topics in ICTD that can be delivered face-to-face or as online self-study courses. Since its launch in 2008, the *Academy* has been rolled-out across the Asia Pacific region and beyond through institutionalization into numerous government human resource training frameworks and university curricula. The rapid uptake of the *Academy* programme can be attributed to the dedicated support of a wide network of national and subregional partners.

Recognizing the need for a comprehensive and streamlined approach to monitoring and evaluating the progress and achievements of the *Academy* programme, APCICT developed a monitoring and evaluation (M&E) framework in 2010 providing general methodologies for capturing the progress and impact of the *Academy*. As a next step, APCICT developed this *Academy M&E Toolkit* to equip national and subregional partners with practical, step-by-step guidelines for monitoring and evaluating the *Academy* programme. The process of developing the M&E Toolkit was inclusive and participatory, involving 65 implementing partners of the *Academy*. They provided comments and feedback during the different stages of development in order to make a more relevant and useful resource.

APCICT now presents the finalized M&E Toolkit, which aims to assist partners effectively and efficiently implement the *Academy* programme. The M&E Toolkit will enable partners to identify key information needs as well as methods for measuring the impact and viability of the *Academy* programme in their countries. By collecting more relevant and accurate feedback on the progress and impact of their initiatives, the Toolkit will help partners improve their programme implementation and, at the same time, help APCICT design and implement better and more informed ICTD programmes in the future.

The process taken to ensure the high quality and relevance of the Toolkit was a joint effort. I would like to extend my heartfelt thanks to the dedicated efforts of the Toolkit's authors, including the lead author, Ruth Rosario D. Gerochi and the team of supporting authors, Maria Veronica P. Angeles, Maria Cecilia Cuyugan Bulos and Maria Victoria R. Gustilo. I would also like to thank the group of *Academy* partners from Cambodia, Indonesia, Mongolia, the Philippines and Tajikistan who participated in the field test of the Toolkit and whose valuable insights helped make the Toolkit more relevant to the M&E needs of all partners. Finally, I wish to thank the wider network of *Academy* partners who generously made available their time to provide feedback on the Toolkit through online reviews and through their participation during the various *Academy* Partners Meetings.

I sincerely hope that the Toolkit will be a valuable resource to our partners and contributes to more effective *Academy* programmes. But ultimately, the M&E Toolkit intends to strengthen our partners' capacity to monitor and evaluate their national ICTD capacity development initiatives in a holistic and comprehensive manner.

Hyeun-Suk Rhee

Director
UN-APCICT/ESCAP

INTRODUCTION

About the M&E Toolkit

The *Academy Monitoring and Evaluation (M&E) Toolkit* will help the partners develop, customize and strengthen the M&E plan and the M&E system in their organizations. It will assist the partners in determining very important inputs, activities, tools and resources needed to design, build or improve, and implement an appropriate M&E system. Through the Toolkit, the partner will be able to:

- Define what they want to measure in the *Academy* programme and how these areas can be measured reliably;
- Report to APCICT relevant information about the state of the *Academy* programme in their organizations;
- Determine what they can or cannot provide to establish a full scale *Academy* M&E system; and
- Determine what they can realistically do to ensure that the *Academy* programme has an effective M&E plan that can be implemented in their organizations.

The Toolkit provides APCICT with a common framework and language in setting goals, reporting results of partners, and analysing performance of partners and APCICT across time. Sharing a common M&E framework and language will enable APCICT to determine the most effective mechanisms to respond to partners' needs based on results of M&E findings.

TIP BOX

A system in an organization is composed of procedures, tools, policies, people with specific roles and relationships, a purpose, and a plan. The ingredients must be complete and complementing to make the system work.

The Toolkit guides the partners in designing their respective M&E based on where they are in the implementation process of the *Academy* programme, i.e., Tiers 1, 2 and 3. These tiers are broadly defined by the level of maturity of *Academy* implementation by the partner in their respective countries.

- Tier 1 refers to an advanced stage where partners have sustainably implemented the *Academy* programme over several years and institutionalized *Academy* courses as part of their medium- to long-term ICTD capacity building initiatives.

- Tier 2 partners have launched the *Academy* and demonstrated a clear commitment to adopt the programme. These partners are still in the early stages of utilizing the modules as compared to Tier 1.

- Tier 3 partners have been exposed to the *Academy* programme, and have expressed interest in adopting it, but have not yet launched the programme.

While the Toolkit will enable the partners to customize an M&E plan, activities and system for the *Academy*, they can also use the Toolkit to help them design an M&E plan and system for other learning and development (or training) programmes in their organization.

TIP BOX

This Toolkit will help the partner construct or customize the best-fit M&E system at this point in time. It is, however, not intended to provide the partner with a ready-made M&E design.

Contents of this Toolkit

The Toolkit is divided into three parts. Each part will present definitions, basic elements and important guidelines in designing or improving the M&E system. It will also present examples and additional considerations based on the partners' level of maturity in the implementation of the *Academy* programme (tier level).

Part 1: The Basics of Monitoring and Evaluation presents the overall process of designing the *Academy* partners' M&E system, but begins with the basics by defining M&E and explaining its purpose and importance. This part answers the following questions about M&E:

- Why do an M&E?
- What is the difference between "monitoring" and "evaluation"?
- What are the important elements that make M&E successful?
- What do you do with your M&E results?
- What are the guidelines for designing an M&E system for an *Academy* partner?
- What are the steps to develop the *Academy* M&E?

This part includes discussions on the flexibility in the design process and looks at aspects of the M&E system that can be customized to meet the needs of the partner organizations and their level of maturity in the implementation of the *Academy* programme (tier level). Common M&E standards and the general steps for customizing the M&E plan are provided.

Part 2: Conducting Monitoring and Evaluation helps partners identify and define aspects of the programme that they want and need to measure to assess programme performance. Part 2 then proceeds to introduce various methods of obtaining that information reliably and validly. The reliability and validity of results are very essential requirements of a credible and relevant M&E. This part will help partners answer the following questions:

- How do you develop programme indicators?
- How do you determine appropriate methods for gathering and analysing data and information?
- How do you effectively use the results of your M&E?

Part 3: Strengthening the Monitoring and Evaluation System presents the key components of an M&E system that need to be established or improved to reliably and sustainably obtain the information needed by the partners and APCICT. Part 3 assists the partners in establishing and/or strengthening their M&E system. It also helps partners determine whether their organization is ready to implement and sustain the M&E system, and continuously improve it. The following questions will be answered in this part:

- How do you assess your readiness for an M&E system?
- What are the components of the M&E system?
- How do you develop the M&E plan?
- How do you strengthen the M&E structure?
- How do you improve your M&E continuously?

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Acronyms

APCICT	Asian and Pacific Training Centre for Information and Communication Technology for Development
ESCAP	Economic and Social Commission for Asia and the Pacific
ICT	Information and Communication Technology
ICTD	Information and Communication Technology for Development
IT	Information Technology
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
RAP	Re-entry Application Plan
SOPs	Standard Operating Procedures
UN	United Nations

PART ONE: THE BASICS OF M&E

Part 1 of the Toolkit provides important information about monitoring and evaluation (M&E), and guides partners in customizing their M&E system. Part 1 answers the following questions:

Section 1: Why do M&E?
Section 2: What is the difference between “monitoring” and “evaluation”?
Section 3: What are the important elements that make M&E successful?
Section 4: What do you do with your M&E results?
Section 5: What are the guidelines for designing a specific M&E system for an *Academy* partner?
Section 6: What are steps to develop the *Academy* M&E?

There is a difference between monitoring and evaluation.

Section 1: Why do M&E?

During the Third Academy Partners Meeting held in the Republic of Korea in October 2011, a survey of partners emphasized that M&E is critical because it will tell them if:

- They are **effectively** implementing the *Academy* programme – whether or not they are achieving their objectives and accomplishing their business plans.

- They are **efficient** in implementing the programme – if they are utilizing all resources appropriately and implementing the planned activities without delay or duplication and at the right quality.

- They have created **impact** on the target client – if they are making a difference by improving information and communication technology (ICT) competencies and organizational capacities to use ICT for development (ICTD).

- They can **sustain** and make the programme **viable** in the long term – if they are able to attain self-reliance, and can even increase and widen their coverage and services; and if they are capable of sustaining their M&E effectiveness and efficiency to ensure sustained impact and **relevance in society**.

Responses from partners affirm the importance and value of M&E to any programme and organization. M&E results that provide feedback and analysis on programme performance and impact are essential parts of the development cycle of a policy and a programme. M&E provides evidence and systematic analysis that are crucial in making informed, strategic and urgent policy and operational decisions about a programme. The M&E activities and processes must therefore be implemented and sustained through an M&E system that is composed of the following basic and important parts:

1. The **mandate** or purpose of the M&E system – What value will it bring to the organizations and what formal policies will ensure that it will be implemented and supported by resources.
2. The **M&E plan** – What will be measured, how will these aspects be measured, when and by whom. What will be done with the data and information gathered from M&E activities; and how can these be used effectively by decision makers.
3. The **M&E processes and structure** – What are important work processes and management systems; who are accountable for these processes and for the entire M&E system; what resources are required; and how are these resources used effectively, efficiently and with accountabilities.

The M&E system generates continuous information that must be credible and relevant for its users. M&E results are important evidence-based inputs for decision makers who are engaged in:

- **Formulating and implementing policies** – This process requires information that can aid in assessing the impact of current policies on target stakeholders; and determining the short-term effects and long-term impact of ongoing programme interventions.
- **Formulating long-term, strategic and operational plans** – Trends in programme short-term effects and long-term impact are necessary inputs to the planning process. Findings from M&E are useful guides for the development of desired outcomes and the formulation of strategies to achieve these outcomes.

- **Managing the implementation of programmes** – In the project management cycle, the results from regular M&E provide continuous data and information that enables the project manager to address immediate and short-term risks and effects of the different programme activities and strategies. At the end of the programme, the M&E results will provide the trends and analysis of programme accomplishments and determine its long-term impact.

The M&E system therefore enables the *Academy* partners to monitor and evaluate the different kinds of results derived from the implementation of a policy or a programme, and consequently analyse the effectiveness of a plan.

TIP BOX

Policy
The set of basic principles and associated guidelines, formulated and enforced by the governing body of an organization, to direct and limit its actions in pursuit of long-term goals.

Plan
Written account of intended future course of action (scheme) aimed at achieving specific goal(s) or objective(s) within a specific time frame. A plan explains in detail what needs to be done, when, how, and by whom, and often includes best case, expected case, and worst case scenarios.

Programme
A plan of action aimed at accomplishing a clear business objective, with details on what work is to be done, by whom, when, and what means or resources will be used.

Source: http://www.businessdictionary.com/definition.

Section 2: What is the difference between "monitoring" and "evaluation"?

> Government officials, development managers, and civil society are increasingly aware of the value of monitoring and evaluation (M&E) of development activities. M&E provides a better means of learning from past experience, improving service delivery, planning and allocating resources, and demonstrating results as part of accountability to key stakeholders. Yet there is often confusion about what M&E entails. (Evaluation Capacity Development, World Bank, 2004)

The terms "monitoring" and "evaluation" are closely related and complementary. Although they are often treated as one and the same, i.e., doing monitoring is equivalent to evaluating a programme, they are distinct concepts.

Monitoring is the continuous collection of data on specified indicators to determine the status of programme implementation. It documents what is happening and determines if it is consistent with the programme plan. Monitoring the status of the programme asks the question: **What is happening to the programme at this point in time?**

A Sample Case

The Academy *partner developed an M&E plan with specific details on what results it wants to achieve within a year. The partner identified two indicators where results must be shown, and indicated specific targets that must be achieved in each indicator. The performance indicators and their respective targets are shown in table 1.*

Table 1. The *Academy* sample programme plan

Programme plan for 2013	
Indicators	**Targets**
Number of modules for implementation	Three modules within 6 months of Year 1
Profile of participants attending the workshops	Top level officers of key government offices (5 agencies identified)

Using table 1, monitoring consists of systematically and reliably documenting the actual performance vis-à-vis the targets of each indicator. Table 2 below presents the monitoring results of the targets for each indicator.

Table 2. Programme monitoring report for the first semester of 2013

Indicators	Targets	Actual performance as of the fourth month	Actual performance as of the sixth month
Number of modules for implementation	3 modules within 6 months of Year 1	1 training conducted for 1 module	2 trainings conducted for each of the 3 modules
Profile of participants attending the workshops	Top level officers of key government offices (five agencies identified)	Mid level officers: 65% Top level officers: 35% Targeted government offices: none	Top level officers: 85% Mid level officers: 15% Targeted government offices: 4 Non-targeted government offices: 5

In table 2, the partner has monitored and recorded the actual performance across two different time frames and compared the actual performance versus the planned desired results. The monitoring report presents the actual data, and ensures that data and information are validated to present an accurate picture of what is happening to the programme in specific time frames.

As presented in the sample case above, the data does not tell the programme stakeholders factors affecting the implementation process: Why was the performance low or slow in the fourth month and then suddenly was high in the sixth month?
An analysis must be done: What factors affected the performance in the fourth month and in the sixth month? What factors contributed to making a significant difference in the performance? Answering these questions requires an evaluation.

Evaluation is the periodic and systematic organization of data and information to assess the overall programme performance vis-à-vis the programme plan. Evaluation determines factors that affect the quality and level of performance. Analysis will entail determining the quality, efficiency, reach or impact of the programme in the identified programme indicators and targets.

A Sample Case

Using the same case presented above, table 3 shows the same indicators and targets, and monitoring results for two periods but with an additional evaluation input:

Table 3. Mid-year programme evaluation report

Indicators	Targets	Actual performance as of the fourth month	Actual performance as of the sixth month
Number of modules for implementation	3 modules within 6 months of Year 1	1 module conducted once	3 modules conducted. Each module conducted twice
Profile of participants attending the modules	Top level officers of key government offices (5 agencies identified)	Mid level officers: 65% Top level officers: 35% Targeted government offices: none	Top level officers: 85% Mid level officers: 15% Targeted government offices: 4 Non-targeted government offices: 5
Analysis of Performance (Mid-year Evaluation of Performance): Slow delivery of results in the fourth month was due to two factors: Marketing activities did not fit the profile of targeted participants and the timing of the training course coincided with the government's deliberation on ministry budgets. These factors implied that the programme team failed to conduct a thorough analysis of the profile of their target clients. The monitoring result provided after the fourth month however, enabled the programme team to access more technical assistance from the communication experts in the organization. Immediate action was undertaken following expert advice. The efforts exerted by the team within the last two months reflected the ability of the team to seek expert assistance and flexibility in responding to the situation.			

The evaluative analysis identified: (1) the external (client's environment) and internal (programme team) reasons for the slow delivery of results and, (2) the appropriateness of the programme team's response in managing the situation in order to achieve the results within a short period of time. The analysis also pointed out the importance of getting immediate feedback from a monitoring activity. It likewise, made an assessment of performance (slow) based on the planned targets for each of the performance indicators of the programme. Without such indicators and targets, it will be very difficult to determine whether or not the performance was high or low, slow or fast.

A more detailed distinction between monitoring and evaluation is provided below:

Monitoring is when the partner…

- **Document events systematically through a reporting format.** An organization should have a systematic reporting system to be able to monitor events and progress of activities across time. The partner monitors the actual implementation of the M&E plan. The partner answers the question: **What have we accomplished right now?**

  Example:

  What modules have been implemented based on planned activities for the month of October?

- **Immediately identifies outputs or achievements.** Outputs are *concrete* and immediate results of specific activities. The partner answers the question: **What is the immediate result of our activity?**

  Example:

  An Academy *module workshop conducted with 25 participants is an output of combined activities done in one month: inviting participants, designing the details of the workshop, inviting resource persons, preparing the training venue. Hence, for all the activities done by the partner in one month, the monitoring report will identify one module trained with 25 graduates*.

- **Identifies risks or problems.** The partner answers the question: **What can we anticipate and what is our response?**

  Example:

  Based on a monthly monitoring report provided to the project officer, the trainer for Module 1 was always late for the sessions. The same trainer has been invited again for an upcoming Module 4 training. The project officer can identify a potential risk: the trainer may be late again for the Module 4 sessions. Based on this possible risk, the project officer can provide risk mitigation (or prevention) by inviting a stand-by resource person or by giving feedback to the concerned trainer about the tardiness.

- **Immediately gives feedback for immediate action.** The partner can give immediate feedback to decision makers and programme managers. The partner answers the question: **What can be done now?**

  Example:

  The monitoring reports for the last two months show that the responses of invited agencies to attend Modules 3 and 4 trainings have been very high. They sent more participants than expected and budgeted. The response trend for Modules 3 and 4 requires the programme team to immediately increase logistical support and hold more session dates for these modules than planned.

Evaluation is when the partner…

- **Identifies accomplishments vis-à-vis the target or planned level of outcome and impact.** Outcomes are desired results. They can be immediate, medium-term or long-term. They can be related to changes in behaviour, systems, policies, structures, the way of life or culture in an organization or in society. When outcome results are evaluated, you answer the questions: **What have we accomplished in terms of changes in our client's competencies and/or in their organization's capacities? Have we made a difference? What impact have we generated in our clients and in the larger community or society?**

  Example:

  After two years of offering Academy *Modules 1-5, the clients (individuals and organizations) showed results in the following: competency for policy review and analysis of ICT guidelines in their respective organizations resulting in more appropriate ICT policy recommendations in procurement, talent management and cybersecurity. Out of six organizations with such recommendations, four organizations have adopted the graduates' recommendations*.

  This level of evaluation may be significant for Tier 1 and Tier 2 partners who are already in need of determining programme impact on the target clients, organizations or sectors. Partners in Tier 3 and some in Tier 2 who have not yet implemented modules over a period of time need not undertake this level of evaluation, or ***may undertake a modified version*** by asking: **What are the effects of this particular module on the graduates after two or three months?**

- **Identifies hindering, mitigating and facilitating factors that have affected the level of accomplishments of the target outcome**. Performance-related factors are determined after in-depth analysis of situations and conditions in the internal and external environment of the programme and its implementing partner. These factors affect the quality, efficiency and effectiveness of the *Academy* programme's actual performance. The factors explain why the roll-out of the *Academy* programme accomplished or did not accomplish the targets and indicators as stated in the programme's strategic and business/operations plans. The partner answers the questions: **Why were we able to accomplish (or not accomplish) our immediate, medium-term and long-term outcomes? What made us perform this way?**

Example:

Using the previous sample case, the analysis of performance factors are as follows:

***Hindering factors** – Initial lack of systematic programme planning and target setting resulted in an underestimation of the resources required and the extent of targeted marketing needed. These posed as risks to the eventual success of the* Academy *roll-out.*

***Mitigating factors** (actions that address the hindering factors) – Immediate feedback from the monitoring team to the programme manager and sponsor resulted in quick turnaround of the* Academy *programme through appropriate actions: hiring of a marketing specialist and strengthening of the curriculum to fit the needs of the market.*

***Facilitating factors** – The programme was strongly endorsed by the Minister of Communications and the Minister of Education. Their sponsorship was critical in enlisting the participation of key officers from other ministries in the* Academy *trainings, and in supporting the re-entry action plan of the participants. The support provided by the organizations to the participants to implement the re-entry action plan was critical in implementing ICT-related reforms in their respective units and organizations.*

This level of evaluation analysis is very important for all partners in Tiers 1, 2 and 3. But for Tier 3 partners who have not started rolling out the *Academy* programme after several months from the target date of implementation, the important evaluation question that they may want to ask is: **What factors are affecting the delay in implementation?**

- **Studies the implications of performance factors.** Results from the analysis of hindering and facilitating factors are further used to anticipate possible scenarios or future situations so that the *Academy* partners can be more proactive in the implementation of succeeding activities. The partner answers the questions: **What are the implications of these performance factors on our achievement (or non-achievement), and on our future plans? What more can we do?**

Example:

Using the previous sample situation again, the implications of major programme sponsorships from Ministry officials and the successful results in the re-entry action plan are the following:

- *The increase in enrolment (increase in demand) will require more investments so that* Academy *partners can increase their capability to conduct more trainings on Modules 1-5 (increase in supply).*
- *The success of the programme will increase the expectations of the clients; they will ask for more advanced modules that will ensure upgrade of competencies.*

- *The* Academy *partners must be able to document the programme lessons systematically in order to derive and consolidate learning towards further programme development and policy recommendation on ICTD training.*

Based on these implications, the Academy *partner will do the following within the next four months (new M&E plan based on the evaluation results):*

- *Strengthen and upgrade the curriculum, and request technical assistance from APCICT and from experts in the field.*
- *Engage a third party to conduct impact evaluation, documentation and publication of results for general consumption.*

This level of evaluation must be done by partners in all tiers to create or update their respective business or annual M&E plans.

