

PROCESS DOCUMENTATION

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Structure



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Learning Objectives



After going through Unit 2, it is expected that you would be able to

- ❖ Describe the aims and objectives of process documentation
- ❖ Discuss the different methods and tools of process documentation
- ❖ Conduct documentation based on software
- ❖ Document a digital event.

2.1 Introduction

The conceptualisation, evolution, growth and implementation strategies for event documentation differ from one organization/ project to another. Each project or agency has the potential to provide deeper insight into the enigmatic subject of social development, but differently. Each case has something to contribute to the learning process in the field of adult education, as there is no “blue print” approach. Hence, understanding the process documentation (PD) is of immense relevance to strengthen the adult education project implementation.

In adult education programs in India, the information collected during the

evaluation provides insights in post-facto. On the other hand, process documentation provides concurrent insights, since evaluation is a real time ongoing activity during the course of the project. As such, information collected during the course of process documentation is of timely relevance. Information collection on programs is the key aspect of PD

PD in the context of social science research is about finding occurrences of similar events or deviations, causative factors, etc in an ongoing manner. Hence, it results in constant thinking, reflecting and analysing the adult education concepts and implementing strategies.

In adult education projects, generally there are not any hard and fast set of rules, criteria or any one specific model. Methods, models, criteria are situation and context specific. Hence, PD in adult education is a process of collection of authentic data about recurring phenomena on an ongoing basis to provide insights into programs, implementing strategies and organization development mechanisms. In this sense, PD of each organization or project provides a different model.

PD is based on the learning approach. Before undertaking bigger projects, it is useful to apply PD on pilot scale to gain clearer insight into policy formulation and criteria for making bigger projects. PD of another agency on the similar project can be used to gain policy insights, etc. In PD, the key players are managers, supervisors, community leaders etc. The insights and analyses of process begin during the data collection process itself.

Hence, not only PD provides insights into the programs and strategies but also builds the organization capacities. PD provides inter linkages between different agencies, facts, systems, not conventionally thought of in a developmental model. PD also helps in

educating different members who join the agency at different stages on the mission and strategies and serves the purpose of orientation and team building.

Every social set-up, organization operates under its own articulated ideology, mission and perspectives. A variety of processes take place during the articulation and implementation. It is very difficult to capture all processes that undergo in a development organization. PD is a tool, which helps to collect data systematically on various processes. PD is not an evaluation strategy, or a post-facto exercise. It is an exercise to gather all data for continuous reflection and analysis and re-examination of strategies for strategic and operational framework.

The above discussion makes it clear that knowledge and skills about process documentation is a necessary item of acquisition by professional adult educators. Unit 2 is going to focus on explaining what and why of process documentation and what its relevance is for running an adult education program. Most importantly, it provides the learners some key skills to begin process documentation at their end.

2.2 The Aim and Importance of Process Documentation

Process documentation is a method of concisely capturing and sharing critical project concepts, plans and information as they are developed, so that impacted parties can share this information, make informed decisions, and keep the project moving forward without having to revisit old discussions.

The basic aim of process documentation (PD) is to learn from implementation experience and in the light of this modify the strategy and ultimately, policy of a

program, project or organization.

Documentation of processes helps in creating systematic information to articulate the intervention strategies and develop the flow chart of a program. This helps the project or organization to find out more about the needed field intervention methods, coordination, management requirements, financial management and human resource development policies. Not only the project conducting process documentation takes

benefit from this but also other similar projects and agencies can use the outcome as a model in their formulation and implementation methods.

Most of the process-oriented methodologies are meant to record programs as they occur and feed the information back to managers, researchers and policy makers to help them understand the working of the project better.

However, there are several other purposes, equally important, for which processes are sought. They are used by

agencies undertaking new and complex forms as part of expansion of programs, which need understanding about stakeholder participation. Such information is often needed to validate the approach/program and consequent policy formation.

An important aspect of any process is the documentation that accompanies it, such as logging trouble calls, requesting system changes, or executing disaster recovery plans. Let us now discuss the methods and tools of process documentation.