From the explanation above, **monitoring and evaluation are clearly two separate activities**. They are implemented differently. Table 4 summarizes the differences between monitoring and evaluation.

Table 4. Summary of differences between monitoring and evaluation

	Monitoring	Evaluation
Activities, sources of data and information	Requires ongoing data collection from a systematic reporting system using reliable data collection tools and forms (in online and/or hardcopy formats).	Requires sufficient (across time) and complete data and information that must be consolidated into trends and patterns. Sources of data and information come from a very good monitoring system and from other sources of information like third party reviews, newspaper articles and expert opinions.
Analysis and basis of performance assessment	Data gathered will require immediate analysis through reliable methods (qualitative or quantitative). Focus of analysis is on the present situation: what is happening now. Basis of comparison for the current performance are the periodic (quarterly or monthly) targets of: (1) inputs (what were provided), (2) outputs (what are products of inputs), and (3) implemented activities set by the *Academy* partners in their annual or business plans.	Analysis is in-depth. It identifies factors affecting performance by examining the causes and effects of decisions and actions of the *Academy* partners (internal factors) and their clients (external factors); and then determines the implications of such factors on the future plans of the programme. Basis of comparison are the planned programme impact or outcomes set by the *Academy* partners for the client and the programme itself.
Action required from management	Quick and on the spot analysis of outputs/products and programme risks and problems requiring immediate action from programme managers.	In-depth analysis of all data and information derives important lessons for major decision-making that may have wider and medium- to long-term impact on the programme and on its clients.

Section 3: What are the important elements that make M&E successful?

Understanding the elements that make M&E effective and sustainable provides the *Academy* partner with important guidelines in designing their respective M&E system. These elements are presented below:

- **Every successful M&E system is based on a clear programme plan.** The basis for an M&E—what to measure and how—is the programme plan. In the case of the *Academy* partner, it may be their respective business plans or annual plans. For partners who have not yet started the implementation of the programme, it is best to develop the business plan or the annual plan first. Some guidelines for developing the programme plan are outlined later on in this section. Designing an M&E system will be difficult if performance outcomes are not clearly defined and specific output and input targets are not spelled out. Part 3 will discuss in greater detail what an M&E plan looks like and its connection with the programme plan.

- **The programme team of the *Academy* partner must be able to distinguish the difference between M&E activities and the M&E system, and must be ready and able to do and have both.** The success of M&E is determined by the *Academy* partners' **readiness** to conduct systematic and reliable **M&E activities**, and put in place an effective and efficient **M&E system**. The M&E activities are the different tasks and processes that use various methods to measure actual performance results, which are then analysed and compared with the programme's business plan. The M&E system is composed of the entire set of enabling policies, resources, staffing and standard operating procedures (SOPs) that ensures the M&E activities are implemented consistently. Readiness of the partner to conduct M&E activities and establish a working M&E system is present if:

    - There are incentives and demands for an M&E system
    - Structures for an M&E system exist within the organization
    - The organization has the capacity for M&E

Building your organization's readiness is further discussed in Section 1 of Part 3 of the Toolkit.

- **The programme team must establish the credibility of the M&E results through reliable M&E activities, and an effective and efficient M&E system.** Critical to the credibility of M&E results is the degree of **reliability** of the M&E tools and methods used in the gathering, analysis and reporting of results. Equally important is the **effectiveness and efficiency** of the M&E system in undertaking the M&E activities. Credible M&E results are important for increasing the programme stakeholders' (sponsors, clients, networks) confidence and commitment to the programme. Part 2 looks at ways to ensure the reliability and validity of data and information.

Figure 1. Elements of a successful M&E

The programme plan

The programme plan is key to the clarity and direction of the M&E system. For partners who are starting their programme (Tier 2 or 3), an important first step is the development of their annual plan. For Tier 1 partners already implementing the programme continuously, their annual plan must be reviewed, analysed and revised regularly with inputs from the results of their M&E.

What the *Academy* partners will measure to determine their performance MUST already be included in the **annual programme plan** that states the goals, objectives, targets, activities, and results of activities. These results are called **indicators of performance**—the areas that must be measured to indicate whether or not targets are being met. For Tier 1 and 2 partners, they may want to create their strategic programme plan covering three or four year periods. A strategic plan will enable partners to have a longer-term perspective in setting goals and strategies based on a more thorough analysis of their environments and stakeholders. The strategic plan will include performance indicators; but it must be operationalized through an annual plan.

For partners who are familiar with Results Based Management and Log Frame, goals and objectives may be restated as desired **outcomes** (long-term goals and impact, medium- to short-term objectives). Desired or target outcomes may be developed for policy, systems, structures, people and culture. The *Academy* M&E is based on the Results Based Management framework. Hence, the *Academy* indicators include outcomes that are defined as the desired changes in:

- The participants or graduates of the programme (competencies: skills, attitudes, knowledge levels).

Example of an immediate outcome or effect:

After attending the Academy *workshop, key decision makers in the Ministry have become much more open to seriously considering ICT solutions in service delivery and quality systems.*

- The participants' organizations (e.g., in policy, systems, technology, relationship, etc.). The changes may be due to the *Academy* participant's application of competencies acquired from the programme.

Example of a long-term outcome or impact:

The Department of Education deployed ICT solutions to address delays and confusion in their human resource performance management system. The change increased and improved the capacity of the organization to develop their human resources strategically, that is, the department can make effective decisions on who to develop and what competencies are needed in the short and long terms.

Example of a medium-term outcome for relationships, competencies and capacities across organizations:

The Academy *participants from three major ICT-related organizations, through their joint re-entry action plans, improved the systems and policies for information sharing across these three organizations so that they can develop a unified database for business licensing and monitoring.*

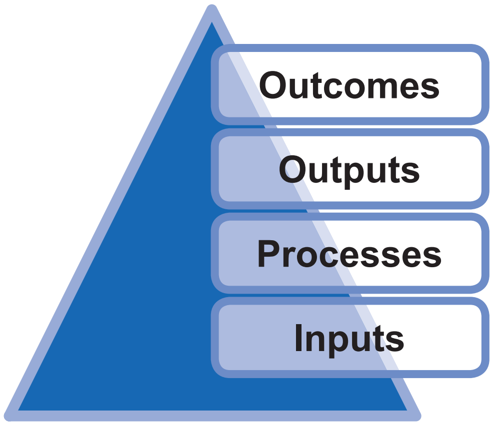
- The sector, wider public or community/society where APCICT participants and/or participating organizations are located. The desired change, for example, may be in the form of sector-wide ICT policy or strategy.

Outcomes can also include desired changes in the programme itself: its relevance to a society's current context, its coverage and reach, and its sustainability. Outcomes can be broken down into long, medium and short terms. Long-term outcomes that are sustained for a period of time are often referred to as programme **impact**.

The **activities** in the programme plan are broken down into **inputs**, **processes** and **outputs**. Inputs are what you will provide, e.g., workshops and training manuals, to generate specific outputs or products, e.g., 25 participants with competencies on ICT policy analysis. Processes are activities that you will do with the inputs to turn them into outputs. Outputs are results or products of inputs and processes, e.g., workplan is an output of a planning activity (process) that was provided with different inputs pertaining to data and information relevant to the programme.

Indicators will be more thoroughly defined and discussed in Part 2, Section 1 of the Toolkit.

Figure 2. Programme elements that must be measured through an M&E



TIP BOX

Outcomes are desired changes in the participants, the participants' organizations or the wider society/sector due to the *Academy* programme. These changes can be at the level of competencies, capacities and relationships. When desired changes are sustained over a period of time, these are called programme impact.

The activities can be both INPUTS and OUTPUTS. Inputs are what you will provide to generate specific outputs or products.

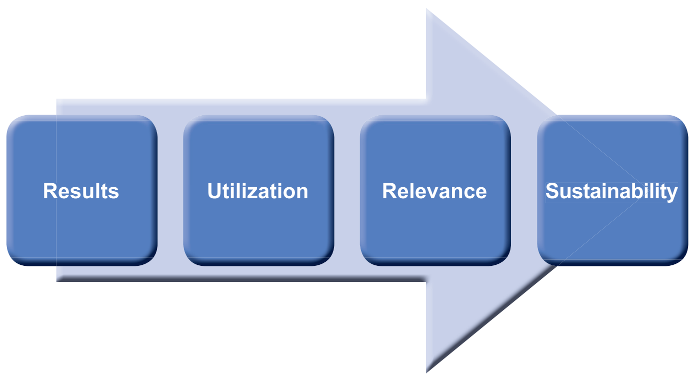
Section 4: What do you do with your M&E results?

The relevance of M&E (activities, results and system) are only determined by how stakeholders utilize the information generated (and not by how they are well filed) to make important decisions about the delivery of the programme and its impact on its target clients.

Results must be re-packaged in different reporting formats that fit the readers' or users' profile. The user of information must be able to understand what the results mean as far as determining:

- The current status of the programme
- The impact it is creating on target clients
- The state of programme implementation
- The future of the programme given its impact and state of implementation

Figure 3. Moving M&E towards sustainability



The entire M&E effort will not be sustainable if the M&E results are not relevant and utilized to serve important needs and purposes of the different stakeholders of the *Academy*. Section 3 of Part 2 will focus on utilizing the results of the M&E—this step is often forgotten in the entire process of conducting M&E.

Section 5: What are the guidelines for designing a specific M&E system for an *Academy* partner?

The programme has a specific purpose and design to enable it to achieve its goals. The M&E system for all *Academy* partners, must have:

- **A flexible design** to consider and accommodate the realities, requirements and conditions specific to the organizational and social culture of the partners.

- **A set of shared standards** since the partners are all implementing a common programme with specific mandates, content and requirements, especially for generating results and lessons that will have wider applications (beyond the country or subregional levels).

Figure 4. Features of the APCICT M&E

The Toolkit presents different recommendations and information for the partners to design their own unique M&E system that will:

- Define what the partners want to measure to show results
- Implement different M&E activities to measure results within its time frames
- Organize the implementation of all these activities into effective and efficient operating procedures with appropriate staffing and resources

The Toolkit also presents important shared standards in designing its respective M&E system. The **shared standards** will enable partner organizations to:

- Use common indicators of performance to generate common lessons and recommendations that have wider impact (beyond country and subregional levels)
- Determine collective progress and impact through the use of common indicators that must be measured across time
- Identify common needs and requirements that can be responded to by APCICT or other stakeholders and *Academy* partners

Without a shared standard for developing the M&E system, partners and APCICT will use different lens to determine progress and impact. They will have different (and maybe confusing) ways to report accomplishments as well as varying perspectives in analysing needs, gaps and issues with regard to the programme. These shared standards for measuring programme areas were identified and a consensus reached among the *Academy* partners during the Third Academy Partners Meeting in 2011. The shared standards are provided below.

1. **Programme areas** common to all must be measured by clear and concrete indicators. These programme areas are:

    - Competencies
    - Curriculum
    - Programme management
    - External impact

    Definitions of each of these areas are provided in the next subsection.

2. For each of the programme areas, **specific dimensions** are identified. Partners may add to these dimensions as they mature in the implementation of the *Academy* programme.

Table 5. The programme areas and dimensions

Programme areas	Dimensions
Competencies	• Knowledge, skills and behaviour that learners must acquire for each module • Application of learned competencies
Curriculum	• Module content • Resource persons • Learning methods and tools • Participants/learners
Programme management	• Leadership/sponsorship • Programme delivery • Management systems/processes
External impact	• Extent of impact on the country's or the sector's development goals, priorities and strategies • Extent of impact on the country's MDG targets • Extent of impact on the organization's priority agenda

3. **Reliable and valid methods must be used** to ensure the credibility of results.

4. **M&E results must be effectively utilized**:

    - By partners for continuing programme improvement and development; and
    - By APCICT for generating collective lessons, and for developing recommendations and actions for wider applications (across nations and at subregional and regional levels).

5. **The respective M&E system of partners should be flexible in design** in order to realistically consider the following:

    - The level of programme implementation of the partner, that is, if the partner is only starting or has already implemented several modules repeatedly across time

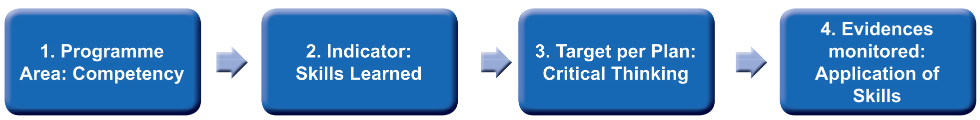
- The local context of the partner that includes –
  - the level and kind of support and resources provided for the programme by the host organization
  - the country-level or sector-level socio-political and economic realities, ICT-requirements and opportunities

This level of flexibility implies that the partner will:

- Define its own indicators and targets
- Create its own M&E plan
- Determine the most appropriate research methods to conduct M&E
- Determine the extent of impact its M&E can give to the organization

Figure 5. Process flow for designing M&E for competency

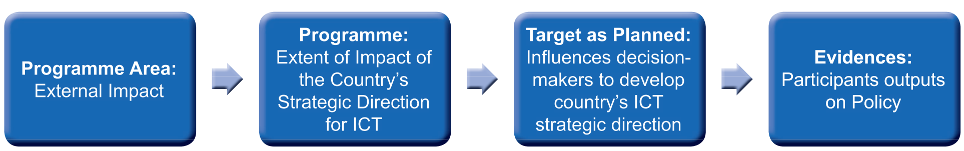
A sample process in designing an M&E system for Tier 3 partners



*Using figure 5 above as an example for the programme area on **competency** (1), an important **indicator** (2) of competency is the **skill learned by the participants**. The partner identifies that for Module 1 the **target or desired (3) skill** is critical thinking. This target is identified in the business plan or annual programme plan of the partner. What will be monitored after the attendance of participants in Module 1 is their **ability to (4) apply the skill** of critical thinking in their organization.*

Figure 6. Process flow for designing M&E for external impact

A sample process in designing an M&E system for Tier 1 partners



*Using the same process flow above but applied to **external impact** (1), the partner identifies the "extent of impact on country's strategic direction for ICT" as its **indicator** for performance or success (2). The **target** (3) based on the plan for 2013 is for the programme to influence decision makers to develop an appropriate ICT strategy for the country. For M&E, the partner will report **evidences** (4) of participants who have initiated policy or activity recommendations that will enable concerned government officials to formulate an ICT strategy for the country. The evaluation will focus on analysing factors that enabled or hindered the participants as they endeavoured to influence decision makers by using the competencies learned from one module or from the combination of programme modules.*

5.1 Definition of programme areas

The succeeding parts and sections of the Toolkit will constantly refer to and use the four programme areas identified by the partners during the Third Academy Partners Meeting in 2011. The four areas are defined in table 6.

Table 6. Definition of *Academy* programme areas that must be measured

Programme area	Definition of programme areas and dimensions within each programme area
Competency	• Specific competencies that learners of the *Academy* modules must be able to obtain after attending the workshops. They must be able to apply these competencies in their workplace or situation. Evidences that competencies are acquired include behavioural indicators. • The behavioural indicators are combinations or clusters of related knowledge, skills and behaviour that will enable learners to perform specific tasks or activities, e.g., critical thinking, policy analysis, programme design, advocacy for ICTD. • There are two dimensions for this area: o Knowledge, skills and behaviour that are instilled upon the learners o Application of the competencies to the workplace
Curriculum	The entire learning process and content that deliver the desired competencies to the learner. This area is further subdivided into four dimensions: • The content of the modules or the subject matter (what) • The learning/teaching methodologies or the strategies for teaching (how) • The resource persons (who will deliver) • The learner or participants of the workshop (who are targets of content and methods)
Programme management	The important work procedures, policies and systems to implement the entire programme. They determine the level of effectiveness, efficiency and quality of programme activities, inputs and outputs, and the level of accomplishment of the desired outcomes. This area is further subdivided into three dimensions: • Programme delivery o Strategies to achieve results, efficiencies and sustainability o Human resource – competencies of staff, staffing roles, responsibilities, relationship, motivation • Management systems/processes o Business processes – SOPs, work systems, technology • Leadership – competencies, direction, motivation

Programme area	Definition of programme areas and dimensions within each programme area
External impact	This covers the extent of influence of the programme in changing the external environment (sector, country) of the *Academy* partners through its products (e.g., publications) and services (e.g., training courses). There are three possible or recommended dimensions in this area: • Extent of impact on the country's or the sector's development goals, priorities and strategies • Extent of impact on the country's achievement of MDG targets • Extent of impact on the organization's priority agenda

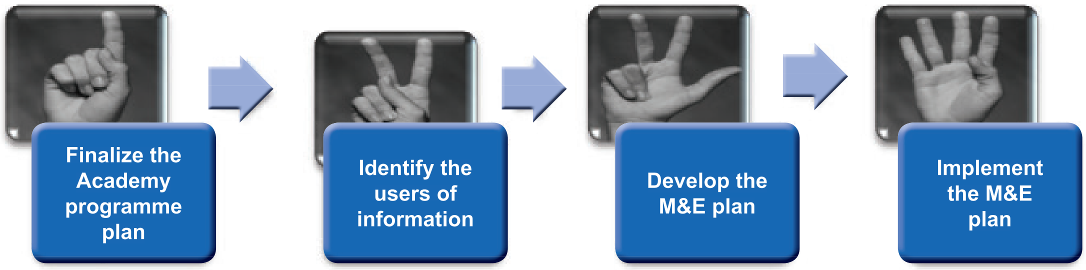
TIP BOX

Suggestions to partners
What to focus on if you are in…

Tier 3: If you have not yet implemented a module in the *Academy* programme, develop an annual or a quarterly programme plan first before reading Part 2 of this Toolkit. After developing your quarter or annual programme plan, study Part 2, Sections 1 and 2 only (developing your indicators and method) and then proceed to Part 3, Section 2—Developing your M&E plan. A simple M&E plan is best with a few but well-defined indicators and methods. Carry out M&E activities (data gathering and analysis) twice a year or after training workshops, and after a year, study the other parts of the Toolkit. Once you have moved to Tier 2, please remember to read all of Part 2 of the Toolkit!

Tier 2: Ensure that you have an annual plan for the *Academy* programme. Determine what programme area to focus on for your annual plan. Create an M&E plan (Part 3, Section 2). Define clear targets ONLY for applicable dimensions in your chosen programme areas. Go for qualitative methods in data gathering and analysis but support your findings with quantitative data. Develop or use simple templates and tools that will get data that you need. Focus on Part 2 of this Toolkit but please read Part 1 for proper background. After a year in implementing the programme modules and your M&E, focus on Part 3 of the Toolkit!

Tier 1: Develop a three-year strategic plan for the *Academy* programme. Define your desired outcomes clearly. Develop performance indicators in all programme areas. Add other relevant dimensions in programme areas that are aligned with your strategic plan. Go for stretch targets. Use mixed methods in research (qualitative and quantitative) for data gathering and analysis. Enhance and improve your M&E system. Read all of the sections in this Toolkit!



Section 6: What are steps to develop the *Academy* M&E?

STEP 1: Finalize the *Academy* programme plan

The *Academy* plan for one year or for the next three years must be completed and finalized. This plan is the source of all information required for developing the M&E plan, and it should include: the desired outcomes or results that the partners want to achieve after 12 to 36 months; the strategies and activities that must be implemented to get to the desired outcomes; and the resources and support required to implement strategies and activities.

Table 7. Contents of the *Academy* plan

Desired outcomes	Strategies and activities	Performance indicators	Targets per indicator	Requirements

Desired outcomes are intended results you want to achieve within a specified time frame. In the *Academy* plan, these results revolve within the *Academy* programme areas described in the previous subsection.