2.3 Methods and Tools of Process Documentation

When we ask the average team member in an adult education organization why he or she has so much documentation, a common answer is, “Because my organization requires me to fill out the templates.” If we ask about the usefulness of such documentation, a typical reply is, “I guess it will provide a trail of what has happened so that management can study my project later.” But almost no one ever goes back and ploughs through “the stack.” With purposes as unclear as these,

it is not surprising that people just “fill out the templates.”

There are many methods and tools available today to aid in capturing information about how an organization performs its day-to-day activities in order to achieve desired efficiencies and cost reductions. A common approach integral to most methods is to develop an end-to-end process flow (See Box 2.1 to understand what an end-to-end process flow is.

Box 2.1 End-to-end Process Flow

An important question to be answered before starting is ‘What does end-to-end really mean?’ For the head of an adult education organization it may mean viewing all its activities from the time the organization has been set up until it has completed its plans. It may mean only those processes initiated and developed by the organization. For a project head, it may include all the activities of the project and may become a means to identify gaps and overlaps to determine improvement opportunities. And yet another perspective is that of the Head or key actors who want to use a process-centric approach to the the organization/ project rather than the typical functional view and achieve a means to assess the impacts of strategic decisions on the activities critical to their Organization.

Centralized support groups such as Information Technology (IT), in addition to their own activities, are responsible for all automated processes used by modern organizations. Therefore, IT may see end-to-end as referring to the execution of specific software processes regardless of who uses them. For the purposes of this discussion, a machine aided by technology performs the software process. It starts when a user initiates a transaction, or triggers an event, and ends when the computer delivers a response or result. An adult education program, on the other hand, is performed by a human being and may or may not be enabled by one or more software processes.

Methods for Documenting the Process

You may find some of the following methods quite useful for documenting the process in your adult education set-up.

- ❖ Use of existing documentary material
- ❖ Records
- ❖ Structured interviews
- ❖ Case studies
- ❖ Reconstruction of events

- ❖ Field diaries of project staff
- ❖ Video and audio recordings
- ❖ Newspaper clippings
- ❖ Software development
- ❖ Participant observation of users
- ❖ None of the above methods is new in itself in the social science methodology, but what is new is the use to which each method is put.

Let us now look at some more process documentation techniques to achieve a common understanding of a process.

2.4 Process Narratives and Flow Charts

Documenting an understanding of a process, related controls, and key roles and responsibilities can be achieved through process narratives and flow charts. Both of these documentation techniques assist internal audit teams and those responsible for the processes to establish a common understanding of a process.

Once the documents are confirmed as accurate, they provide a baseline for performing risk analysis, internal controls testing, and implementing process improvements as necessary.

Narrative and process flow tools allow auditors to organise, describe, and graphically depict the results of

- ❖ Reviewing policy and procedure manuals;
- ❖ Discussing the process with key employees through inquiry;
- ❖ Performing a process walk through of sub-processes using samples, etc;
- ❖ Considering key inputs and outputs to a process;
- ❖ Lines of responsibility for individual employee and departmental roles.

The objective of process narratives and flow diagrams is to generate an accurate representation of how work is actually performed. Audit teams are then positioned to add value to recommend improvements, evaluate segregation of duties controls, and identify key controls (see Figure 2.1).

Process Reviewed: ----- Location: -----

Process Management Rating: ----- Sub-Process: -----

Figure 2.1: Audit Team’s Comments

2.4.1 Risks and Controls

Narratives and process flow maps (see various part of Figure 2.2) are designed to assist the analysis of processing risks and related controls. Although these documentation techniques do not test

the effectiveness of controls, they should promote an agreed upon understanding of how a process is performed, who performs specific duties (roles and responsibilities), and assertions about control activities.

Key risks and controls can be mapped on the process flow diagram to indicate when, by whom, and how controls mitigate risks.

Many organizations or IT companies develop excellent processes but fail to document them adequately. After an initially successful implementation of the process, many of these procedures go

unused due to lack of documentation, particularly as new staff members who are unfamiliar with the process attempt to use it. Methodical process management can identify bottlenecks and inefficiencies that are invisible to the organization and it can find room for improvement even in well-refined procedures.

Process Summary	Yes or No
A Does the process narrative summary have the preparer's name?	
B Does the process narrative summary have the approver's name (where applicable)?	
C Is the process owner name evident on the process narrative summary?	
D Are the relevant policies and procedures (P&P) noted on the summary?	
E Are the P&P in the documentation folder or related application storage facility? Where?	
F Does the summary clearly indicate the financial statement accounts impacted by the process?	
G Does the summary indicate the related COSO assertion (where applicable)?	

Figure 2.2a: Narratives and Process Flow Maps

Process Maps	Yes or No
A Is there a defined start symbol (either start or connector from another map)?	
B Does the map have a legend that describes the various shapes in the map?	
❖ Is each shape in the map appropriate (e.g., database reference shows a database shape)?	
C Does each shape (process) describe ->	
❖ Who is performing the action? <i>Note:</i> Examples include: AP Clerk, Senior Accountant, Controller, etc. This is particularly important when describing authorization/approval controls.	
❖ Are only position titles (not names) utilized in the map?	
❖ What action are they performing [e.g., reconciling, posting, validating, etc.]?	
❖ When are they performing the actions?	
❖ Where is the action being performed (could be externally, internally, systemic application, database, etc., different dept, etc.)?	
D How is the action being performed? <i>Note:</i> describe what is being utilized to perform the action, for example, report name, database, etc.	
E Do the maps indicate inputs, outputs for each activity?	
F Is the input/output specifically identified (i.e., exact name of query or name of report)?	

<p>G Have all FINANCIAL risks been identified? <i>Note:</i> What could go wrong for each shape, keeping in mind a financial impact focus?</p> <p>H Have all FINANCIAL controls been identified? <i>Note:</i> How do we prevent what could go wrong such as a mitigating control?</p> <p>I Are there any estimates or assumptions in the process?</p> <p>❖ Is the methodology explained/documented in the narrative?</p> <p>J Does the process end at the end of the map?</p> <p>❖ Yes - Is there a defined end symbol?</p> <p>❖ No - Is the next process connector on the map instead of an end symbol?</p> <p>K If process map is linked to/from another, have the terminology and common activities been named the same between maps?</p> <p>L Have risks been documented where the risk is occurring?</p> <p>M Have controls been documented where they occur? <i>Note:</i> controls that occur outside of the process (e.g., senior management operational review) should be documented on the map.</p> <p>❖ Does every risk identified on the process map have an associated description in the narrative?</p> <p>N Does every risk identified on a process step have a control and vice versa?</p>	
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Figure 2.2b: Narratives and Process Flow Maps

Information Technology	Yes or No
A Is the specific database referenced where process information exists?	
B Does the narrative indicate which database?	
C Have IT processes within each financial/operational process map been identified?	
D Has IT provided process and control information when computer applications are involved?	
❖ Are all the applications used listed/represented?	
E If the financial process is dependent on other IT processes (e.g., polling, interfaces, etc.), have these IT processes been identified and linked to the applicable IT map(s)?	
F Has IT provided process and control information when computer applications are involved?	
G Do process flow maps or narratives cite specific application controls and related individual users (position associated with access)?	
<i>Note:</i> See the Controls Checklist below for coverage of basic IT control attributes.	

Figure 2.2c: Narratives and Process Flow Maps

<ul style="list-style-type: none"> b. Who approves (what level of management?) c. Existence of an established level of authorization? <p>VI. If a reconciliation control, does the control detail:</p> <ul style="list-style-type: none"> a. Who prepares and performs the reconciliation? b. What is the purpose of the reconciliation? c. Who reviews the reconciliation? d. What is the evidence of the review? (manager approval) e. What reports are used and which systems generate the reports used? f. How are differences investigated / resolved? <p>VII. If a document control, does the control detail that:</p> <ul style="list-style-type: none"> a. Documents are pre-numbered and system generated (e.g., sales orders, invoices etc) b. Documents are safeguarded (e.g., physical controls over checks, contracts, manual journal entry logs, etc.)? <p>VIII. If a physical asset control, does the control detail:</p> <ul style="list-style-type: none"> a. How is the access to the asset and related record keeping appropriately restricted and is it reviewed periodically? b. What procedures ensure the accuracy of the related record keeping (activity logs)? <p>IX. If a system based control, does the control detail:</p> <ul style="list-style-type: none"> a. All key fields for data entry must contain valid information (e.g., current date, established dollar range) in order for a record to be accepted. b. Information is validated against a master table (e.g., customer number, product number, vendor number, PO number). c. Master tables are reviewed and updated regularly to ensure accuracy and table data is safeguarded. d. Duplicate postings/entries are not accepted. e. Accounting period-end cut-off dates are enforced by the system. f. System-based control overrides must be authorized. 	
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Figure 2.2e: Narratives and Process Flow Maps