Strategies are the major plan of action needed to attain the desired results—they show how resources are going to be used to achieve results. For example, to achieve the desired result of an "established network of government supporters for the *Academy* programme" within a year (time frame of the outcome), the strategy is to "embark on an intensive information campaign focused on the top level officers of target government agencies". The strategy is a major plan of action requiring several activities. Table 8 provides a more detailed explanation of the different areas in the *Academy* plan.

Table 8. Description of *Academy* plan content

Desired results – What do you want accomplished: • Participant's knowledge and skill development (competencies) • Effects of competency application on participants' organization (external impact) • Extent and quality of module roll-out (curriculum) • Implementation of the curriculum (programme management)	**Time frame –** What results must be visible by the following period: • Within 1 quarter • Within 2 quarters • After 1 year • Within 2 years • After 2 years
Strategies - What are the major actions needed to accomplish desired outcomes within various time frames: • Networking, marketing and promotions • Resource persons and curriculum development • Staff and resource development • Programme management: Systems improvement	**Requirements** - What resources are needed to implement the different strategies: • Budget for all strategy activities • Staffing • Technology • Technical assistance

STEP 2: Identify the users of information

The M&E results will be most useful if programme stakeholders can actually and effectively use the results and information derived from the M&E, especially for making decisions about the programme. The stakeholders may want to increase support or even curtail ongoing support; they may want to further expand the coverage and scope; or use the programme for critical advocacies that impact on greater government and better governance. Section 3 of Part 2 further details how to use the M&E results based on an analysis of stakeholders' information needs and profile.

As an input for developing the M&E plan of the partner, a stakeholder's analysis must be conducted so that the M&E plan places emphasis on gathering and analysing information that are actually needed by these stakeholders.

STEP 3: Develop the M&E plan

Once the *Academy* plan is finalized and the information needs and profile of the *Academy* stakeholders have been defined and analysed, the partner is ready to build its M&E plan. The desired results or outcomes will be translated into performance or success indicators, and each of the indicators must have a specific target.

Sample performance indicators and targets

- *Desired outcome within a year: The programme has an **established network** of government **supporters***

- *Performance indicator and targets*

    - ***Programme support from leaders*** *(performance indicator)*

      Targets –
      Top level officers including minister or department secretary, deputy ministers and secretaries, directors directly reporting to the deputies, and key advisers of the minister/secretary and deputies

    - ***Available support for the programme*** *(performance indicator)*

      Targets –
      - *Establish mandate or policy requiring all planning and policy, ICT-related and programme management functions and positions in the government agency to attend the complete course of the* Academy
      - *Allocate resources for all participants to attend* Academy *workshops that cover fees, travel, accommodation, stipends, etc.*
      - *Support the implementation of participants' re-entry action plan, particularly projects that will make use of participants' increased competency from the* Academy *programme towards improving the agency's performance*
      - *Advocate for other government agencies and private sector partners to attend* Academy *workshops*

    - ***Established network*** *(performance indicator)*

      Targets –
      - *All front line government agencies directly involved in the delivery of basic services to the public, e.g., education, health, public works, transportation, etc.*
      - *Know about the programme and have sent participants to* Academy *trainings*
      - *Attend a forum to discuss how to tailor-fit the* Academy *modules to the needs of the various agencies*
      - *Attend a forum to evaluate the effectiveness of the* Academy *modules*

In the example above, the keywords of the outcome statement (in bold) are elaborated and translated into concrete performance indicators with specific targets. All statements (outcome, indicators and targets) are in present tense and worded in such a way that the desired results have already been achieved. Table 9 provides an overview of the different levels of indicators that are developed for each outcome to ensure that the M&E process is effective.

Table 9. Different indicators for each outcome

Outcomes and time frame	Input indicators and targets	Process indicators and targets	Output indicators and targets
Competencies			
Curriculum			
Programme Management			
External Impact			

Part 2, Section 1 details the different kinds of indicators and how these are developed for the *Academy* programme areas while Section 2 provides guidelines to determine appropriate methods for the indicators. The M&E plan may be customized based on the information needs of the partner. It is recommended, however, that the important information stated in previous steps are included in the plan. Table 10 provides a basic guide to the content of an M&E plan based on Steps 1 and 2 presented above.

Table 10. Basic content of an M&E plan

Desired outcomes time frame	Concrete indicators or evidences of performance targets per indicator	Activities: methods to measure baseline, progress and evaluate timelines of activities	Results generated from M&E reports, users of info and info packaging for the specific users	Activities to disseminate results to users of info in the right packages; timelines of activities	Resource requirement to implement the activities

STEP 4: Implement the M&E plan

Once the *Academy* M&E plan is finalized, the partner organization must be able to implement the different activities through its M&E system. A monitoring matrix is developed containing the different indicators for each outcome. The matrix informs the partners about the actual status of the programme and the *Academy* module implementation. Table 11 provides a sample of a monitoring matrix.

Table 11. Template sample of a monitoring matrix

Monitoring for outcome: Localization and standardization of modules to fit the needs of Republic X		
Time frame **Programme area** **Users of information**	**1 year** **Curriculum (Module)** **Resource persons, Director of *Academy***	
Target INPUTS & time frame	**Status**	**Details**
Three expert translators (English to local language) – before 2013	Recruited Dec 2012	Contract amount is USD 1,000 per module.
Presence of standards in translating module from English to local language – before 2013	Done Dec 2012	Cooperation of APCICT provided: standards identified together with them.
Target OUTPUT & time frame	**Status**	**Details**
5 modules localized within 5 months	5, first quarter 2013	Localization process was pre-tested, valid and reliable. Done by university partner. No problems encountered.

Target PROCESS & time frame	Status	Details
Publication of advertisement for translators by third quarter 2012	Not done	Resource person served as translator already
Target IMMEDIATE OUTCOME & Time frame	**Status**	**Details**
Participants provide high evaluation mark on the use of local language in delivery of module – after every workshop	After first run of Module 1: average score 5 on item 6	High marks: free discussions using local language – more active participation

Part 3 discusses thoroughly the strengthening of the M&E system to ensure that the planned activities for M&E are effectively implemented, sustained and further improved.

Summary Table: Part 1	
Section 1: Why do M&E?	M&E results that provide feedback and analysis on programme performance and impact are essential parts of the development cycle of a policy and a programme. M&E provides evidences and systematic analysis that are crucial in making informed, strategic and urgent policy and operational decisions about a programme. M&E results are important evidence-based inputs for decision makers who are engaged in: • Formulating and implementing policies • Formulating long-term, strategic and operational plans • Managing the implementation of programmes The M&E system enables the *Academy* partners to monitor and evaluate the different kinds of results derived from the implementation of a policy or a programme, and consequently analyse the effectiveness of a plan.
Section 2: What is the difference between "monitoring" and "evaluation"?	**Monitoring** is the continuous collection of data on specified indicators to determine the status of programme implementation. It documents what is happening and determines if it is consistent with the programme plan. Monitoring the status of the programme asks the question: What is happening to the programme at this point in time? **Evaluation** is the periodic and systematic organization of data and information to assess the overall performance vis-à-vis the programme plan. Evaluation determines factors that affect the quality and level of performance. Analysis will entail determining the quality, efficiency, and reach or impact of the programme in the identified programme indicators and targets.

Section 3: What are the important elements that make M&E successful?	• Every successful M&E system is based on a clear programme plan. The basis for an M&E plan—what to measure and how—is the programme plan. • The programme team of the *Academy* partner must be able to distinguish the difference between M&E activities and the M&E system, and must be ready and able to do and have both. The success of M&E is determined by the *Academy* partners' readiness to conduct systematic and reliable M&E activities and to put in place an effective and efficient M&E system. • The programme team must establish the credibility of the M&E results through reliable M&E activities, and an effective and efficient M&E system. Critical to the credibility of M&E results is the degree of reliability of the M&E tools and methods used in the gathering, analysis and reporting of results. Equally important is the effectiveness and efficiency of the M&E system in undertaking the M&E activities.
Section 4: What do you do with your M&E results?	The entire M&E effort will not be sustainable if the M&E results are not relevant to the target users. It will not be relevant if the users of the results do not know how to use these results. It will not be utilized effectively if the results and information from the M&E are not effectively packaged into appropriate information materials other than technical reports only evaluators can understand. Results must be re-packaged in different reporting formats that fit the readers' or users' profile. The user of information must be able to understand what the results mean as far as determining: • The current status of the programme • The impact it is creating on target clients • The state of programme implementation • The future of the programme given its impact and state of implementation

Section 5: What are the guidelines for designing a specific M&E system an *Academy*?	In designing the M&E system for all *Academy* partners, the system must have: • **A flexible design** to consider and accommodate the realities, requirements, and conditions specific to the organizational and social culture of the partner. • **A set of shared standards** since the partners are all implementing a common programme with specific mandates, content and requirements, especially for generating results and lessons that will have wider applications (beyond the country or subregional levels). The following are the shared standards of *Academy* partners: o Programme areas common to all must be measured by clear and concrete indicators. These programme areas are: - Competencies - Curriculum - Programme management - External impact o Each of the programme areas has dimensions. Partners may add to these dimensions as they mature in the implementation of the *Academy* programme. o Reliable and valid methods must be used to ensure the credibility of results. o M&E results must be effectively utilized. o The respective M&E system of partners should be flexible in design.
Section 6: What are steps to develop the *Academy* M&E?	Step 1: Finalize the *Academy* programme plan. The plan contains the direction and performance indicators that will be further detailed in the M&E plan. Step 2: Identify the users of information. The M&E plan results must show value to the different stakeholders of the programme. It is therefore important to identify what are the information needs of these stakeholders so that the M&E content can be directed towards these needs. Step 3: Develop the M&E plan. Important information must be provided in the M&E plan: the indicators and targets that must be monitored and evaluated; the users of information and their information needs; and the different methods and activities to gather and analyse data, and to report the results to the identified users of information. Step 4: Implement the M&E plan. This will require a basic M&E system in the partner organization. A monitoring matrix is developed for each of the outcomes to ensure that the M&E plan is implemented.

PART TWO: CONDUCTING M&E

It is important to define what information you want to know about your performance and how to get that information reliably, validly and in a timely manner. Part 2 will help partners identify areas in the programme that they want and need to measure through systematic M&E activities, and reliable and valid tools and methods. This part will answer the following questions:

Section 1: How do you develop programme indicators?

Section 2: How do you determine appropriate methods for gathering and analysing data and information?

Section 3: How do you effectively use the results of your M&E?

Defining and measuring indicators are critical steps in developing the Academy *partners' M&E system.*
Without a clear definition of what will be measured, the system will be confusing and unwieldy.

Define Indicators and Targets | Select Right Method | Use Your Results Effectively

Section 1: How do you develop programme indicators?

During the partners' business or annual planning, the desired outcomes (desired results or expected benefits) of the programme are identified. The desired outcomes in turn determine the programme's components, activities and modules that will contribute to the attainment of the outcomes. The plan must identify relevant indicators of performance and specify performance targets for each of the indicators.

For the *Academy* partners in their respective organizations, it is advisable to bring together the professionals (e.g., ICT experts in policy formulation), the technical team (e.g., curriculum developers, programme implementers, M&E team, resource persons, etc.), as well as representatives of the target clients to:

- Create or identify and agree on appropriate indicators for the four programme areas; and
- Determine specific targets for each indicator.

The information that will be defined in this consultation and in the final programme plan is the content of the M&E activities. These are the areas and targets that will be measured. The result of measuring these areas will provide feedback to the partners and their stakeholders regarding the level of performance of the programme for a specified period of time.

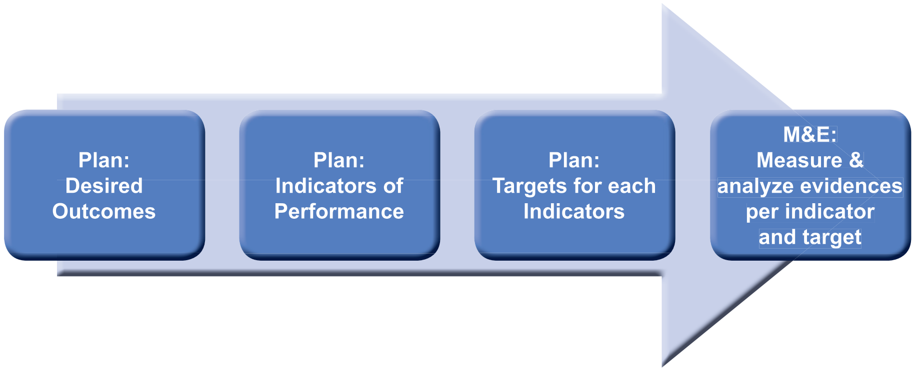
Defining indicators, therefore, is a critical step in developing the partner's M&E system. Without a clear definition of what will be measured, the indicators and targets of each indicator, the system will not bring relevant and useful results to all stakeholders.

This section will help partners develop reliable and valid indicators for the four programme areas.

1.1 What are indicators?

Indicators are concrete, observable, measurable and critical areas that will inform partners about the performance of the programme. These are specific evidences that reflect performance or change in the target client or condition. These are the tangible variables to measure programme achievements. Indicators point to how well the programme is actually progressing versus what was planned.

Figure 7. Measuring programme progress vs. what was planned



As shown in figure 7, when creating an M&E plan, the desired programme outcomes that are clearly set at the beginning of the programme, concrete indicators for each outcome and their specific targets are identified. These are the three most important inputs of your M&E plan. As mentioned in Part 1, one of the standards for the programme M&E is the four programme areas and their specific dimensions as shown in the first two columns in table 12. The *Academy* partners must define in each of the dimensions their country-level indicators and targets.

A Sample Case

Table 12 provides an example of an indicator for a particular dimension, and the specific target for the identified indicator.

Table 12. Programme areas, dimensions and sample indicators

Programme area dimensions	Desired outcomes	Indicators for dimensions (examples only)	Target per dimension (examples only)
COMPETENCIES • Competencies that learners must acquire from each module • Application of competencies in respective work areas	• Decision makers of government agencies are competent in formulating ICTD strategic directions in their organizations	• Number of competencies acquired from each module	• Two competencies acquired from Modules 1-5
CURRICULUM • Module content • Resource persons • Learning methods and tools • Participants/Learners	• Resource person pool has credibility and expertise in delivering programme modules	• Level of expertise of main resource persons	• Has a postgraduate degree and at least 5 years of ICTD experience
PROGRAMME MANAGEMENT • Leadership/ Sponsorship • Programme delivery • Management systems/ processes	• *Academy* roll-out is efficiently and effectively managed	• Regular feedback of performance to sponsors	• Establish M&E in Quarter 1

Programme area dimensions	Desired outcomes	Indicators for dimensions (examples only)	Target per dimension (examples only)
EXTERNAL IMPACT • Extent of impact on the country's or the sector's development goals, priorities and strategies • Extent of impact on the country's MDG targets • Extent of impact on the organization's priority agenda	• Elderly citizens have easier access to relevant government services via e-government	• Contribution of programme in developing the digital strategy of the country	• Government officials developing the digital strategy are participants of Modules 1-3

Guidance in developing indicators

1. Know your plan.

- Define the programme areas and dimensions – where do you want to see results, e.g., curriculum, competencies, programme management and/or impact.
- Ensure that indicators are accurately reflected in the organization's desired outcomes in each of the programme areas and dimensions.
- Clearly define indicators for each programme area and dimension – what will indicate that the programme is performing. Prioritize your indicators in terms of importance and financial and human resources available.
- Translate indicators into specific targets, which are measurable.
- Determine possible changes in the programme that may require corresponding changes in indicators. These changes may be due to shift in priorities of the programme or the partner organization.

A Sample Case

In your M&E plan, priority information needed by the programme by end of the first quarter is the evaluation of participants on the training modules they attended. But after the first quarter, the modules were not implemented. Hence, the important information that is now required are related to indicators on programme management to understand why the modules were not rolled out within the planned timetable.

TIP BOX

Partners at different levels of implementation (Tiers 1-3) may select all or specific dimensions within each of the four programme areas. For starters (Tier 3 partners), the selection of two programme areas and dimensions is recommended. This will be further discussed and shown in Part 3, Section 2.

2. Know the users of the M&E results.

- Identify the users (multiple stakeholders and major decision makers of the programme) of M&E results, and what information they need at different points of programme implementation.
- Knowing the information needs of the client will enable partners to effectively utilize the results of the M&E.

3. Know the needs of the programme.

- When you have conducted your M&E, you can compare actual results (evidences) versus targets (planned) and analyse the results to determine the reasons for the attainment (or non-attainment) of targets as shown in the evidences.
- The information from this analysis will be the basis of improving the business processes and management of the programme.

1.2 What are characteristics of good indicators?

Based on a wide range of literature on M&E, the following are important characteristics of good and effective indicators:

- Clear, specific, coherent, and precise
- Objectively measurable and verifiable
- Can be monitored and validated regularly
- Relevant to the programme's desired results
- Directly connected to the attainment of outcomes
- Can be derived from multiple sources of data, e.g., reports, feedback survey, etc.
- Can be easily measured with reasonable amount of resources (people, effort, energy, money)
- Agreed upon by stakeholders at the onset of the programme
- Reflects the different interests of the different key/major stakeholders
- Internally driven and customized to the needs of an organization, sector or country (may be based on policy and strategy papers)

1.3 What are the basic types of indicators?

All M&E plans used by Tiers 1-3 *Academy* partners would include most of the basic types of indicators.

Based on the programme design, indicators may reflect the different components of a programme and show the flow or process of delivery or implementation of the programme, e.g., inputs, processes (or throughput), outputs, outcomes (short- and medium-term) and impact (long-term). The process chain is illustrated in the M&E framework for a results-based M&E system below:

- **Input**

  Focuses on what and how resources are being utilized by a programme or project. This includes human resources, the training and expertise of programme staff that is brought in, financial, physical and material resources such as training venues, etc.

  Examples:

  Trainers recognized locally and internationally

  Number of learners from appropriate levels of authority and position, expertise and educational background, and institutional affiliation

- **Process/Activities**

  Measures ongoing implementation and progress of the programme or project in terms of activities, processes associated with the programme's delivery and the transformation of input into output.

  Example:

  Number of exercises conducted and local case studies discussed

- **Output**

  Includes actual achievement of the desired results, behavioural changes in the baseline, and major milestones accomplished through the implementation of the programme. Contribution to the programme's objectives and purpose. This is the intermediate effect on the target clients or beneficiaries.

  Example:

  ICT skills curriculum in high school education

- **Outcome**

  Measures the benefits of the programme on the target organization in the short- and medium-term.

  Examples:

  Proportion of government employees who are computer literate and can access information via the LAN

  Number of government telecentres and information kiosks set up in city malls

- **Impact**

  Focuses on programme or project results and contribution to the country's development goals. The scope of impact indicators are broad, long term and may even be subregional and regional.

  Examples:

  Number of computers per 100 public school students

  Annual government expenditure on ICT

  Per cent increase of ICT-related jobs and positions in the government sector

  ICT infrastructures set up in the provinces that allow businesses and households to access information via the Internet

In terms of the kind of data they yield, indicators can be:

- **Quantitative**

  Reports specific numerical figures (numbers, per cents, averages, rates, etc.)

  Example:

  Number of trainings conducted within a quarter

  Describes numerically the extent of change in insights, behaviour, beliefs, attitudes, perception, etc.

  Examples:

  Openness to ICT solutions measured in terms of the number of approved ICT solutions to be deployed in the company

  Change in behaviour in terms of per cent increase in applications for business permits via the Web/Internet

- **Qualitative**

  Describes the quality of the change in insights, behaviour, beliefs, attitudes, perception, etc.

  Examples:

  Able to use the ICT tools in day to day activities

  Openness to ICT solutions measured in terms of employee suggestions involving ICT modes

The use of quantitative, qualitative or a combination of both types of indicators will determine the methodologies employed to measure and gather data, as well as the appropriate tools to analyse them.

Indicators may also be classified in terms of whether they are direct or indirect measures of progress or desired results:

- **Direct**

  Directly measures what is intended.

  Example:

  Concrete inputs and feedback from key stakeholders (direct measure of the level of stakeholder involvement)

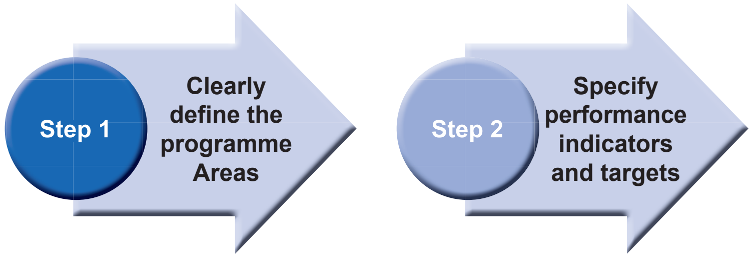
- **Indirect/Proxy**

  Approximates what should be measured. Used when it is too costly to measure something directly or when direct indicators are not available.

  Example:

  Number of consultative meetings with stakeholders (indirect/proxy measure of the level of stakeholder involvement)

1.4 How to construct a good performance indicator



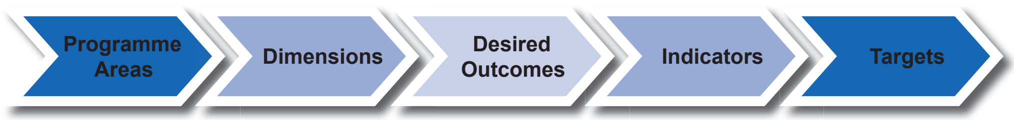
Step 1: Clearly define the desired outcomes for each programme area (competency, curriculum, programme management, external impact) and their respective dimensions. Refer to table 6 in Part 1 for a description of the programme areas and their dimensions.

Figure 8 presents the flow for developing indicators and targets. According to the flow, desired outcomes are defined for each dimension in a programme area. Indicators are then identified for each desired outcome, and targets are set for each indicator.

Example:

***Programme area**: Curriculum*
***Dimension:** Participants*
***Desired outcome**: A network of* Academy *graduates who collaborate on specific projects benefiting their organizations*
***Indicator**: Number of participants who are in positions of influence in their respective organizations or units*
***Target**: Two graduates from each of the participating organizations in the programme that have a rank of director or higher.*

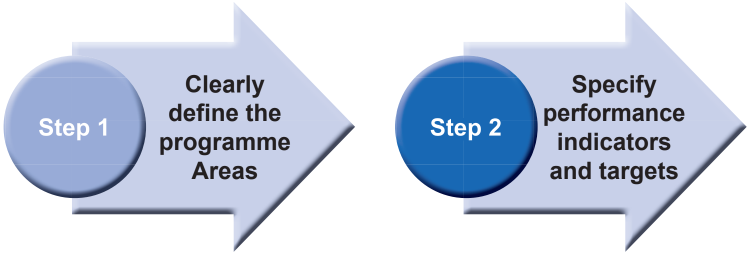
Figure 8. Flow for developing indicators and targets



Examples of desired outcomes

An example of a desired long-term outcome for the programme area, "external impact" and dimension, "extent of impact on achievement of the country's MDG targets," is that "graduates of the programme contribute substantive policy inputs in the Commission on ICT that will enable government agencies to use ICTs to achieve MDG targets."

An example of a desired short-term outcome for the programme area, "curriculum" and dimension, "participants to the programme," is that "participants of the Academy *Modules 1-5 are top level executives in 75 per cent of the national government agencies."*



Step 2: Specify performance indicators and targets for the different dimensions of each programme area.

An outcome is not in itself an indicator. While outcomes are agreed upon desired results that must be achieved through a programme's implementation, they may be quite general and even abstract, and may not be easily and directly measured. Therefore, there is a need to specify one or more performance indicators for each desired outcome.

For example, the desired outcome on "influence policy on ICT" may be broken down into two performance indicators: (1) number of policy analysis done on current ICT policies that impact on development; and (2) number of ICT policy recommendations submitted to policymaking bodies.

Definitions of each of the programme areas and their dimensions achieve clarity and concreteness when performance indicators are specified and targets for each indicator are set. The following subsection further explains how the four programme areas may be translated into indicators and targets:

1. ***Competencies***. Traditionally, training programmes commonly describe desired results in terms of **learning outcomes** or what the participants can and may learn. Performance is usually measured by examinations or methods that determine what the participants have learned from the course, e.g., reports. Training programmes may state learning objectives, which may be terminal objectives (what can be achieved at the end of the programme) and process objectives (what is achieved per module or workshop).

   Training programmes that are competency-based express learning objectives as desired results of a module or combination of modules. These competency-based learning objectives clearly and concretely state:

   - What the participants will be able to do specifically (e.g., ability to analyse policy statements);
   - How the participants will behave in certain work situations (e.g., provide coaching to staff on ICT-related studies and policies); and
   - What activities and at what level of effectiveness can participants perform at work as a result of the learning experiences (e.g., recommend updated, relevant and strategic ICT policy agenda to top management).

In order to be useful, competencies as stated in learning objectives need to be defined in terms of performance indicators that can be systematically observed and measured. Competencies, when translated into indicators, describe the "bundle" or combination of concrete values, beliefs, attitudes, knowledge, skills and work behaviour that may be demonstrated after going through the learning programme. These competency indicators may include measures of effectiveness and efficiency standards of performance.

Example

Learning objective: *At the end of the training, the learner can effectively communicate with co-workers and senior management on the importance of ICT for meeting development goals within the mandate of their organization.*

Desired ability (as a competency) for this learning objective: *Effective communication.*

Performance indicators *(bundle of skills, knowledge, attitudes that contribute to the competency on effective communication)**:** Learners will be able to:*

- *Explain with conviction the importance of ICT in achieving socio-economic development objectives*
- *Provide echo training on basic ICTD concepts to all employees of the organization*
- *Explain to their staff the roadmap for the use of ICT to meet the development goals that fall within the purview of their organization*
- *Explain to their staff how ICT can reduce the turnaround time in clients' applications and increase the accuracy of processed client information*
- *Appreciate the importance of clear and complete communication in promoting ICTD*

A sub-indicator for this objective: As a result of providing training on basic ICTD concepts, the per cent of development projects of the organization that utilize ICT tools increases.

2. ***Curriculum*****.** As a major content area of the programme, curriculum needs to be further broken down into its component parts and translated into indicators that can be used to monitor how people are doing and how the programme is progressing.

   Curriculum components include the contents of the different modules, teaching tools and learning methodologies, resource persons and the learners or participants. Partners may use a variety of indicators for each of these components that reflect input, activities, outputs and outcomes that are relevant to the partners and their respective stakeholders. These indicators are then provided with specific targets that will be measured across time of implementation.

   Table 13 illustrates sample indicators and targets for curriculum that can be used by Tier 1-3 partners.

Table 13. Curriculum indicators and targets by Tiers

Tiers	Dimensions	Indicators	Targets
Tiers 1-3	Teaching and learning methodology	Level of adaptation of the course to the local context	Local cases observed, written and discussed among participants during the module
Tiers 1-2	Teaching and learning methodology	Level of adaptation of the course to the local context	3 modules translated into local language 50% of cases observed, written, and discussed during the module are local cases
Tier 1	Teaching and learning methodology	Class size Ratio of resource person to participants during training Use of adult learning methodologies	Maximum of 25 participants per session 1 resource person to 10 participants in a training
Tiers 1-3	Content	Actual cases on cybercrimes and cybersecurity incorporated in the module as examples	At least 5 actual cases on cybercrimes and 5 cybersecurity programmes developed and implemented by agencies
Tiers 1-2	Content	Ease of understanding of module contents Number of local studies developed	50% of cases used in discussion and manual are about local ICTD initiatives on disaster risk management
Tier 1	Content	Number of references to the national policy documents Presentation of emerging models of good practices	At least 20% of curriculum content refer to national policy on ICTD
Tiers 1-3	Resource persons	Level of expertise of main resource persons	Postgraduate education and at least 5 years of ICTD experience
Tiers 1-2	Resource persons	Theoretical and practical knowledge Number of research articles published by resource person Years of experience in advising government organizations on ICTD	At least 5 published research articles in area of interest or module At least 10 years of work experience in the field of disaster management

Tiers	Dimensions	Indicators	Targets
Tier 1	Resource persons	Degree of satisfaction expressed by participants	Average rating of 85% for each module taught by resource person
Tiers 1-3	Learners/ Participants	Level and position in their respective organizations Educational attainment and depth and breadth of IT knowledge and background in disaster management	Director level and above in the ministry or agency University graduates in courses related to IT and communication, with at least 5 years of experience working in ICT related functions and the disaster risk management field
Tiers 1-2	Learners/ Participants	Reach of learners: Sector represented by workshop participants: • Government • Private • NGO • Other Geographical origin of learners (i.e., city, province, etc.)	Composition of participants in workshop: 50% government research and clerical staff 25% senior management level 25% top management level 50% government staff from regional or provincial offices 50% government staff from national offices
Tier 1	Learners/ Participants	Number of government services transformed by participants into Internet-based platform	15% access rate of particular e-government service within the first year of launched e-government service 25% access rate of particular e-government service within the second year

3. ***Programme management.*** This is an essential component of the *Academy* M&E system. Programme management includes programme delivery processes, management system, leadership, human resources, business processes, and products and services, all of which support and facilitate programme implementation. Table 14 provides sample indicators and targets for programme management that can be used by Tier 1-3 partners.

Table 14. Programme management indicators and targets by Tiers

Tiers	Dimensions	Indicators	Targets
Tiers 1-3	Programme delivery	Number of *Academy* workshops conducted within a quarter	1 executive briefing conducted every quarter 2 workshops on ICTD and basic services conducted every quarter
Tiers 1-2	Programme delivery: Global/ Regional collaboration with *Academy* partners in other countries	Networking with regional *Academy* partners	Attendance and active participation in the APCICT *Academy* Partners' Meeting
	Leadership: Sponsorship of APCICT programme and M&E system	Strong political champion and stakeholder ownership of programme and M&E system	Act as resource person in other *Academy* partners' workshops
		Number of consultative meetings with leaders and major stakeholders of the programme	Partnership agreement signed between APCICT and *Academy* partners

Tiers	Dimensions	Indicators	Targets
Tier 1	Programme delivery	Shift from topic-based to competency-based training	Specific competencies identified for each module
	Implementing processes and M&E system	Extent of M&E conducted	Creation of a monitoring reporting schedule and tools Conduct quarterly monitoring of indicators and targets in all programme areas Conduct yearly evaluation of performance
	Human Resources	M&E team expertise on the modules, possesses both technical and non-technical skills (e.g., research methods)	2 individuals with M&E expertise per programme 1-2 existing M&E units or teams in partner organizations
		Efficient and effective monitoring activities conducted on a quarterly basis	1 monitoring report per quarter
		Programme team members' ability to construct indicators, collect relevant and high quality data, analyse data, and report performance status in relation to indicators, baselines and targets	1 evaluation report at the end of programme Presentation of M&E results to stakeholders upon completion of programme
	Business processes: Sources of funds and resources for ICTD projects/ activities	Per cent of annual state budget allocated to ICTD	(Targets to be set per country based on policy or strategy paper)

It is important to note that in order to monitor effectively, the choice of indicators or evidences should allow for continuous measurement and generation of data streams instead of periodic data gathering.

4. ***External impact.*** This reflects the desired end result or benefits of the programme on target areas, sectors and beneficiaries.

   For Tier 1 partners, identifying and creating indicators for external impact may contain the various characteristics of the basic types of indicators discussed earlier. The indicators for external impact may further include attributes of the more complex types of indicators and may be described and measured in terms of intensity or level, directness (or proximity), scope or reach, stage, and time frame.

   External impact indicators may be determined by their source, and by whom or what identifies them. They may be:

   - **Pre-designed**

     This means the indicators are created independently of the country, sector, programme or organization. They are usually determined by external stakeholders, development institutions, donor organizations or countries, and drawn from a top-down process.

     Examples:

     Portion of seats held by women in national parliament (MDG indicator for Goal 3: Promote gender equality and empower women)

     Continued post-training consultation of client organization with partner on ICT issues and concerns (indicator for partner-client improved relations)

     In the case of the *Academy* programme, these indicators may be the ones identified and agreed upon during the Third Academy Partners Meeting in 2011 (see Appendix).

- **Disaggregated or customized**

  These indicators are identified as appropriate and relevant to the needs of the country, sector, programme or organization. They may be internally driven and customized to specific needs of stakeholders and arrived at through participatory processes among stakeholders.

  Examples:

  The number of local poor people, especially woman, participating in the community e-dialogues or e-campaigns (indicator specific and relevant to a country's ICTD programme)

  Partner is exclusive supplier of ICTD training programme (indicator for partner-client improved relations)

  Academy partners can monitor and evaluate indicators for a specific sector they are currently focusing on. For example, if the ICT training programme is customized for a group of government agencies involved in disaster risk reduction and management, the following indicators may be used:

  The extent commercially available ICT media (such as radio, TV, telephone, SMS, cell broadcasting and Internet) are used by government agencies to issue early warning bulletins about tropical storms and typhoons

  The number of government agencies and partner organizations involved in disaster management that share disaster-related information with each other and the general public via commercially available ICT media during relief operations

  Indicators may also be categorized based on the scope or reach as follows:

- **Global/Regional/Subregional**

  These indicators look at the scope and reach of the programme, particularly the collaboration with other Academy partners in other countries in gathering and sharing data. They can also include the adoption of good practices of an Academy partner by another partner in a different country.

  Examples:

  Best practices of programme implementation utilized by Academy *partners in Asia (regional).*

  Cases of successful ongoing e-government programmes in different Academy *partner countries in the Pacific incorporated in discussions of their* Academy *modules (subregional)*

- **National/Country/Sector**

  These indicators are tied to country assessments, national governments' progress and development composite indices. They may also include assessment of selected sectors that the programme targets.

  Examples:

  Per cent of entrepreneurs that access online government/public services for businesses licenses (degree of usage of e-government initiatives targeted at businesses)

  Number of government agencies with multiple databases that enable interconnectivity in providing services to the public (capacity/readiness of government in rolling out e-government initiatives)

  Per cent of schools (urban vs. rural) with Internet connectivity and websites (degree of ICT diffusion in the education sector)

  Number of ICT policies created that are related to cybersecurity within the organization

  Number of implemented ICT policies related to cybersecurity within the organization

- **Programme**

  These indicators are anchored on the programme's process and outcome.

  Example:

  Number of resource persons with degrees relevant to ICTD who can deliver APCICT modules and integrate ICTD in university courses

Some indicators may be defined based on a given framework that drives a programme, such as the capacity, usage and transformation (CUT) model for ICTD:

- **Capacity/Readiness**

These indicators include ICT infrastructure and resource (such as size, capacity, spread and coverage, degree and level of deployment, etc.).

Examples:

ICT investment and spending annually (capacity/readiness, resources)

ICT-related occupations in the government sector (capacity/readiness, skills)

ICT infrastructure or platform to support web-based services in government agencies and ministries (capacity/readiness, infrastructure)

Level of trust in the security and privacy of e-government services (readiness, trust)

- **Usage**

These indicators include ICT facilities and resources (level, degree and spread of access; degree and level of usage; distribution of usage in specific communities, groups and sectors).

Examples:

Per cent of Internet usage by industry and size of business (usage, by firms)

Number of daily transactions and access of services via government websites by individuals (usage, by citizens)

Customer satisfaction of services rendered via government websites

Perceived level of trust in the use of government websites

- **Transformation**

These indicators focus on socio-economic development impact measurements. They include looking at the impact of information society development on households and their socio-economic outcomes; business activities and outcomes; and government systems operations, performance and activities.

Examples:

Level of employment in ICT and ICT-related industries in absolute headcount and per cent of total workforce

Per cent of reduction in government spending on the processing of new business applications as a result of creating government websites

ACTIVITY

Review your lists of country-specific and universal indicators. Please see Appendix.

Discuss with your programme team and other stakeholders what indicators would best reflect the goals or outcomes you would like to achieve in each of the programme areas (competency, curriculum, programme management, external impact) and their respective dimensions.

Shortlist and prioritize your list of indicators based on relevance to policies, information needs, feasibility and availability of resources.

Identify targets for each indicator. Make sure that your targets are very concrete, specific, time-bound and measurable.

Refer to the examples in this section to guide you in constructing and refining your indicators.

Define Indicators and Targets | **Select Right Method** | Use Your Results Effectively

Section 2: How do you determine appropriate methods for gathering and analysing data and information?

Once the different indicators are identified, the next steps are identifying the sources of information for each indicator, and determining the appropriate data gathering and analysis methods and tools. These steps provide the important blocks for building the M&E plan.

2.1 What are different sources of information for M&E?

Primary and secondary data may be gathered from various sources to provide evidence about the programme status, outputs and outcomes. Primary data are first-hand information gathered by an implementing partner from its training participants, service providers and programme clients or partners. These data can be in the form of questionnaires or evaluation forms during and immediately after the programme training or workshop.

Secondary data, on the other hand, are relevant information about the programme that was collected by organizations other than the *Academy* partner. Examples of these are demographic data, increase or decrease in ICT use or national poverty rates, published in reports produced by government and non-government organizations. Any information related to the programme outcomes that come from sources indirectly involved in the programme is considered secondary data.

2.2 What data collection and analysis methodologies can be used for M&E?

Data collection and analysis can be classified into three methodologies: quantitative, qualitative and mixed methods. Tools and templates for M&E may be found in reference materials for M&E, or they may be custom made. *Academy* partners may already have their respective tools and templates from other training programmes that they deliver. The partners, however, must match the type of data and information that need to be collected with the appropriate methodologies and tools.

A **quantitative approach** to M&E consists of numeric-based tools and methods for data gathering and analysis. These tools may be in the form of survey instruments, scorecards and ratings scales. Such tools translate perceptions, opinions or feedback into numbers that can be analysed using various statistical techniques. The structure and ease of responding to these tools allow programme implementers to reach as many respondents as possible.

Depending on the purpose and nature of M&E indicators in the different programme areas, different analytical methods may be used to reveal patterns and relationships of answers in each item and for all items, e.g., general pattern of dissatisfaction over teaching methods but high satisfaction over content of the module. These patterns can help the partner make conclusions about the status of the module implementation. Table 15 shows some of the most common quantitative analysis methods that can be used to monitor and evaluate the programme.

Figure 9. A sample questionnaire using quantitative method for measuring attitudes

Please check the box that best describes your answer:

I clearly understand the definition of ICT.

____ Agree very much
____ Slightly agree
____ Slightly disagree
____ Disagree very much
____ No answer

Note: Each choice in this statement will have its numerical equivalent, i.e., 4 for agree very much, 3 for slightly agree, 2 for slightly disagree, 1 for disagree very much, 0 for no answer.

Table 15. Sample of analytical techniques

Purpose	Analytical techniques	Examples of questions that can be answered by quantitative methods
Reveal patterns and trends in the answers of the respondents	Frequencies and per cents, ratio Measures of central tendency: mean, mode, median	How many government officials have participated in *Academy* workshops? How did the participants rate the *Academy* workshops? What is the ratio of computers to staff in an average government office? What is the median age of citizens availing of e-government services?
Reveal strength of relationships in the different findings and make predictions among programme areas or variables	Correlation and regression analysis	Does age make a difference in the way ICTD concepts are received? Do young people (age) in richer areas (economic status) respond better or worse to ICTD? Does the number of *Academy* workshops attended make a difference on the impact of e-government services?

Refer to Annex A for a tool that can be used to measure the organization's level of readiness for conducting and installing an M&E system. It is a checklist for determining the institution's readiness for M&E and uses a quantitative approach.

A **qualitative approach** to M&E consists of non-numeric based data gathering tools and methods. These may be in the form of semi-structured interviews, focus group discussions or case studies. Compared to quantitative techniques, qualitative data gathering methods are more time-consuming and laborious. As such, the extent of use of qualitative studies is more limited. This limitation is however offset by the depth of information and insight that can be derived from these methods.

Interview question: How did you apply the knowledge you gained from the three modules you attended?

The themes derived from the answers of the seven interviewees:

They designed an internal ICT learning session on policy analysis.

They were selected and participated in special committees for reviewing ICT-related policies.

They developed ICT position papers or technical research materials.