Additional Considerations	
<ul style="list-style-type: none"> A Is the methodology explained / documented in the control descriptions for formulas etc? B Is the control frequency documented e.g., quarterly, monthly, weekly, daily, multiple times daily? C The control description adequately explains how it mitigates the risk? D Is the control type (Preventive, Detective, Corrective) listed? <ul style="list-style-type: none"> ❖ Is the control type listed accurate? E Is the control owner listed? F Are only position titles (not names) utilized in the RCM? G Is the control technique (Systemic, Manual) listed? <ul style="list-style-type: none"> ❖ Is the control technique listed accurate? 	

<p>H Is the control level (Primary, Secondary, Tertiary) listed? ❖ Is the control level listed accurate?</p> <p>I Is the COSO component identified? ❖ Is the COSO component identified accurate?</p> <p>J Has the preparer assessed the design effectiveness?</p> <p>K Do you agree with the assessment of design effectiveness?</p> <p>L Has the preparer documented any deficiencies (Control gaps) in the design effectiveness?</p>	
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Figure 2.2f: Narratives and Process Flow Maps

2.4.2 Proactive Process Management

Proactively managing the processes can help an organization to achieve the following benefits.

- ❖ Eliminate flaws
- ❖ Reduce the time spent on specific tasks
- ❖ Decrease costs
- ❖ Decrease resources associated with any task

- ❖ Improve efficiency
- ❖ Improve overall quality
- ❖ Increase customer and employee satisfaction.

Very few techniques are available to quantify the quality and value of Process Documentation. See Box 2.2 for a list of different approaches to understand process documentation.

Box 2.2 Different Approaches to Understand Process Documentation

There are quite a few different approaches to understand process documentation, including

- | | |
|--------------------------|-------------------------------|
| ❖ Field level activities | ❖ Planning |
| ❖ Meetings | ❖ Implementation of decisions |
| ❖ Negotiations | ❖ Resolutions of differences |
| Decision-making | |

Activity 2.1

Note the following steps to take in developing Process Documentation at your adult education setup and describe its relevance for your activities as a professional adult educator.

- ❖ Develop an action plan to manage the creation of a policy and process documentation system that effectively prescribes action and expedites efforts.
- ❖ Design a documentation structure suited to your organization’s needs and its size.
- ❖ Analyse the potential of process documentation versus training material.
- ❖ Learn various ways to organize and express your organization’s goals or its expectations.
- ❖ Examine the merits of various structures and styles to compose/access both policy and process documentation.
- ❖ Discover the key criteria to keeping it simple.

2.5 How to Conduct Process Documentation

Although there are no well-defined methods for conducting PD, some methods can be spelled out in specific context of agency needs. The key steps are:

- ❖ The program or agency needs to articulate the purpose, scope and limits of the PD exercise.
- ❖ Expectations of both the agency personnel and PD facilitator need to be clarified and reach a common understanding on the process of the PD
- ❖ At the outset it is important to establish the focus and frame of reference for PD in which the expected outcome of PD needs to be spelled out.
- ❖ PD needs to result in analysis, reflection, planning, diagnosis and organizational 'development' and also address the day-to-day needs of the organization like preparation of an organizational document on its history and programs.
- ❖ Having an organizational framework in mind helps in the systematic identification of processes. This enables in identification of processes that could begin from the results/ outcomes to leadership, policy formulation, strategies and mission or begin from mission and move onto other areas of organizational framework.
- ❖ The key actors' recalling or narrating the experiences, events, happenings and decisions form a large part of data. Structuring these and putting them in a proper perspective results in process identification.
- ❖ Analysis need to focus on both desired and undesired processes but also hint at the causes of processes and patterns.
- ❖ The PD process should be defined within a particular time frame. The temporal aspect provides clarity for future use of data that has emerged from the PD process.
- ❖ PD essentially enables the organization to build internal mechanisms for continuous reflection and analysis based on authentic data. It is primarily used for developing appropriate system, structure, perspective and building the institution.
- ❖ PD essentially enables the organization to build internal mechanisms for continuous reflection and analysis based on authentic data. It is primarily used for developing appropriate system, structure, perspective and building the institution.