Qualitative data in the form of transcripts, texts or narratives may be analysed using content or thematic analysis. In doing content or thematic analysis, the researcher-evaluator looks for recurrent ideas, words and phrases. These are then categorized into meaningful themes and are linked with programme processes or outcomes. The results of content analysis may provide explanations or alternative understanding of ICTD concepts and experiences.

Annex B is an Institutional Readiness Questionnaire. This tool is a sample of a qualitative approach to determining respondents' opinions, conditions and recommendations.

Figure 10. Sample result of a qualitative method using the clustering of themes to capture responses from participants

A mixed methods approach combines both quantitative and qualitative data gathering and analysis methods and tools to provide a more comprehensive feedback and analysis of the programme inputs, process, outputs and outcomes. Very few *Academy* partners have developed mixed method monitoring or evaluation templates but a number have expressed their desire to reach this level in terms of measuring the programme. To get the most value it is important to compare the different techniques in terms of costs, amount of training required for data gathering and analysis, completion time and response rate (e.g., number of respondents completing the surveys or participating in interviews and discussions). Table 16 compares some data collection methods.

Table 16. Comparison of data collection methods

	Data collection methods				
Characteristic	*Surveys*	*Rating Scales*	*Small Group Discussions*	*Interviews*	*Case Studies*
Costs	Low	Moderate to High	Low to Moderate	Moderate to High	High
Completion time	Short	Short to Moderate	Moderate	Moderate	High
Response rate	Moderate to High depending on distribution	Moderate	High	Generally Moderate to High	High
Amount of training required for data gathering and analysis	Few	Moderate to High	Moderate to High	Moderate to High	High

Adapted from *United Way of America* (1996) as cited in Kusek and Rist (2004).

The *Academy* module evaluation form in Annex C is the standard tool used by APCICT to evaluate the results of its course. The questionnaire is handed out to participants at the end of the course to give feedback on the content and design of the module, and on the trainer. The tool uses both quantitative and qualitative approaches to M&E. The data can be analysed by computing the average scores of the numbered scale while the responses to the open-ended questions can be summarized using content analysis. This is an example of a mixed method measurement tool.

More examples of M&E tools that use the mixed methods can be found in Annexes D-F. They contain the end of course survey form, spot check rating form and site visit interview guide for eSkwela, an online learning module for adult learners and out-of-school youth in the Philippines. These tools are being used to monitor the impact of eSkwela courses on participants.

Refer to further reading below for resources on different statistical tools for data organization and analysis.

2.3 What are important considerations in choosing data gathering and analysis techniques?

According to Kusek and Rist (2004), there are three main criteria that must be considered in data collection and analysis. These are reliability, validity and timeliness. These criteria ensure the credibility and relevance of the M&E data.

Reliability is a measure of the stability, dependability and consistency of data and results across time and space. This means that using the same indicators and analysis techniques produce similar results. For example, the *Academy* partner obtains consistent results across five modules in two years when using the same instrument to measure level of satisfaction on module teaching approaches. Reliability measures provide evidences that programme interventions such as trainings are effective or not effective.

Validity, on the other hand, is the measure of the accuracy and clarity of a concept or reality that the instrument intends to measure. The focus of measurement here is a particular concept or condition. The instruments must be able to measure what it is intended to measure in an accurate and clear manner. For example, if the indicator being measured is the improvement in participants' attitude towards ICTD, the result of the tool must clearly and accurately show the change in beliefs and behaviour of the participants towards ICTD. If the instrument showed a change in attitude towards Internet usage instead, then that instrument is not a valid measure of the attitude on ICTD.

Finally, **timeliness** is a measure of the frequency (how often) and currency (when) of data collection and the production of results. Reliable, valid and timely information enables programme stakeholders to make accurate decisions about the programme.

2.4 What different tools may be used to monitor and evaluate the programme?

Depending on the scope and purpose of the M&E system and the complexity of programme implementation, there are many M&E tools that may be used for the different programme areas. Table 17 gives some examples of the M&E tools used by *Academy* partners in their programmes.

Table 17. Example of tools for M&E

Programme areas	Tools for monitoring	Tools for evaluation
Curriculum	• End of course evaluation and training reports • Resource person peer review reports	• Annual or semi-annual academic audit reports • Supervisor's feedback and performance reviews
Programme management	• Programme status and accomplishment reports • Incident reports • Financial records	• Case documentations • Mid-term and end of programme reviews • Organizational scorecards
Impact	• Statistical and country reports • MDG status and accomplishment reports	• Programme impact assessments

Table 18 shows an example of an evaluation report (template form) provided at the end of implementing a series of the same training workshop.

Table 18. Sample template for an evaluation report

Indicator	Target	Data sources	Actual performance	Actions to be taken
Number of participants who match required characteristics of attendees (e.g., senior-level government officials)	75% of attendees should match specified characteristics	Participant information sheet	50% of attendees match specified characteristics	Improve recruitment and screening process
Average score in course evaluation	Participants give a score greater than 3 in a 5-point scale	End of course evaluation	Average score is 3.5	See which areas of the training need improvement
Improvement in participants' work performance	75% of the participants receive favourable feedback from supervisors	Performance appraisal form	50% provided performance appraisal results 45% of participants receive favourable feedback from supervisors	Improve system of post-workshop reporting and tracking of participants Review applicability and relevance of curriculum

ACTIVITY

Using the indicators and targets you identified or developed in Section 1, determine the best-fit M&E tools for gathering data and for analysing the results of these tools. You may use the template below as a guide:

Programme area:

Dimensions	Indicators	Data gathering tool (type of data gathered: quantitative, qualitative, mixed)	Type of analytical technique to be used

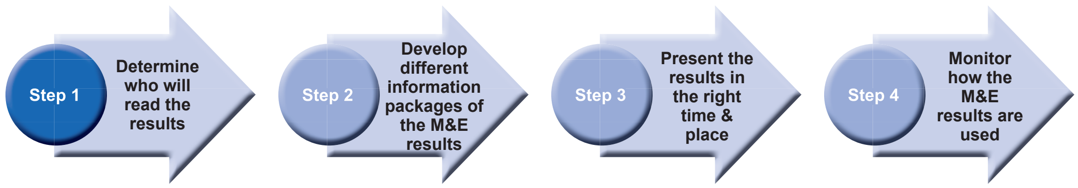
Section 3: How do you effectively use the results of your M&E?

The partner's M&E results can only be fully relevant if these are used by decision makers within and outside the programme team to:

- Respond immediately to situations requiring urgent action
- Improve aspects of the programme in the medium- or long-term
- Derive important lessons that can be inputs to further research and policy recommendations
- Guide other related decisions and actions that will impact the programme

Reporting the results is therefore a critical step in the entire M&E process.

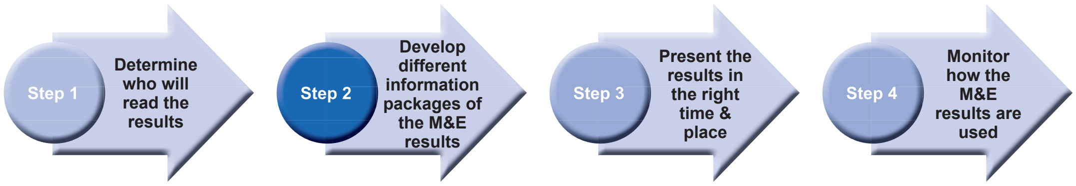
3.1 Steps in determining how to report M&E results



Step 1: Determine who will read the results

When presenting the M&E results, it is important to keep in mind the profile of the reader or end user. An executive summary is often best for busy sponsors who may not have the time to read a full technical report. But resource persons or curriculum developers of the programme may need a full technical report. In determining the profile, the partner may want to find out:

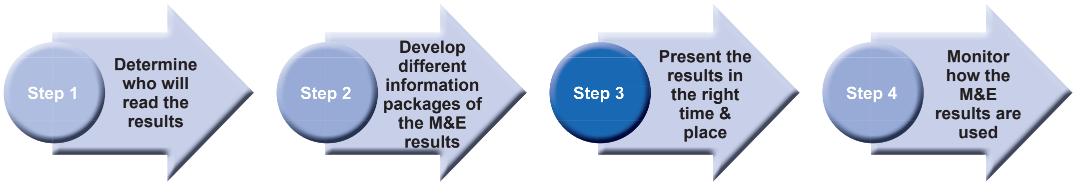
- What do they want to know about the programme first—this is their primary interest, e.g., sponsors may want to know more about impact than curriculum while resource persons will prioritize competency and curriculum over programme management
- How much time can be given by the reader to read the entire report
- What language is best used to ensure that the reader understands the jargons and terms in the M&E results
- What is the preferred style of presenting the report, e.g., visual presentations rather than narrative or a presentation before reading a document



Step 2: Develop different information packages of the M&E results

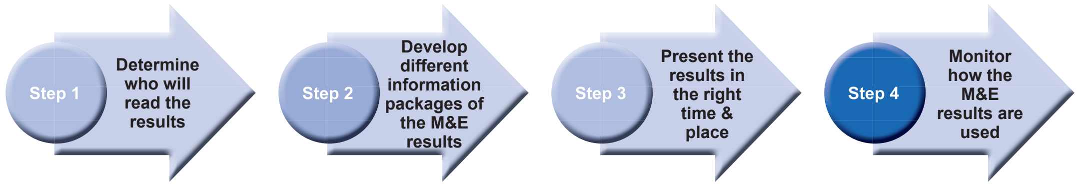
Once the profile of readers or users of M&E are determined, develop the appropriate information packages or materials for the specific reader. In developing the information packages, it is best to:

- Combine narratives with visual presentations, e.g., diagrams, charts, photo-documentation
- Provide a concise and clear executive summary that can be used as a single document
- Provide a presentation that summarizes the results, analysis and recommendations
- Ensure that the technical or complete evaluation report is written following a clear and logical flow of thoughts
- Indicate which result items are urgent, important and strategic so that the readers or listeners will know how to respond
- Provide for a time and space when the written report can be presented and discussed through a question and answer session



Step 3: Present the results at the right time and in the right place

Timing is critical. The reader's or listener's readiness to absorb the results depends on the right time s/he gets the report and where s/he reads it. Placing the report on the sponsor's desk does not guarantee that s/he will read it. Presenting the results through a presentation may not be effective if the director of the organization is rushing to another meeting. It is best to set the right time and control the environment where the presentation of the M&E results will be given, especially if there is a need for discussion of the results.



Step 4: Monitor how the M&E results are used

M&E results must be monitored to determine how and when these are used, by whom and for what purpose. A simple way of monitoring how the M&E results are being used is presented in table 19.

Table 19. Monitoring the utilization of M&E results

What report was produced: Title, date, key information about the report	Who used the report and when was it used; for what purpose was the report used (Use another space for each event and users of the same report)	What decisions or actions resulted from the use of the report; when will these decisions and actions take effect	Where is the report now; other requirements needed by the users based on the results of the report or because of using the report
Monitoring Report 1: Issued 25 March 2013 Status of Quarter One implementation of the *Academy* programme	APCICT: 25 October 2013; review of partners status	The report was incorporated in the annual review and used to develop the theme for the next partner's meeting	Report is with APCICT; no further feedback about the report. APCICT requested that the report be summarized through a digest
	Board of Director of organization: 10 June 2013; determine the resource investments for programme	The Board decided to increase staff and funds to implement Modules 1-5 of the *Academy* in September-December 2013; Decision will take effect on 1July 2013	Report is on programme file. Board directed that an Executive Summary be provided to all directors of the different departments of the organization

TIP BOX
Increasing the usefulness of results

When presenting your M&E results to a specific audience, you may want to:

- Relate the results to specific issues important for the audience. If, for example, the audience is a health minister, connect the M&E results to appropriate national health indicators or issues.
- Show how the implications of the results, based on your analysis, may affect particular policies and programmes of the national government agencies or ministries.
- Present strategic possibilities and benefits that may be derived from the results if these are utilized to address current global or regional challenges, for example, innovations in climate change response.

3.2 Monitoring charts and reports

A monitoring chart can help the team track targets versus actual results. This chart is updated periodically based on the results of the monitoring analysis. A simple example for partners in Tiers 1 and 2 is presented in table 20.

Table 20. Sample of monitoring chart

Table 1-A: Monitoring – Programme Area: Curriculum – Dimension: Resource Persons (2013)							
Indicators	*Years experience in the topic being taught (in actual years)*		*Conceptual/ Theoretical expertise (peer rating) 1-very low 5-very high*		*Teaching competency (peer rating) 1-very low 5-very high*		*Observation of monitor*
Modules: # of resource persons	**Actual**	**Target**	**Actual**	**Target**	**Actual**	**Target**	
Module 1 2 resource persons	Average: 5	Average: 7	3.5	5	4	5	Sustain pool but provide opportunities for updates
Module 2 3 resource persons	2	5	2.5	5	2	5	Need to train/ widen pool of resource persons
Module 3 2 resource persons	6	6	4	5	4.5	5	Pool of experts; may be used to help develop other resource persons

The chart above provides immediate feedback on the quality of resource persons per module. Peer rating is done by resource persons, participants and experts using a standard format that specifies levels of expertise along a scale of five, from very low to very high.

Table 21 gives an example of how the peer rating can be applied to three targets of the indicator on "conceptual/theoretical expertise in subject matter". These targets and scales may be incorporated in the evaluation form provided to participants after each module training. All same scaled items can then be averaged using an appropriate statistical tool to obtain an overall assessment of the resource person. Based on overall results for a particular period, for example after three workshops, data can be analysed based on trends, and observations and recommendations may be presented.

Table 21. Assessing targets using a scale

Programme area: Curriculum Dimension: Resource person Indicator: Conceptual/Theoretical expertise in the subject matter		
Targets of indicator being assessed	**Assessment scale**	
Mastery of foundational theories related to the module	1 (Very low)	5 (Very High)
Updated on relevant findings related to the module	1 (Never)	5 (Always)
Published or lectured on theories and principles relevant to the module	1 (Never)	5 (Always)

Your forms must only get data and information that you need. No more, no less.

Every programme requires different kinds of reports. For these reports to contribute to effective and reliable M&E, the format and the content must be consistent with the indicators and targets of the programme areas, i.e., the report must provide the reader with the necessary data and information they need as specified in the indicators and targets. No more, no less. Oftentimes, evaluation forms contain too many items that are not needed by the users of information. Too much data with no clear purpose or use will only waste time and effort. Hence, if an indicator of performance has only two targets that must be accomplished, then the evaluation forms and reports must only reflect items related to these requirements.

Important reports to consider as part of the reporting system for M&E:

- **Status report** – Indicates the actual state of implementation by showing in clear, understandable format the targets attained, the current situation of the programme (problems raised and addressed, added benefits, etc.). Status reports are usually provided to the programme manager and to the team at the end of every month or every quarter, depending on the M&E plan.
- **Incident report** – Documents important or critical events during the course of programme implementation. The report presents:
    - Why the critical events happened
    - Why these events are important to note or document
    - What happened in these events

- What are the results of actions taken to address (or not address) the events
- What actions (if any) are needed from the programme team and management

- **Yearly performance report** – Is a full evaluation of a programme for a period of one year. For the partner, the annual performance report may contain the findings on the four programme areas, the analysis of factors that influenced the level of performance for each area, the possible implications of the result of performance, and the recommendations for moving forward.

It is recommended that partners in all tiers must have at least these three basic reports.

Summary Table: Part 2	
Section 1: How do you develop programme indicators?	A good M&E plan must have relevant indicators. Indicators are the tangible and critical aspects of your programme that are measured to determine progress and performance. Effective indicators are clear and specific, objectively measurable and verifiable, regularly monitored and validated, connected to the attainment of outcomes, and easily measured with reasonable amount of resources. The basic types of indicators are related to inputs, processes/activities, outputs, outcomes and impact. Indicators can be quantitative, qualitative or a combination of both. Indicators may also be classified in terms of whether they are direct or indirect measures of progress or desired results. It is important to choose indicators that cover the different components and processes of the *Academy* programme. The types of indicators chosen will determine the methodologies employed to measure and gather data, as well as the appropriate tools to analyse them. The steps in developing good indicators are: 1. Define the desired outcomes for each programme area (competency, curriculum, programme management, and external impact) and their respective dimensions; and 2. Specify performance indicators and targets for the outcomes of each programme area dimension.
Section 2: How do you determine appropriate methods for gathering and analysing data or information?	Once the different indicators are identified, the following are the next steps in designing the M&E plan: 1. Determine the different sources (primary and secondary sources) of information for each indicator; 2. Determine the appropriate data collection and analysis (qualitative, quantitative, mixed methods) techniques; 3. Determine the different tools that may be used to monitor and evaluate the programme; and 4. Consider the reliability, validity and timeliness of the data gathering and analysis techniques.

Section 3: How do you effectively use the results of your M&E?	The partner's M&E results can only be fully relevant if these are used by decision makers within and outside the programme. Reporting the results is a critical step in the entire M&E process, which is often overlooked. Four steps must be considered to ensure that M&E results are effectively utilized by targeted stakeholders: 1. Determine who will use the results and what are their specific needs and profiles; 2. Using the M&E results, develop different ways to present and package the information to address the needs of the specific users of information; 3. Present the results at the right time and in the right place to ensure that the audience is in the appropriate environment and disposition to listen to the results; and 4. Monitor how the M&E results are utilized by the different users of information.

PART THREE:
STRENGTHENING THE M&E SYSTEM

The M&E system must have a plan and a purpose, and include necessary mandates to give it formal authority to implement and achieve its purpose. The M&E system consists of important work processes, technologies and resources, including people with specific roles. Part 3 assists the partners in establishing and/or strengthening these basic components in their M&E system. It also assists partners in determining whether their organization is ready to establish and sustain an M&E system. Part 3 will cover the following:

Section 1: How do you assess your readiness for an M&E system?
Section 2: What are the components of the M&E system?
Section 3: How do you develop the M&E plan?
Section 4: How do you strengthen the M&E structure?
Section 5: How do you improve your M&E continuously?

Your M&E plan will be determined by
the annual plan or business plan.

Section 1: How do you assess your readiness for an M&E system?

It is important to determine your organization's readiness to develop and implement an effective M&E system. Like other critical management systems, M&E is a core function that enables decision makers to determine programme relevance, viability and sustainability through a systematic process of gathering and analysing evidences of performance across a period of time.

1.1 Why a readiness assessment?

A readiness assessment allows *Academy* partners to determine the viability of an M&E system in their organizations. An M&E system not only requires the investment of time, people and resources, it also requires investment in an organizational culture that values continuous learning and improvement. As such, a readiness assessment allows organizations to identify their strengths and areas of improvement. It further provides information about an organization's internal environment and assesses whether a learning culture is being fostered.

1.2 How to do a readiness assessment?

One approach to conducting an M&E readiness assessment is to undertake a comprehensive review of the current system in the organization. By looking at the different elements of an M&E system, *Academy* partners will be able to determine the extent and complexity of the system for the programme. An institutional readiness assessment questionnaire is given in Annex B. The questionnaire consists of questions on the following elements of an M&E system:

- Existing organizational mandates for the programme
- Overall design of the existing M&E system including the content, indicators, criteria for M&E, and the utilization of M&E data and reports
- M&E processes including the frequency and schedule of M&E, existing models, tools and activities, reporting and sustainability measures
- Structure of the M&E team

A similar approach is proposed by Kusek and Rist (2004) who identified at least three factors that contribute to a successful M&E system in an organization. These are: (1) incentives and demands for an M&E system; (2) existing structures for an M&E system; and (3) the human resource capacity for M&E. Each element is broken down further into specific criteria that may be evaluated on the dimensions of presence in an organization and its degree of effectiveness (see Annex A).

Ideally, each staff member of the organization and other programme stakeholders should participate in the M&E readiness assessment. They can come together to reach consensus on the overall readiness of the organization to establish an M&E system. Should this not be feasible, the organization can choose significant persons or key informants who can provide an accurate and unbiased assessment of the key elements of the organization.

Below are the different criteria for an institutional M&E readiness assessment.

Incentives and demands for an M&E system

- There are institutional and political demands from stakeholders to create an M&E system.
- There are champions that will advocate and sustain an M&E system.
- There are policies that support the establishment of an M&E system.
- Different stakeholders recognize the need for and the use of an M&E system.