After our long discussions of merits, methods and tools of process documentation, let us now complete what we began in unit 1. While discussing planning of documentaion system and services in section 1.4 of Unit 1, we had mentioned that in Unit 2 we will discuss two types of documentation, namely, software documentation and documenting a digital event.

Activity 2.2

Read section 2.5 carefully and select some steps from the above list to carry out process documentation at your adult education centre. Explain why the steps selected by you are more appropriate for your adult learning setup.

2.6 Software Documentation

Software documentation is a form of writing for both print and online media that supports the efficient and effective use of software in its intended environment. Software documentation, as many researchers have shown and as technical writers and software documents know from their work in the business, contributes significantly to the value of the software product. In this sense the documentation contributes to the user's efficiency in the workplace and thus has an important role to play in modern business.

Over its evolution, software documentation has expanded to take on the challenge of providing useful and practical information products for users. Whereas documentation once aimed to satisfy the support needs of the experienced user, documentation in the 2000s aims also to make software useful. This means not just teaching features but supporting workplace tasks with step-by-step relevancy.

In changing from the goal of supporting experts to guiding and teaching beginning and intermediate users, researcher looked to a number of resource disciplines, including document design, instructional psychology, cognitive psychology, ergonomics and human factors, and traditional rhetoric. These explorations created a great number of design innovations that, coupled with technological advances in page design and functionality, have given us the exciting world of single-sourced documents (online documents with dynamically generated content and adaptive interfaces) and embedded help files (documents that present information at the point of need through

features of the software interface).

But of all the innovations that span from the rapid rise of computer and software technology during the 1920s and 1990s, task orientation has provided the most dependable and useful tool for manual design. Task orientation, as an organizing principle in manuals and online help and as a goal in their design and writing informs the modern day approach.

Task orientation is an approach to software documentation that presents information in chronological order based on the user's workplace sequence. Task orientation encourages the successful application of software to workplace objectives. Other terms used for task orientation include how-to, step-by-step, procedures, walkthroughs, and tutorials. This approach to documentation is shown in a variety of print and online forms: tutorials, "getting started" booklets, instruction steps, job performance aids, and online help procedures.

A good document should encourage users to learn the program (proficiency) and encourage users to apply the program to problems in the workplace (efficiency). A number of things determine the success of software documentation. Put another way, you can easily find a number of ways to mess up a documentation project. The overriding principle is: Make the software usable. A manual that does this adapts the software to the user's job, rather than making the user adapt to the software.

Software users often need both how-so and how-to information while working with a program.

2.7 Documenting a Digital Event

As the morning of 11 September 2001 unfolded, the media looked at history to provide a sensible reference point for the shocking events it presented to the public. In the heat of the moment, it became all too common to compare the attacks of 11 September 2001 with the attack on Pearl Harbor of 7 December 1941. So successful was this comparison that now, more than a year later, it remains commonplace in both media and popular circles.

The comparison has, however, come under some scrutiny by the historical community. Among other things, historians point out differences in the nature of the targeted communities, public response to the events, the relationship between attacker and attacked, and in the broader cultural and geopolitical circumstances in which the two events were situated. Yet even putting substantive debates aside, it must be admitted that from the historian's perspective there are important practical differences between Pearl Harbor and 9/11 - differences that speak to the nature of sources.

The historical record of 1941 consists almost entirely of paper - government reports, letters from home, photographic prints and newspaper headlines. Not so in 2001 - September 11 was not only the first major event of the twenty-first century, it was also the first major event of the Internet age. For the first time, people experienced a major historical event as it unfolded on their computers - both at work and in classrooms. Much of the record of 11 September 2001 sits on our hard drives and servers - in documents, e-mails, voice mails, digital images, and web sites. Without a

concerted effort by historians and archivists, these fragile materials will surely be lost - even at the touch of a delete key. The September 11 Digital Archive is working to prevent that loss.