Existing structures for an M&E system

- There are existing units in the organization that are already doing M&E for existing programmes.
- There are units in the organization that can take on the responsibility of M&E.
- *Academy* partners and units are willing to share information about their programmes.
- M&E data are being used for planning and oversight of programmes.
- Past M&E results are communicated to the different stakeholders of the programmes.

Capacity for M&E

- Personnel have the skills in programme management, data analysis and performance audit.
- There are existing trainings or technical assistance available on M&E.
- There are existing incentives and scholarships for M&E trainings.

1.3 What is the M&E readiness scale?

Assessing M&E readiness can be done with a simple assessment tool that may be accomplished by the different members and stakeholders of the organization (see Annex A). The tool uses a five-point scale where 1 is the lowest score and 5 the highest score. The score reflects the presence and effectiveness of the different factors that drive an M&E system. The last column provides the space for the respondent to identify particular evidences for their assessment of each factor.

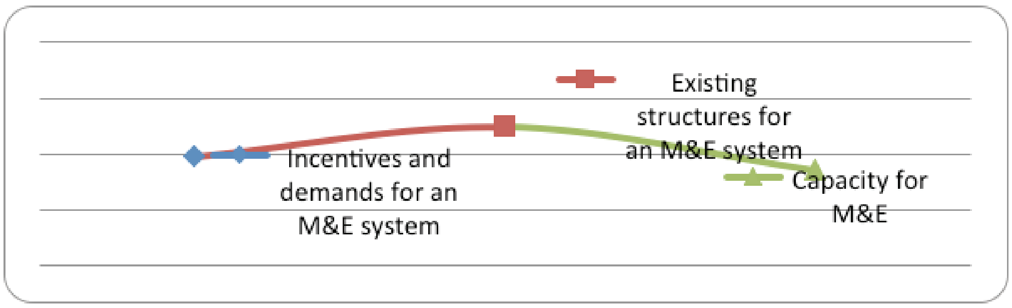
After the form has been completed, the respondent computes the average score for each factor of the scale. The higher the score for each factor means the organization is more prepared to develop their M&E system. A lower score means that the organization needs to advocate and sell to its stakeholders, particularly internal stakeholders, the importance and the need for an M&E system.

The APCICT Partners' M&E Readiness

During the Third Academy Partners Meeting in 2011, programme partners were asked to give an assessment of their different organizations in relation to their readiness to develop the *Academy* programme M&E system. A total of ten partner organizations provided information on their M&E readiness. The mean score of the respondents for each factor of M&E readiness was 2.95 for the incentives and demands for an M&E system, 3.48 for existing structures for an M&E system, and 2.7 for the capacity for M&E (see figure 11).

The graph shows that the different *Academy* partner organizations are generally ready to set up M&E processes for the programme. There are existing structures that can be utilized for the *Academy* programme. There is however, a need to advocate to stakeholders the importance of M&E and build the capacity of existing staff to effectively monitor and evaluate the *Academy* programme. The latter can be addressed by providing trainings and opportunities for staff to learn the skills related to M&E such as data gathering and analysis.

Figure 11. Results of M&E readiness assessment of the *Academy* partners



Section 2: What are the components of the M&E system?

2.1 Components of the M&E system

The M&E system provides the partner with an organized process and structure to implement the M&E plans. An M&E system is composed of the following:

1. **Policies** are official pronouncements of the agency establishing the M&E system. They indicate:

    - The reasons why an M&E system must be established in your programme or organization. This is often called the mandate or the rationale.
    - The different goals and objectives that must be accomplished by the system, for example, to provide senior management with timely and evidence-based information and analysis of the programme and its accomplishments. In other policy statements, the outputs of the system are also indicated, for example, yearly evaluation reports and quarterly status reports.
    - The units and persons responsible for the system. This section spells out the roles and accountabilities of the units and persons involved. It also indicates who will supervise the unit and who will work together with the M&E unit or group to accomplish the goals and mandate.
    - Resources and other requirements of the unit and the system to formalize the M&E plans, and implement activities, procedures and structures. These are formal office orders stating that M&E is an important management function that must be undertaken by the programme.

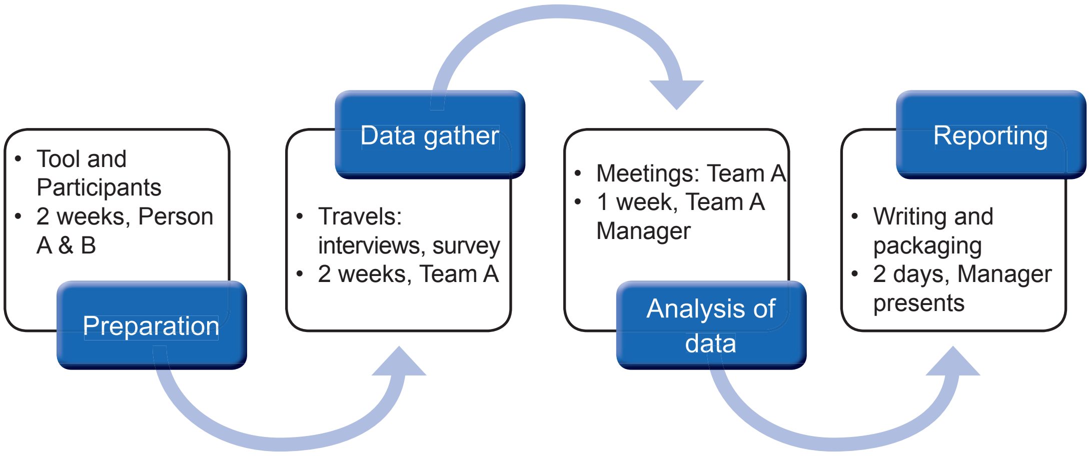
    These policies provide the legal basis or mandate for implementing the M&E plan and system. These policy statements are sometimes referred to as the **charter** in certain organizations, especially those that are using specific project management systems. Formalizing the policy statements or charter for the system usually requires an official order from the leadership of the organization or the programme.

2. **Standard operating procedures** (SOPs) detail how the different M&E activities will be conducted, who will conduct these, and the standards that will ensure quality and efficiencies. The SOPs pertain to the different business processes involved in operating the M&E system: creating the M&E plan, doing the research activities, reporting the results, managing these activities and resources, as well as continuously improving the system. Important parts of the SOPs include:

    - Reporting forms and schedule. These may include monthly or quarterly status reports, critical incidents reports, post-workshop/module evaluation feedback forms, resource person reports, client satisfaction survey forms (soft or hard copy).

- Process flow of activities for conducting monitoring and for conducting evaluation. Flow charts are usually used to demonstrate the actual sequence, activity owner (implementer) and time frame of activities so that anyone can follow the SOPs (user-friendly).

Example flow chart for the business process of monitoring:



- Overall standards that must be followed in implementing M&E activities and in operating the M&E system. These may be important principles in implementing the research activities, such as participation of stakeholders from data gathering to analysis, transparency of results, confidentiality for respondents participating in data gathering and analysis, as well as gender-sensitivity of research activities, especially in dealing with respondents. The standards may also state specific requirements pertaining to the reliability, validity and integrity of results, and the processes for conducting M&E.

3. **Structure** for operating and managing the M&E system. The structure identifies who will do what and who is accountable for results and overall management. It also presents the relationship of the M&E team with other programme stakeholders, e.g., relationship or responsibilities of the M&E team to the sponsors, programme officers, etc. A basic M&E team is composed of one or two members. They may have other functions in the team but their main responsibilities and accountabilities are in M&E. This component will be further discussed in Section 4.

2.2 Sustaining the M&E system

Academy partners with an existing M&E unit and system funded by their organization can contribute towards sustaining their current system by ensuring that M&E results of the programme are effectively utilized and that M&E activities for the programme are efficiently implemented. For partners with start-up M&E, the most important consideration for sustainability is the system's overall relevance and contribution to the programme and to the organization. In both situations, there are three essential points to build and strengthen the sustainability of the M&E system:

- The M&E plan must ensure that activities are cost effective—that activities are able to produce target results and outputs in an efficient manner without compromising the quality of the products. Some organizations conduct a cost-benefit analysis to assess if activities and investments are worth undertaking, and if outputs and benefits from such undertakings will provide a satisfactory return on investments.

- Reports that prove the effectiveness of M&E results utilization increase the level of support from top leadership since the value of investment in M&E is clearly manifested.

- The M&E system is a part of the entire project management cycle. The sustainability of the system is closely linked with how the entire programme is managed. Overall programme efficiency and effectiveness will impact on the sustainability of its M&E.

Section 3: How do you develop the M&E plan?

The M&E plan is based on the *Academy* annual plan. For partners in Tier 1, the annual plan may be derived from the three-year strategic plan. The annual plan states the performance objectives and targets, including strategies and action steps to attain targets. The content of the annual plan is then converted into an M&E plan.

Figure 12. How M&E plans are derived from annual programme plans

The M&E plan determines what information must be gathered, analysed and presented, and how these tasks will be accomplished so that the important information can be published for key decision makers. The M&E plan, when effectively implemented, will provide the users with the following information:

- What was actually accomplished compared to what was planned
- Factors that affected performance
- Lessons learned from implementing the programme within the period (one year)
- What can be done to improve performance for the next year/s

A basic M&E plan must contain at least the following information elements:

- What will be monitored, measured and analysed (indicators and targets that are stated in the annual plan)
- How, by whom and when will monitoring be done (mechanisms, staffing and resources needed for constant and consistent monitoring)
- What, how and who will analyse the results of monitoring reports (evaluation process)
- Who will use the information and what specific information do they need about the programme (users of M&E results)
- How will the information (M&E results) be presented to the different users

Sample M&E plans

Sample Document 1: Areas and elements for measurement		
Programme area	**Curriculum**	
Desired curriculum outcome for one year: After one year, trainings for five *Academy* modules have been conducted for top and mid level ministry officers		
Dimensions	*Indicators of Performance*	*Targets for 12 months*
Characteristics of participants	Position in government	From minister to department heads
	Equal access for different genders	Classes have almost equal numbers of male and female participants
	Ability to apply learning in their respective organization	Officials (participants) have access to resources and support to implement initiatives after attending the module training
Characteristics of resource persons	Experience in the topic being taught	At least 5 years of actual practice in the field/topic. Practice can be in research, academe, consulting, government service, etc.
	Conceptual/Theoretical expertise in the topic being taught	Formal schooling with postgraduate degree or research and publication in journals (at least 5 publications)
	Teaching competency	Effective use of participatory and other adult learning methodologies and technologies
Topics/Subject matter	Relevant to the country's development agenda	Reflects the country's digital strategy on increasing IT competencies of government officials and staff
	Updated content	Must be based on relevant IT findings and trends (global and national) within the last 3 years
Learning Method	Use of adult learning principles	Strategies and activities for hands-on participation
		Provides for application of learning in the office after the workshop

Sample Document 1 answers the question: "**What are we going to monitor and evaluate for a particular period?**" This document details the information that needs to be gathered during M&E to assess the performance of the programme area on curriculum. It includes looking at the:

- Accomplishments in each of the dimensions of curriculum – the desired characteristics of participants and resource persons, the relevance of the topics, and the appropriateness of the learning methods
- Gaps that need to be further addressed and improved in each of the dimensions

Sample Document 1 presents the CONTENT, the areas that must be measured. Sample Documents 2 and 3, on the other hand, present the plan for how to measure the content; it details the METHODOLOGY for data gathering, analysis and feedback giving. Document 2 presents a method and schedule for monitoring. It is a guide for **monitoring the actual outputs** of each dimension and indicator. Document 3 provides a method and schedule for evaluation. It is a guide for **evaluating overall performance** based on target outcomes as determined in the programme plan. It is important to have separate monitoring and evaluation plans since the purpose of monitoring is different from the purpose of evaluation.

Sample Document 2: Method & schedule for monitoring				
Programme area		**Curriculum**		
Dimensions	*Sources of data; data gathering activities and schedule*	*Method for analysis and schedule*	*Who will conduct the monitoring*	*Who will give and receive feedback; how will feedback be given*
Characteristics of participants	Use Participant's profile sheet* (Form 1) to be filled out by participants after enrolment	Analyse profiles after every class/ session; summarize profiles annually	Registrar's office: (name of specific person) To be supervised by:	Report of participants' profiles per module and per year. Reports to be given to resource persons, programme team and sponsors
Characteristics of resource persons	Use resource person profile sheet (Form 2) to be filled out and updated annually	Analyse resource person profiles per module; summarize all resource persons' profiles annually	Lead resource person and programme head	Report on resource persons' profiles per year, per module to be given to programme head and teaching team
Topics/Subject matter	Use teaching plan** (Form 3) submitted by resource person prior to every lecture			Per module report to be given to programme team, sponsors and advisers
Learning method	Use teaching plan submitted by resource person prior to every lecture			

Profile sheet forms must include all required information about the participant

***The teaching plan must require important information based on Document 1 indicators and targets*

Sample Document 3: Method & schedule for overall evaluation				
Content areas of the programme	*Sources of information used for evaluation*	*Method for gathering and analysing data*	*Schedule for data gathering and analysis*	*Who will give and receive feedback; how will feedback be given*
Curriculum	• Post-workshop evaluation* of participants and resource persons • Feedback from partners (recorded documents) • Incident/status reports**	Data gathering: • Survey (evaluation forms) • Semi-structured interviews • Group discussions Analysis: • Content analysis of qualitative data • Simple statistical tools for quantitative data (survey items)	Survey: • Every training Interviews and group discussions with target partners (semi-structured with determined questions relevant to Document 1): • Every training (facilitated by external person) Analysis of all results: • Every year	• Lead resource person to give report to programme team • Programme head to give report to sponsors and key external partners

Content areas of the programme	*Sources of information used for evaluation*	*Method for gathering and analysing data*	*Schedule for data gathering and analysis*	*Who will give and receive feedback; how will feedback be given*
Competencies of Participants	• Documented feedback from organizations of participants and partners • Post-workshop evaluation of participants and resource persons • Result of Re-entry Application Plan (RAP)***	• Interviews with target respondents from participant's organization • Random selection of participants to be evaluated after 3 to 6 months • Assessment of the RAP results using applied competencies • Content analysis of all interview transcriptions	• Content analysis of interviews to be done immediately per transcription • Thematic analysis of all transcriptions done monthly • Rating of the RAP results to be done together with participants, supervisors and programme team (use statistical tools for analysis) • RAP assessment of random participants: every year (6 months after training)	

Content areas of the programme	*Sources of information used for evaluation*	*Method for gathering and analysing data*	*Schedule for data gathering and analysis*	*Who will give and receive feedback; how will feedback be given*
Programme impact (external)	• Documented feedback from participants' organizations, partners and sponsors • News clippings and articles	• Target interviews (face-to-face or online) with partners, sponsors and external experts assessing the programme • Interviews and group discussion with programme implementers and resource persons • Content analysis of interviews, news clippings and articles about the programme impact	• Annual evaluation of programme impact to be conducted by programme team • Every 2 years full evaluation of programme to be conducted by an external evaluator	• Programme head to report findings to all internal and external stakeholders • Through: Formal report, presentation in a formal meeting and publication of report in relevant journals
Management of programme	• Documented feedback from participants, partners and programme team • Post-workshop evaluation of participants and resource persons			

** Post-workshop evaluation feedback forms (for participants and resource persons) must contain all indicators and targets that need to be measured (consistent with Document 1)*

*** Incident reports are usually written by programme team members to document important events, critical feedback and serious issues that need the attention of the programme team and/or external stakeholders. Status reports, on the other hand, are developed and submitted to the programme head on a regular basis (e.g., monthly or quarterly). The status reports contain details of actual activities, inputs, outputs, critical incidents, etc.*

**** The Re-entry Application Plan (RAP) may be developed by the participants as part of the requirements for the module completion. The RAP will be implemented by the participants in their respective work areas, and its processes and results will be documented by the participants. The RAP report will be submitted to the participant's supervisor in the organization, as well as to the* Academy *partner. The RAP usually includes specific changes that the participant wants to implement in the organization or sector as part of the application of competencies learned from the programme modules.*

As indicated in Part 2, a comprehensive, systematic and reliable evaluation requires the use of social science research methodology to ensure the right selection and fit of methods for data gathering and analysis. Qualitative data from interviews, clippings and reports may employ specific qualitative methods for analysis. For example, content analysis is a qualitative method often used for such data. Quantitative data will require specific statistical analysis based on the nature of the data gathered (nominal, ordinal, interval or ratio). Please see Part 2, Section 2 for details on the methodologies and tools that are available for the gathering and analysis of different kinds of data.

The M&E Gantt Chart

After the different tables and plans have been created by the programme team, it is recommended that a Gantt Chart be created to give the team an overall picture of the M&E events in the programme. The chart gives an overview of the M&E activities and dates, and it will also show any overlaps in activities and schedules, especially for monitoring activities. A sample chart is shown in table 22.

Table 22. Sample M&E Gantt Chart

Activity	Monitoring		Jan	Feb	Mar	Apr	May	Jun
Interview 4 organizations randomly		x						
Analyse status reports	x							
On-site visits of participants for RAP implementation status	x							
Analyse resource person teaching plans	x		Module 1		Module 2		Module 3	
Conduct interviews with partners		x						

A modified M&E plan for starters

Partners who have not implemented the programme modules or who have only started implementing one or two trainings of the same module may develop a combined target and M&E plan for a quick but systematic and organized start to programme implementation and M&E. This modified plan must not, however, be used as a permanent substitute for an annual plan and a strategic three-year plan that will ensure sustained programme relevance and viability.

The modified target and M&E plan contains very important activities and targets pertaining to key dimensions of two programme areas: programme management and curriculum. These dimensions were selected so that efforts of the partners are focused on building initial capacity and momentum towards sustained implementation. A sample detailed plan is provided in table 23.

Table 23. A sample detailed plan for starters

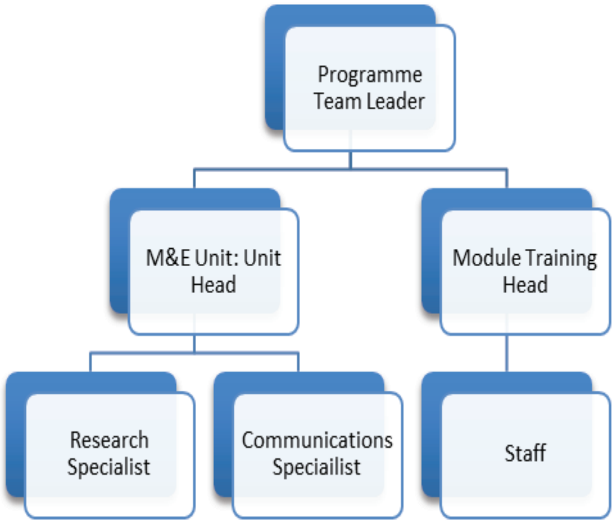
Programme area: dimension	Activities & purpose	Targets	Must be monitored monthly	Must be evaluated after 6-8 months
Programme management: planning and staffing	1. Develop the programme annual plan to define 1-year outcomes and strategies	• Annual plan developed by key stakeholders; done by Sep 2013 • Annual plan provided to all sponsors and partners of the programme in the sector to solicit specific support. • Target start of distribution: Oct 2013	• All inputs and activities leading to the development of the annual plan • Critical incidents in developing the annual plan • Extent of distribution of the annual plan • Level/nature of response of sponsors and partners to the plan	• Facilitating and hindering factors to developing and finalizing the plan • Factors behind the response of sponsors and partners to the plan • Effectiveness of strategies in presenting the annual plan to sponsors and partners
	2. Assign specific roles to team members; develop individual workplans of 3 staff members	• 2 members multi-tasking: managing full delivery of Module 1. Target - Module 1 training twice (June and Oct 2013) • 1 member focused on administrative support for the programme office. Target - raise and manage USD 1,000 by May 2013	• Actual outputs of the team members per month based on activities done • Efficiency in the use of resources • Inputs (investments) to raise the money versus actual money raised • Critical incidents in fund raising or resource mobilization	• Factors for high and low level of outputs of members • Effectiveness of strategies and activities to raise funds and implement the modules •Relationship between the annual plan and the amount of money raised

Programme area: dimension	Activities & purpose	Targets	Must be monitored monthly	Must be evaluated after 6-8 months
Curriculum: Resource persons and participants	1. Identify and invite lead resource persons for Module 1	Resource persons developed and adapted learning materials to the profile of target participants. Target - Curriculum design and learning materials finalized by May 2013	• Actual inputs and outputs of resource persons • Efficiency in the use of resources • Critical incidents in composing the resource person team and in making them work together • Quality of outputs based on the standards of the programme and the profile of participants	• Factors for high and low levels of performance and quality of outputs • Effectiveness of strategies and criteria for selecting and managing resource persons • Relationship between quality of outputs and quality of resource persons • Implications for selecting and managing resource persons in the future
	2. Identify and invite participants for Module 1	• Marketing materials and activities to target organizations done by Apr 2013 • Confirmed participants by 25 May 2013 • 3 main government agencies are fully aware of the programme	• Actual inputs and outputs of marketing activities • Efficiency in the use of resources • Quality of materials and effects of activities • Critical incidents in developing and implementing marketing activities	• Factors for high and low levels of performance and quality of outputs • Effectiveness of marketing strategies and the relationship between investments on marketing and actual results (number of actual graduates and extent of programme awareness in the 3 organizations) • Implications for selecting marketing strategies in the future

For starters, programme management and curriculum are the two areas where activities and targets must be focused on. While the sample plan only details four main activities, effective M&E of these activities will provide strategic and operational inputs so that partners can learn from the M&E results and build on their initial experiences in a systematic and well-informed manner. Once the annual plan or the business plan has been finalized and more resources are provided (funds and staffing), partners can then proceed to develop a more comprehensive M&E plan for each of the four programme areas that must be measured in the programme.