Organized by the American Social History Project at the City University of New York and the Centre for History and New Media at George Mason University with funding by a major grant from the Alfred P. Sloan Foundation, the September 11 Digital Archive uses electronic media to collect, preserve, and present the history of the 11 September 2001 attacks and the public responses to them. In particular, the archive works to collect stories, e-mails, digital images and other "born-digital" materials relating to the attacks of September 11. Additionally, the archive organizes and annotates the most important web-based September 11 resources and develops online materials to contextualize and teach about the events. The archive is quickly becoming the premier resting place for the vast digital record precipitated by September 11.

Launched on 11 March 2002, the archive's first year has seen remarkable success. Over 25,000 e-mails, 10,000 first hand stories and 5,000 digital images have been preserved and permanently archived. A wide-ranging series of partnerships has been formed with other institutions, including the Museum of the City of New York, National Public Radio's Sonic Memorial, and the Library of Congress. The archive is especially pleased to have been selected as the Smithsonian Institution's designated repository for digital materials relating to September 11 and its special exhibition, "Bearing Witness

September 11 Digital Archive apart from other historical repositories is the large number of spontaneous grassroots contributions, personal stories of September 11, and pieces of digital artwork. Unlike traditional “brick and mortar” archives, there are no physical limits to the size of the September 11 Digital Archive’s collection. If it needs to be expanded, more disk space is added. This means that no digital object is too trivial for the archive to accept.

Another thing that sets the archive’s collections apart is the large number of e-mail and instant messages that were written during the moments of the attacks. For instance, the archive contains a series of Blackberry wireless e-mail messages written by people

escaping the World Trade Center. Of course, the substance of these e-mails is moving and fascinating and not in itself very different from the substance of, say, letters written by U.S. service people at Pearl Harbor. What is very different about these communications is their media. Unlike Pearl Harbor and other earlier events, witnesses to September 11 connected to the news and to each other in real time. In these exchanges we see the events as they unfolded and the immediate responses of those involved.

Through continuing efforts to collect the digital record of September 11, the archive will insure that future historians do not fail to understand all experiences of that monumental day.

Activity 2.3

Select two digital events pertaining to India and compare their process documentation along the lines attempted in section 2.7.

2.8 Conclusion

After reading the unit, you have learnt how Process Documentation (PD) is an important part of documentation, which not only provides insights into the programs and strategies, but also builds the capacities of the organization. It is equally useful in an adult learning set-up, where you can develop systematic process documentation by following the different methods and tools mentioned in Unit 2. As an adult educator, you need to understand a process, its key roles and responsibilities. Through process documentation, you can create a database of implementing strategies used at different phases of an adult education program, its salient features, goals, etc., budgetary provisions, important events and internal

inventories during the process of implementation. It can reduce the dropout rate and back-log tendencies existing in any adult education set-up as it would provide an insight to future adult educators and would be a substantive measure to reduce flaws and improve quality, efficiency and learner’s satisfaction. Similarly, as an adult educator, you will document and create a list of important e-mails to send instant messages. You can also develop success stories of adult learners to provide incentive to other learners. But, it is also important for you to carry out a continuous process of documentation for analysing the program and its achievements. In case of transfer or some other causes, if an adult educator

has to change duty then the new person in-charge will not face difficulty in assessing the activities and the teaching-learning process at the ALS will

not be affected if you have carried out the process documentation in an efficient manner.

2.9 Apply What You Have Learnt

Imagine that a new colleague has joined your adult learning setup (ALS) and you need to handover the responsibility of process documentation to this person. For explaining her/his tasks, you prepare a long note so that the new person can refer to it while in doubt. Prepare this note in the context of your ALS and try to incorporate the following points.

- ❖ Aim and Importance of Process Documentation
- ❖ Methods and Tools of Process Documentation
- ❖ Process Narratives and Flow Charts
- ❖ Risks and Controls
- ❖ Proactive Process Management
- ❖ How to Conduct Process Documentation
- ❖ Software Documentation
- ❖ Documenting a Digital Event

Applying what you have learnt in this Unit about Process Documentation prepare a note on process documentation of your ALS and critically examine how to carry out the documentation on a day-to-day basis.