Section 4: How do you strengthen the M&E structure?

Figure 13. A sample structure for implementing a programme



As indicated in Section 2, the structure of an M&E system identifies who will do what, and who is accountable for results and overall management. It also presents the relationship of the M&E team with other stakeholders internal to the programme. Figure 13 is a sample of a structure that may fit partners in Tiers 1 and 2. The M&E team is composed of research and communications specialists and headed by a team member who is a research specialist. For Tier 3 partners, the M&E team may be composed of two people who are both knowledgeable in research methods. In the *Academy* programme implementing team, members may take on multiple functions, for example, the assistant to the programme team leader may also be the M&E head.

Regardless of the ways the roles and accountabilities are assigned and delegated in the *Academy* partner's programme team, basic M&E roles and responsibilities must be present in the team for:

- **Overall management of M&E** – This person must have full responsibility for ensuring that an appropriate M&E is conducted in the programme, and is likely to head the M&E unit if it exists. This person may have specific competency in project management so that s/he can develop the M&E plan and manage the implementation of all M&E activities and the M&E system. S/he may have good working knowledge in research, either in the methods for conducting M&E or the communication of results, so that s/he can provide direction for determining the appropriate research design or for packaging M&E results into relevant information materials for decision makers. This person reports directly to the programme team leader.

- **Conducting research** – If the M&E head does not have research related competencies and may also be responsible for other functions in the programme (multiple roles), a person knowledgeable in research methods is needed. This person is tasked to develop the indicators together with other programme team members, and help determine targets for these indicators. S/he is responsible for creating the M&E plan and designing the research method, and s/he takes the lead in analysing data with other team members in the programme. Writing the technical M&E results is also part of her/his accountabilities. This person reports to the M&E head.

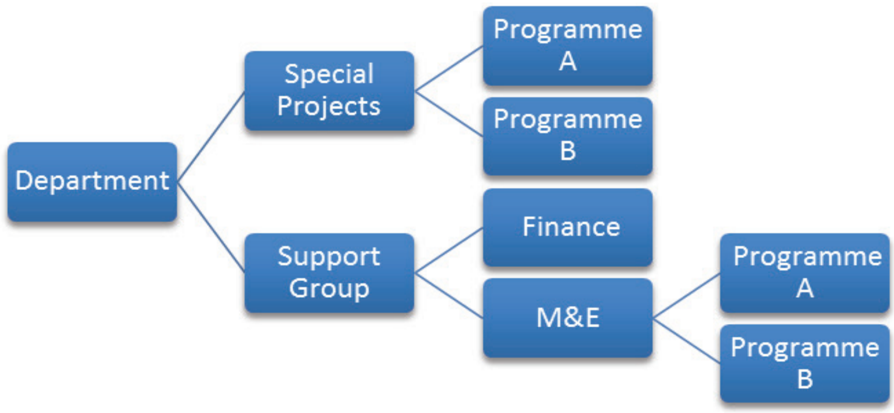
  For partners with resources allocated solely for M&E, one person or two may be focused only on this major task. If the partner has an existing M&E system inside the organization, a person may be assigned to take on this task only for the *Academy* programme so that s/he can focus on the activities relevant to the M&E of the programme. If the M&E research activities will be outsourced or contracted out, this person provides and ensures the application of quality standards required by the programme on its M&E activities and results.

- **Communicating M&E results** – M&E results must be provided to programme stakeholders so that they can benefit from the research findings. Effective communication and feedback of M&E results will be the main accountability of the person who will focus on this role. Specific tasks include developing appropriate information materials or packages for different programme stakeholders to ensure that M&E results are utilized effectively. S/he is also tasked to monitor how the results are used by internal and external stakeholders of the programme. This person may be performing other communication tasks related to the programme, and reports to the M&E head.

The complexity of the structure of the M&E unit will depend on the needs, size and coverage of the programme. But it is best to design the structure with few but high performing members who can perform multiple roles pertaining to the different M&E activities.

A complex M&E structure may look like the organization chart presented in figure 14. This structure presents an existing M&E structure and system in the organization and the *Academy* programme is one of the programmes being served by this structure.

Figure 14. A structure with an existing M&E unit serving all programmes



Continuously developing or enhancing the competencies of the M&E team will further increase its effectiveness and efficiency to attain the M&E goals and objectives of the programme. Ensuring that competencies match the roles is a key consideration in sustaining performance and motivation. The conduct of M&E activities requires perseverance, focus and continuous analysis; it is therefore important for the team to develop a sense of fulfilment and purpose in their work. Even if logistical resources may not be sufficient, the team's motivation and sense of contribution may increase their creativity and resourcefulness in designing and implementing M&E approaches and activities in order to provide the stakeholders with important information.

Section 5: How do you improve your M&E continuously?

Similar to any management process, M&E systems also need to be reviewed regularly in order to determine, among other things, their relevance, effectiveness and efficiency. Adopting the Monitoring and Evaluation Systems Strengthening Framework[1] devised by several international organizations, three elements need to be assessed in order to strengthen the *Academy* M&E system. These are: (1) the assessment of the strength of the M&E plan; (2) the assessment of the capabilities of the management unit to collect, analyse and report data related to programme implementation; and (3) the assessment of the strength of data-collection and reporting systems.

A rapid assessment may be done with programme stakeholders to determine the strengths and weaknesses of each M&E element. The results of the rapid assessment may then be used to devise workplans to strengthen and improve your M&E system.

To assess the M&E plan, *Academy* partners may ask the following questions:

- To what extent did the M&E plan integrate the overall goals of the organization and the programme?
- To what extent did the M&E plan capture the important elements of the programme that the organization wants to measure?
- To what extent are the programme M&E indicators clearly defined and identified with programme stakeholders?
- To what extent are the programme M&E indicators and data sources (including baselines and targets) accessible and reliable?
- To what extent are the data from the programme disseminated properly and sensitive data protected adequately?
- Are there adequate resources allocated for M&E?

Table 24 provides a simple tool to assess and strengthen the M&E plan.

[1] United States Agency for International Development (USAID), *Monitoring and Evaluation Systems Strengthening Tool* (2007).

Table 24. Tool to assess and strengthen the M&E plan

Part 1. Assessment of the M&E plan			
Strengths		*Weaknesses*	
Part 2. Action plans on strengthening the M&E plan			
Specific plans and activities	*Timeline*	*Responsibility*	*Resources needed (including technical assistance)*

To assess the capabilities of the management unit or M&E team, the following questions may be asked:

- How adequate are the resources, skills and experiences of the management unit or team on data collection, analysis and reporting?
- Are there adequate processes for feedback on the programme performance and quality of reporting?
- Are there adequate structures for oversight, guidance and support to programme partners' M&E team?
- Are reports submitted on time, complete and error free?

Table 25 provides a simple tool to assess and strengthen the M&E capabilities of the management unit.

Table 25. Tool to assess and strengthen the M&E capabilities of the management unit

Part 1. Assessment of the capabilities of the management unit			
Strengths		*Weaknesses*	
Part 2. Action plans on strengthening the capabilities of the management unit			
Specific plans and activities	*Timeline*	*Responsibility*	*Resources needed (including technical assistance)*

To assess the strength of data-collection and reporting systems, the following questions may be asked:

- To what extent are data collection and analysis valid, reliable and timely?
- To what extent are reporting systems comprehensive, accurate, clear and understandable?

Table 26 provides a simple tool to assess and strengthen the data collection, analysis and reporting systems.

Table 26. Tool to assess and strengthen data collection, analysis and reporting systems

<table>
<tr><th colspan="4">Part 1. Assessment of the data collection, analysis and reporting systems</th></tr>
<tr><td colspan="2">Strengths</td><td colspan="2">Weaknesses</td></tr>
<tr><td colspan="2"></td><td colspan="2"></td></tr>
<tr><th colspan="4">Part 2. Action plans on strengthening data collection, analysis and reporting systems</th></tr>
<tr><td>Specific plans and activities</td><td>Timeline</td><td>Responsibility</td><td>Resources needed (including technical assistance)</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>

Summary Table: Part 3	
Section 1: How do you assess your readiness for an M&E system?	A readiness assessment allows APCICT *Academy* partners to determine the viability of an M&E system in their organizations. It allows organizations to identify their strengths and areas of improvement. It further provides information about an organization's internal environment and assesses whether a learning culture is being fostered. There are three factors that contribute to a successful M&E system in an organization. These are: (1) incentives and demands for an M&E system; (2) existing structures for an M&E system; and (3) the human resource capacity for M&E. Readiness assessment revolves around these factors.
Section 2: What are components of the M&E system?	The M&E system provides the partner with an organized process and structure to implement the M&E plans. An M&E system is composed of the following: Policies – Official pronouncements of the agency establishing the M&E system. These policies provide the legal basis or mandate for implementing the M&E plan and system. Standard operating procedures (SOPs) – They detail how the different M&E activities will be conducted, who will conduct them and the standards that will ensure quality and efficiencies. The SOPs pertain to the different business processes involved in operating the M&E system: creating the M&E plan, carrying out the research activities, reporting the results, managing these activities and resources, and continuously improving the system. Structure for operating and managing the M&E system – The structure identifies who will do what and who is accountable for results and overall management. It also presents the relationship of the M&E team with other programme stakeholders, e.g., relationship or responsibilities of the M&E team to the sponsors, programme officers, etc. A basic M&E team is composed of one or two members. They may have other functions in the team but their main responsibilities and accountabilities are in M&E.
Section 3: How do you develop the M&E plan?	The M&E plan is based on the programme annual plan. For partners in Tier 1, the annual plan may be derived from the three-year strategic plan. The annual plan states the performance objectives and targets, including strategies and action steps to attain targets. The content of the annual plan is then converted into an M&E plan.

Section 4: How do you strengthen the M&E structure?	The structure of an M&E system identifies who will do what, and who is accountable for results and overall management. It also presents the relationship of the M&E team with other programme stakeholders. The M&E team members may have multiple roles within the programme, or members may have roles that are specialized and dedicated to M&E of the programme. This will depend on the M&E needs of the organization, and the availability and allocation of resources for M&E. Continuously developing and enhancing the competencies of the M&E team will further increase its effectiveness and efficiency to attain the M&E goals and objectives of the programme. Ensuring that competencies match the roles is a key consideration in sustaining performance and motivation. Carrying out M&E activities requires perseverance, focus and continuous analysis; it is therefore important for the team to develop a sense of fulfilment and purpose in their work.
Section 5: How do you improve your M&E continuously?	Similar to any management process, M&E systems also need to be reviewed regularly in order to determine, among other things, its relevance, effectiveness and efficiency. Adopting the Monitoring and Evaluation Systems Strengthening Framework devised by several international organizations, three elements need to be assessed in order to strengthen the *Academy* M&E system. These are: (1) the assessment of the strength of the M&E plan; (2) the assessment of the capabilities of the management unit to collect, analyse and report data related to programme implementation; and (3) the assessment of the strength of data-collection and reporting systems. A rapid assessment may be done with programme stakeholders to determine the strengths and weaknesses of each M&E element. The results of the rapid assessment may then be used to devise workplans in order to strengthen and improve the *Academy* partners' M&E.

ANNEX

A. Institutional M&E Readiness Assessment

A Simple Assessment for Your Organization

It is important to determine your organization's readiness to develop and implement an effective and efficient M&E system. Like other critical management systems, M&E is a core function that enables decision makers to determine programme relevance, viability and sustainability through a systematic process of gathering and analysing evidences of performance across a period of time.

This tool will provide you with some indicators on what you need to have (or what you already have) to establish and roll-out an M&E system that will work for you and your organization. The pattern of your answers gives you feedback on the possible M&E activities you can undertake now. At the same time, your answers will serve as an indication on what you need to build on so that you can eventually implement a comprehensive M&E in the future.

	Not yet in place	**In place, but needs improvement**		**In place and effective**		**Evidences**
	1	2	3	4	5	
Incentives and demands for an M&E system						
There are institutional and political demands from stakeholders to create an M&E system.						
There are champions that will advocate and sustain an M&E system.						
There are policies that support the establishment of an M&E system.						
Different stakeholders recognize the need for and the use of an M&E system.						

	Not yet in place	In place, but needs improvement		In place and effective		Evidences
	1	2	3	4	5	
Existing structures for an M&E system						
There are existing units in the organization that are already doing M&E for existing programmes.						
There are units in the organization that can take on the responsibility of M&E.						
Academy partners and units are willing to share information about their programmes.						
M&E data are being used for planning and oversight of programmes.						
Past M&E results are communicated to the different stakeholders of the programmes.						

	Not yet in place	In place, but needs improvement		In place and effective		Evidences
	1	2	3	4	5	
Capacity for M&E						
Personnel have the skills in programme management, data analysis and performance audit.						
There are existing trainings or technical assistance available on M&E.						
There are existing incentives and scholarships for M&E trainings.						

Your Overall Assessment of Readiness:

✔ ***Strengths –***

Areas for Improvement –

Action Areas (To do's) –

B. Institutional Readiness Questionnaire

PART 1: Existing institutional mandates for the programme

A. What are the general mandates, principles or policies, supporting the implementation of the programme in the organization? In the country, are there national policies that support or mandate the implementation of initiatives like the *Academy* programme?

PART 2: On monitoring and evaluation

A. Overall design of the M&E system
   1. What areas in the programme are measured consistently, e.g., curriculum content, mode of delivery, teaching styles, facilities available for training, overall management of the programme, etc.?
   2. What criteria are being used to monitor and evaluate the different aspects of the programme – relevance, effectiveness, efficiency, quality, sustainability, etc.?
   3. What indicators or measures are being used to monitor and evaluate the *Academy* programme?
   4. Who are the end users of the M&E results? How do they use your programme M&E results?

B. M&E processes
   1. For the areas or activities you evaluate, when do you measure them, e.g., training evaluation immediately after conducting training, evaluation of curriculum/module content every year, etc.
   2. What activities are being done to monitor the programme?
   3. What activities are being done to evaluate the programme?
   4. What tools, frameworks or models are being used to collect and analyse the results of your M&E data (please specify), e.g., benchmarking, results-based M&E (performance management framework), content/thematic analysis etc.?
   5. How do you ensure that results of the M&E are noted and used by those responsible for decision-making in the organization?
   6. What internal policies are in place to make sure that M&E is continuously being done and sustained in your organization or programme?

C. Structure of the M&E team
   1. What unit/team/group is in charge of M&E? Please specify the number of people and the resources they have or are available for them, e.g., budget, availability of separate office space, equipment, etc.
   2. Aside from the current M&E team, are there any other persons involved in the M&E of the programme?

D. Overall assessment of M&E and M&E readiness
   1. What are the areas of strength in the current M&E system?
   2. What are the areas in the M&E system that requires improvement?

Please assess how ready your organization is in implementing the desired M&E framework and system in the near future.

High readiness: There is a visible champion and widespread support in the organization; and the organization can provide policy and resource support as needed.

Medium readiness: There is a champion but support from staff members is currently inadequate; and the organization cannot provide policy and resource support immediately.

Low readiness: There is no champion, but there is some support from selected staff members; and the organization cannot provide policy and resource support.

C. Module Evaluation Form

Academy of ICT Essentials for Government Leaders:
Module ##: (title)

MODULE EVALUATION FORM

Your feedback on this module is very important to our efforts to continually improve the *Academy of ICT Essentials for Government Leaders Programme*. Please take a few moments to complete this questionnaire.

Name (optional): ……………………………………………………………………………………
Country: ……………………………………………………..……..…………………….……..……..

*Please **circle the number** that indicates your degree of agreement with each statement below.*

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

OVERALL QUESTIONS ABOUT THE MODULE					
The subject matter of the module was relevant.	1	2	3	4	5
The sequence of topics included in each module was logical.	1	2	3	4	5
The module's level of difficulty was just right.	1	2	3	4	5
The module provided new ideas, insights or perspectives.	1	2	3	4	5
The module helped me develop a better understanding of major concepts and principles.	1	2	3	4	5
The module stimulated critical thinking.	1	2	3	4	5
The module helped me enhance my knowledge and skills in the use of ICT for socio-economic development in real-world settings.	1	2	3	4	5
Through this module, I feel more competent in my capacity to apply ICT for development in my work.	1	2	3	4	5

Please **circle the number** *that indicates your degree of agreement with each statement below.*

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

TRAINING DESIGN					
The objectives of the training were clearly presented at the start of the training.	1	2	3	4	5
The training fostered dialogue and discussion among participants.	1	2	3	4	5
The case studies were relevant.	1	2	3	4	5
The training materials provided were useful.	1	2	3	4	5
The group discussions were useful.	1	2	3	4	5
The length of time allotted for the training was adequate.	1	2	3	4	5
The time spent on the different topics was balanced.	1	2	3	4	5
The objectives of the training were achieved.	1	2	3	4	5
THE TRAINER					
The trainer was knowledgeable about the module topics.	1	2	3	4	5
The trainer communicated his/her message well.	1	2	3	4	5
There was adequate level of interaction between the participants and the trainer.	1	2	3	4	5
The trainer provided adequate instructional support to the participants.	1	2	3	4	5

Please answer the following questions.

21. What did you find **most useful** in this module and why? (Please explain your answer.)
22. What did you find **least useful** in this module and why? (Please explain your answer.)
23. How might you apply what you learned in the module? (If possible, please give examples.)
24. Do you have any comments or suggestions on how this module itself might be further improved? Please write them below.
25. Would you like to get involved in the training of the modules in the *Academy* programme?
26. Would you recommend the *Academy* programme to a colleague? Why or why not?

Thank you for completing this questionnaire.

D. Interview Guide for Site Visit[2]

Notes:

a. These questions may be asked in individual interviews or during a focused group discussion (FGD) with learning facilitators (LFs).
b. If possible, please do an audio recording of the interview/discussion.
c. Answers may vary depending on which module/module guide. You need to probe which they are referring to when they give a particular answer. Or you could take up each module separately (one by one).

Name of Centre: ……………………………………………………………………………………
Date: …………………………………………………………………………………….................
Interviewees/FGD Participants:………………………………………………………………….
……………………………………………………………………………………..........................
....

1) On average, how long does it take for a learner to complete a module using the module guide?

2) Are the learners participating in the discussion forum? How often? How do you find the quality of their participation?

3) What do you think are the advantages of having the discussion forum? What are the disadvantages of having the discussion forum, if any?

4) Are the learners making use of the recommended Web resources listed on the module guide?

    4a) If yes, do they find the resources useful for learning the module better?

[2] This is an excerpt from the original questionnaire taken from the eSkwela Social Franchise Manual_Version 1.0. Available at http://www.scribd.com/doc/59099440/eSkwela-Social-Franchise-Manual-Version-1-0.

E. Spot Checking Sheet[3]

Spot Check Rating Sheet

Announced ________ Site ________
Unannounced ________ Date of Visit ________

	4	3	2	1	Score
Working condition, computers	All of the units are in good working condition	More than half of the units are in good working condition	Half of the units are in good working condition	Less than half of the units are god working stations	0
Access to eSkwela LMS	All of the units can access the eSkwela LMS	More than half of the units can access the eSkwela LMS	Half of the units can access the eSkwelaLMS	Less than half of the units can access the eSkwela LMS	0
Working headsets	All of the headsets are working	More than half of the headsets are working	Half of the headsets are working	Less than half of the units are working	0
Learners	All scheduled learners are present	More than half of the scheduled learners are present	Half of the schedule learners are present	Less than half of the scheduled learners are present	0
Internet (access per unit)	All units have Internet access	More than half of the units have Internet access	Half of the units have Internet access	Less than half of the units have Internet access	0

	4	1	Score
Electricity	There is power/electricity	No power/electricity	0
Internet (connection)	connected	not connected	0
AC Unit	working	not working	0
Learning Facilitator	Present	Absent	0
Center Manager	Present	Absent	0

AVE. SCORE 0.00 out of 4

Accomplished by: ____________

[3] eSkwela Social Franchise Manual_Version 1.0. Available at http://www.scribd.com/doc/59099440/eSkwela-Social-Franchise-Manual-Version-1-0.

F. Module Guide Evaluation Form

eSkwela e-Module Packages Evaluation Form for Learning Facilitators

Name of your eSkwela Center: ______________________________
Your name: ______________________________
Title of the Module: ______________________________
Date when you completed this form: ______________________________

Part A. *Please encircle the letter marking your answer.*

1. What was the shortest time that it took a learner to complete the module, including the online discussion forum and the module project?

   a) About half a day   b) About a day   c) 2-3 days   d) 4-5 days   e) Other (please specify): ____________

2. What was the longest time that it took a learner to complete the module, including the online discussion forum and the module project?

   a) About half a day   b) About a day   c) 2-3 days   d) 4-5 days   e) Other (please specify): ____________

3. Of the learning activities for studying this module, which did the learners find most engaging:

   a) The online discussion forum   b) The online resources   c) The e-learning module   d) The module project
   e) Other (please specify): ____________________

4. Why do you think was this learning activity the most engaging for learners?

   a) It was easy to do.   b) They had time to do it.   c) They had the resources to do it.
   d) Other reasons (please specify): ______________________________

5. Of the learning activities for studying this module, which did the learners find the most difficult:

   a) The online discussion forum   b) The online resources   c) The e-learning module   d) The module project
   e) Other (please specify): ____________________

6. Why do you think was this learning activity the most difficult for learners?

   a) It took too much time to do.   b) It required knowledge and skills the learners did not have.
   c) The instructions were not clear.   d) It was not interesting enough for the learners to do.
   e) Other reasons (please specify): ______________________________

APPENDIX

Workshop Outputs on Indicators

The following tables are outputs of the APCICT *Academy* partners during the Third Academy Partners Meeting in 2011. Indicators were developed for each of the dimensions of the programme areas identified by the partners during the meeting.

Workshop I: Identification of indicators and evidences for each dimension of the *Academy*'s programme areas

Each group is assigned to one dimension in a programme area.

Group 1: External impact (programme area)	
Dimension	*Evidences/Indicators*
Degree of influence of (learner's) concrete outputs on the development objectives (country's or target sector's or organization's)	Learner's action plan implemented in the organization (include the number of plans)
	Knowledge/skills gained from programme shared with colleagues (in the organization, industry)
	Positive feedback from supervisor and external stakeholders (regarding impact of learner's outputs created through his/her application of new/enhanced competencies from the programme)
	(Outputs from the learner's application of enhanced/ new competencies from the programme) – New/ updated plans and policies on the use of ICT to address problems/issues e.g., in disaster management

Group 2: Programme management	
Dimensions	*Evidences/Indicators*
Relevance of the programme for the learner	Increased competency of learner in critical thinking
	Learner's degree of application of knowledge (competencies gained from the programme in the workplace)
Effectiveness (of the programme)	(Presence of programme marketing/promotion) – Public advocacy
	Number of locally developed and documented case studies (applicable to regional levels)
	Presence of a programme implementation plan
Efficiency (of programme implementation)	(Ability to) meet current and future market demands
	(Capability to deliver targets and) benefits
Flexibility (of programme design)	(Capacity) to address and meet the needs of current and succeeding generations
	Number of visitors and downloads using national partners' websites with information and *Academy* modules
(Other indicators)	Availability of funding (per cent of state budget)
	Consistency/alignment of programme with national plan
	Rate of return on investment on the programme and on the learners and their respective organizations
	Usefulness of graduates from this programme in the workforce
	Number of publications related to *Academy* modules and number distributed

Group 3: Curriculum 1 (content and method)	
Dimensions	*Evidences/Indicators*
Content: Easy to understand	Language adaptation (to local culture)
Method: Combination/ Balance of theory and practice	Use of learning methods appropriate to the resources
	Range of position (depth and breadth) level coverage
Method: Appropriateness of method	Ratio of allotted time (between lecture and discussions/applications)
Content: Relevance to the needs of the country	Topics are aligned with national goals
Content: Level of adaptation of topics to local needs	Number of local case studies developed
Method: Class size	Ratio of learners (to resource persons)
Method: Mode of delivery	Number of exercises and case studies
Method: Open discussions	Number of group discussions
	Number of modes of learning (applicable for the modules)
	Use of adult learning principles
	Number of references to national policy documents
	Presentations of emerging models of good practices

Group 4: Curriculum 2 (resource persons and learners)	
Dimensions	*Evidences/Indicators*
Level of expertise of resource persons on the module topics	Performance Pedagogical satisfaction, quality
	Training and coaching skills
	Degree of satisfaction (of learners on their learning experience) Per cent of satisfaction through questionnaire
	Theoretical knowledge – number of certificates
	Practical knowledge – number of years of experience in the field
	Number of students passed through her/his trainings
	Number of invitations to teach
	Number of degrees (earned by the resource person)
	References to publications in the last 3 years Number of articles and references
	(Expertise) recognized at international and local levels
	Sustainability of (the use of) the training of trainers
Quality of learners attending the course	Number of trainings (attended)
Reach of learners	Number of learners from appropriate levels of authority and position, expertise and educational background, and institutional affiliations
	Organization • Government • Private sector • NGOs • Others
	Location: (coming from) city, province
	Participants from different sectors
Learners' participation	Level of participants' satisfaction
Gender equality	Ratio female/male

Group: Module 1 – The Linkage between ICT Applications and Meaningful Development	
Competency	*Behavioural Indicators/Outputs*
Understanding the importance of ICTD	Formulate proposals on ICT applications
Good knowledge and skills of using ICTD	Advocate (agency, organization, staff) for the use of ICTD
	Legal framework (rules and regulations on using ICTD)
	Training of trainers (on Module 1)
	Create ICT-society (information society)

Group: Module 2 – ICT for Development Policy, Process and Governance	
Competency	*Behavioural Indicators/Outputs*
ICTD policy – development of ICTD policy, knowledge and presence of national/international ICTD strategic plans	Develop plans of action re-implementation and adoption of ICTD policy in agency/sector
	Develop ICTD policy on implementing programme supporting governance
	Align sector/agency policies/plans to national/international ICTD strategy. Plans/ programmes

Group: Module 3 – e-Government Applications	
Competency	*Behavioural Indicators/Outputs*
Knowing the industry standards and practices for communications and IT	Define and discuss the digital divide and identify recent trends in narrowing the gap worldwide
Handling issues and changes associated with e-government	Discuss today's critical social issues and the role of the CIO in advocating inclusion in all phases of planning and development
	Evaluate the significance of market research and consumer profiles in e-government
	Discuss the advantages and disadvantages of marketing internally to electronically deliver government services to the public
	Evaluate the demands of e-government
	Evaluate current collaborative e-government
	Ensuring citizen focus is maintained during the strategic planning process
	Identify and evaluate industry standards and practices in support of e-government
	Develop interagency common operating environments

Group: Module 4 – ICT Trends for Government Leaders	
Competency	*Evidences/Indicators*
Awareness of latest/new technology	Share knowledge of new/latest technology with co-workers/employees
Openness to new/latest technology	Facilitate policy review
Decision-making	Be open-minded and knowledgeable on new trends

Group: Module 5 – Internet Governance	
Competency	*Behavioural Indicators/Outputs*
Application of Internet tools and technologies	Use different Internet technologies appropriately
	Appropriate use of the Internet
Knowledge of international policies	Link to different countries' policies and laws
	Show high interest in formulating policies
Critical thinking	Effective policy implementation
Application of ICT for e-governance	G2C, G2B, G2G service delivery to citizens

Group: Module 6 – Information Security and Privacy	
Competency	*Behavioural Indicators/Outputs*
Mandatory act for ICT security	Know how to use firewall to protect network
Knowledge of security problems for network, and national information security activities	Protect network and computer through implementation of Computer Emergency Response Team
Cybersecurity and crimes knowledge	Able to protect own information
Knowledge of threats to information security and privacy, and international standards for information security and privacy protection	Able to protect computer and network
The skills to detect the threat and protect the information system	Programme implementation for network security
	Prompt action/penalty for rule breakers

Group: Module 7 – ICT Project Management in Theory and Practice	
Competency	*Behavioural Indicators/Outputs*
Timetable design	Able to use the tools to monitor and evaluate the project effectively
How to plan a project. Identify activities, webs, resource allocation	Academic/training institutions. Are customized
Knowledge on programme design Skill in performance evaluation	Ethical probity and willingness
Course/content development for ICT projects	Control implementation of key indicators
Workable methods and user-friendly indicators	
Knowledge of ICT trends	
Knowledge of project management theory	
Experience in developing projects	
Skill in linking standards and practice	

Group: Module 8 – Options for Funding ICT for Development	
Competency	*Behavioural Indicators/Outputs*
Good communication skills	Readiness of sponsors/partners
Good relationship with stakeholders	Negotiate with vendors on public-private partnership project
Find out alternative agencies for rolling out ICT	Good programme planning
Knowledge of public-private partnerships	Sustainable programme evaluation
	Get support from the stakeholders

M&E Methodologies

- Academic audit reports
- Programme and course review by external evaluators (annually, every 2 years)
- Mid-term review
- Participants information surveys and performance reviews after training
- Questionnaires/Evaluation forms (manual, online) and training reports, during and immediately after training
- Informal consultative meeting with key stakeholders
- Feedback from supervisors on course participants' work performance after training
- Site visits and interviews
- Consultative meetings
- Documented success stories
- Online feedback/forum and blogs
- Qualitative and quantitative feedback and analysis
- Statistical reports
- Alumni tracking
- Participants' evaluation of course and resource persons
- Peer review of resource persons
- Checklists
- Tally scorecards
- Financial records
- Business documents

Worksheet: Action Planning

Country	
Name of *Academy* partner organization	
Name of participant(s)	

Instructions: Reflect on your present M&E system based on what has been discussed during this workshop today. Answer the following questions:

1. What are our strengths and areas of improvement?

Strengths	Areas of improvement

2. If we want to develop, enhance and improve our current M&E systems and practices, what are the top three concrete things we can do immediately?

   A.

   B.

   C.

Sample Indicators

Curriculum

Dimensions that must be measured to determine performance	Specific evidences of performance
Curriculum Content	
Degree/Level of adaptation of module content and objectives to country ICT goals, contexts (culture, etc.)	• Language adaptation, modules are written in the local language • Use of learning methods appropriate to the resources and culture
Current and relevant to the needs of the sector/country	• Topics are aligned with national goals/ strategies • Number of local case studies developed • Presentation of emerging models and good practices (local and global)
Resource Persons	
Level of expertise on module topics	• Theoretical knowledge (degrees or certificates obtained related to ICTD) • Practical knowledge (number of years of experience in the field) • References used in modules from publications in the last five years
Bench/Pool of experts	• Number of experts per topic • Reach of resource persons network (local and international) • Availability of resource persons when needed
Learning Tools, Methods and Approaches	
Appropriateness of method based on profile of learners/participants	• Use of adult learning principles and methods to ensure participation and critical thinking • Learners' display of understanding and retention of topics as indicated by examinations
Class size per training	• Ratio of learners to resource persons
Learners/Participants	
Quality of learners attending the course	• Number of learners from appropriate levels of authority and position, expertise and educational background, and institutional affiliation(s)
Reach of learners	• Number of learners who completed the programme modules per country, island, territory, province, city, barrio, government organization/agency

Programme Management

Dimensions that must be measured to determine performance	Specific evidences of performance
Leadership	
Management support of the programme	• Existence of an executive sponsor and champion(s) for the programme • Institutional mandate for the programme
Human Resources	
Training team effectiveness in delivering the programme	• Quality of performance in providing the different products and services as indicated by staff performance appraisal • Satisfaction ratings of graduates on services of staff • Number of staff members who attended the training of trainers courses organized by APCICT and who have been able to effectively teach the *Academy* modules
Efficiency of training staff	• Number of days used to organize training
Business Processes	
Technical and administrative dimensions of the programme	• Timely submission of progress reports, partner's performance reports, programme monitoring reports (on-site visits)
Delivery of *Academy* modules	• Number of trainings organized • Number of participants per module (disaggregated by gender, position/job title, country, province/state, city, government organization)
Strategies towards Products and Services	
Involvement of multiple and major stakeholders (e.g., administration, trainers, clients, participants) in developing and localizing the modules	• Participation of identified stakeholders in consultative meetings and key stakeholders interviews to get advice, and discuss needs and concerns • Number of consultative meetings conducted • Degree and quality of inputs from key stakeholders in major decisions regarding the programme's strategies, products and services

External Impact

Dimensions that must be measured to determine performance	Specific evidences of performance
Related to MDGs	
Improvement of government services for the poor. Community decision-making. (MDG Goal 1: Eradication of extreme poverty and hunger)	• The number of local poor people especially women participating in community e-dialogues or e-campaigns
Reduction of physical and social barriers to education. Promoting efficiency in education. (MDG Goal 2: Achieving universal primary education)	• Adoption of computer education and training within the educational system • Number of public primary school teachers who are trained to use ICT in their classrooms
Managing health information and patient data. Automating basic processes of health care. (MDG Goals 4, 5 and 6: Reduction in child mortality, improving maternal health, and the fight against HIV/AIDS, malaria and other diseases)	• Number of health-care workers in municipal hospitals and health centres who use computers to access health information and patient records
Related to Country Goals	
Deployment and expansion of ICTs and the Internet within the government sector	• Per cent of government agencies and offices that use Internet and telecommunications to communicate and deliver their services to the public • Number of government establishments that maintain websites

Worksheet: Country-specific Indicators

Country	
Name of *Academy* partner organization	
Name of participant(s)	

Programme areas	Dimensions that must be measured to determine performance	Specific evidences of performance
1 Curriculum	Curriculum content	
	Resource persons	
	Learning tools and technology, methods, approaches, and learning environment	
	Learners/Participants	
2 Competencies	Module number: Learning objectives	
3 Programme Management	Leadership	
	Human resources	
	Business processes	
	Products and services	
4 External Impact	Related to MDGs	
	Related to country goals	

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UN-APCICT/ESCAP

The United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development (UN-APCICT/ESCAP) is a subsidiary body of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). UN-APCICT/ESCAP aims to strengthen the efforts of the member countries of ESCAP to use ICT in their socio-economic development through human and institutional capacity building. UN-APCICT/ESCAP's work is focused on three pillars:

1. Training. To enhance the ICT knowledge and skills of policymakers and ICT professionals, and strengthen the capacity of ICT trainers and ICT training institutions;
2. Research. To undertake analytical studies related to human resource development in ICT; and
3. Advisory. To provide advisory services on human resource development programmes to ESCAP member and associate members.

UN-APCICT/ESCAP is located at Incheon, Republic of Korea.

http://www.unapcict.org

ESCAP

ESCAP is the regional development arm of the United Nations and serves as the main economic and social development centre for the United Nations in Asia and the Pacific. Its mandate is to foster cooperation between its 53 members and nine associate members. ESCAP provides the strategic link between global and country-level programmes and issues. It supports governments of countries in the region in consolidating regional positions and advocates regional approaches to meeting the region's unique socio-economic challenges in a globalizing world. The ESCAP office is located at Bangkok, Thailand.

http://www.unescap.org

The Academy of ICT Essentials for Government Leaders (Academy)

http://www.unapcict.org/academy

The *Academy* is a comprehensive ICT for development (ICTD) training curriculum with currently 11 modules that aim to equip policymakers with the essential knowledge and skills to fully leverage opportunities presented by ICTs to achieve national development goals and bridge the digital divide. Below are the short descriptions of the 11 modules of the *Academy*.

Module 1 - The Linkage between ICT Applications and Meaningful Development

Highlights key issues and decision points, from policy to implementation, in the use of ICTs for achieving the Millennium Development Goals.

Module 2 - ICT for Development Policy, Process and Governance

Focuses on ICTD policymaking and governance, and provides critical information about aspects of national policies, strategies and frameworks that promote ICTD.

Module 3 - e-Government Applications

Examines e-government concepts, principles and types of applications. It also discusses how an e-government system is built and identifies design considerations.

Module 4 - ICT Trends for Government Leaders

Provides insights into current trends in ICT and its future directions. It also looks at key technical and policy considerations when making decisions for ICTD.

Module 5 - Internet Governance

Discusses the ongoing development of international policies and procedures that govern the use and operation of the Internet.

Module 6 - Information Security and Privacy

Presents information on security issues and trends, and the process of formulating an information security strategy.

Module 7 - ICT Project Management in Theory and Practice

Introduces project management concepts that are relevant to ICTD projects, including the methods, processes and project management disciplines commonly used.

Module 8 - Options for Funding ICT for Development

Explores funding options for ICTD and e-government projects. Public-private partnerships are highlighted as a particularly useful funding option in developing countries.

Module 9 - ICT for Disaster Risk Management

Provides an overview of disaster risk management and its information needs while identifying the technology available to reduce disaster risks and respond to disasters.

Module 10 - ICT, Climate Change and Green Growth

Presents the role that ICTs play in observing and monitoring the environment, sharing information, mobilizing action, promoting environmental sustainability and abating climate change.

Module 11 - Social Media for Development

Provides a development-oriented perspective on social media and describes innovative ways for governments and development stakeholders to leverage them in national development strategies and programmes.

These modules are being customized with local case studies by national *Academy* partners to ensure that the modules are relevant and meet the needs of policymakers in different countries. The modules are also been translated into different languages. To ensure that the programme stays relevant and addresses emerging trends in ICTD, APCICT regularly revises the modules and develops new modules.

APCICT Virtual Academy (http://e-learning.unapcict.org)

The *APCICT Virtual Academy* is part of the multi-channel delivery mechanism that APCICT employs in the implementation of its flagship ICTD capacity building programme, the *Academy of ICT Essentials for Government Leaders*.

The *APCICT Virtual Academy* allows learners to access online courses designed to enhance their knowledge in a number of key areas of ICTD including utilizing the potential of ICTs for reaching out to remote communities, increasing access to information, improving delivery of services, promoting lifelong learning, and ultimately, bridging the digital divide and achieving the MDGs.

All *APCICT Virtual Academy* courses are characterized by easy-to-follow virtual lectures and quizzes, and users are rewarded with APCICT's certificate of participation upon successful completion of the courses. All *Academy* modules in English and localized versions in Bahasa and Russian are available via the Internet. In addition, plans for more content development and further localization are underway.

e-Collaborative Hub (http://www.unapcict.org/ecohub)

The e-Collaborative Hub (e-Co Hub) is APCICT's dedicated online platform for knowledge sharing on ICTD. It aims to enhance the learning and training experience by providing easy access to relevant resources, and by making available an interactive space for sharing best practices and lessons on ICTD. e-Co Hub provides:

- A resources portal and knowledge sharing network for ICTD
- Easy access to resources by module
- Opportunities to engage in online discussions and become part of the e-Co Hub's online community of practice that serves to share and expand the knowledge base of ICTD