Documentation is a set of documents provided on paper, or online, or on digital or analog media, such as audio tape or CDs. Examples are user guides, white papers, on-line help, quick-reference guides. It is becoming less common to see paper (hard-copy) documentation. Documentation is distributed via websites, software products, and other on-line applications.

Professionals educated in this field are termed documentalists. This field changed its name to information science in 1968, but some uses of the term documentation still exists and there have been efforts to reintroduce the term documentation as a field of study.

Principles for producing documentation

While associated ISO standards are not easily available publicly, a guide from other sources for this topic may serve the purpose. David Berger has provided several principles of document writing, regarding the terms used, procedure numbering and even lengths of sentences, etc.[4]

Guidelines[edit]

The following is a list of guides dealing with each specific field and type:

- documentation in health care[5]
- thesis writing

  Further information: Dissertation

- papers for academic journal publishing (i.e., *Journal of Food Science*[9] and *Analytical Chemistry*)

Procedures and techniques

The procedures of documentation vary from one sector, or one type, to another. In general, these may involve document drafting, formatting, submitting, reviewing, approving, distributing, reposting and tracking, etc., and are convened by associated SOPs in a regulatory industry. It could also involve creating content from scratch. Documentation should be easy to read and understand. If it's too long and too wordy, it may be misunderstood or ignored. Clear, Short, Familiar words should be used to a maximum of 15 words to a sentence. Only gender hyper neutral word should be used and cultural biases should be avoided. Procedures should be numbered when they are to be performed.

Producing documentation

Technical writers and corporate communicators are professionals whose field and work is documentation. Ideally, technical writers have a background in both the subject matter and also in writing and managing content (information architecture). Technical writers more commonly collaborate with subject matter experts (SMEs), such as engineers, technical experts, medical professionals, or other types of clients to define and then create content (documentation) that meets the user's needs. Corporate communications includes other types of written documentation that is required for most companies.

Specializing documentation

- Marketing Communications (MarCom): MarCom writers endeavor to convey the company's value proposition through a variety of print, electronic, and social media. This area of corporate writing is often engaged in responding to proposals.

- Technical Communication (TechCom): Technical writers document a company's product or service. Technical publication include user guides, installation an configuration manuals, and troubleshooting/repair/replace procedures.
- Legal Writing: This type of documentation is often prepared by attorneys or paralegals who could be in private practice or retained as corporate council.
- Compliance documentation: This type of documentation codifies Standard Operating Procedures (SOPs), for any regulatory compliance needs, as for safety approval, taxation, financing, technical approval, etc.

Indexing

- Index (database)
- Index (search engine)

Documentation in computer science

The following are typical software documentation types

- Request for Proposal (RFP)
- Requirements/ Statement of work/ Scope of Work (SOW)
- Software Design and Functional Specification
- System Design and Functional Specifications
- Change Management, Error and Enhancement Tracking
- User Acceptance Testing
- Man pages

The following are typical hardware and service documentation types

- network diagrams
- network maps
- datasheet for IT systems (Server, Switch, e.g.)
- Service Catalog and Service Portfolio (ITIL)

Documentation include such as feasibility report, technical documentation, operational documentation, log book, etc.

Tools for documenting software

There are many types of software and applications used to create documentation.

SOFTWARE DOCUMENTATION FOLDER (SDF)

A common type of software document written by software engineers in the simulation industry is the SDF. When developing software for a simulator, which can range from embedded avionics devices to 3D terrain databases by way of full motion control systems, the engineer keeps a notebook detailing the development "the build" of the project or module. The document can be a wiki page, MS word document or other environment. They should contain a *requirements* section, an *interface* section to detail the communication interface of the software. Often a *notes* section is used to detail the proof of concept, and then track errors and enhancements. Finally, a *testing* section to document how the software was tested. This documents conformance to the client's requirements. The result is a detailed description of how the software is designed, how to build and install the software on the target device, and any known defects and work-arounds. This build document enables future developers and maintainers to come up to speed on the software in a timely manner, and also provides a roadmap to modifying code or searching for bugs.

SOFTWARE FOR NETWORK INVENTORY AND CONFIGURATION (CMDB)

These software tools can automatically collect data of your network equipment. The data could be for inventory and for configuration information. The ITIL Library requests to create such a database as a basis for all information for the IT responsible. It's also the basis for IT documentation.

Documentation in criminal justice[edit]

"Documentation" is the preferred term for the process of populating criminal databases. Examples include the National Counter-terrorism Center's Terrorist Identities Datamart Environment ("TIDE"), sex offender registries, and gang databases.

Documentation in Early Childhood Education[edit]

Documentation, as it pertains to the Early Childhood Education field, is "when we notice and value children's ideas, thinking, questions, and theories about the world and then collect traces of their work (drawings, photographs of the children in action, and transcripts of their words) to share with a wider community"

Thusly, documentation is a process, used to link the educator's knowledge and learning of the child/children with the families, other collaborators, and even to the children themselves.

Documentation is an integral part of the cycle of inquiry - observing, reflecting, documenting, sharing and responding.

Pedagogical documentation, in terms of the teacher documentation, is the "teacher's story of the movement in children's understanding". According to Stephanie Cox Suarez in 'Documentation - Transforming our Perspectives', "teachers are considered researchers, and documentation is a research tool to support knowledge building among children and adults"

Documentation can take many different styles in the classroom. The following exemplifies ways in which documentation can make the 'research', or learning, visible:

1. Documentation Panels (bulletin-board-like presentation with multiple pictures and descriptions about the project or event).
2. Daily Log (a log kept every day that records the play and learning in the classroom)
3. Documentation developed by or with the children (when observing children during documentation, the child's lens of the observation is used in the actual documentation)
4. Individual Portfolios (documentation used to track and highlight the development of each child)
5. Electronic Documentation (using apps and devices to share documentation with families and collaborators)
6. Transcripts or Recordings of Conversations (using recording in documentation can bring about deeper reflections for both the educator and the child)
7. Learning Stories (a narrative used to "describe learning and help children see themselves as powerful learners")
8. The Classroom as Documentation (reflections and documentation of the physical environment of a classroom).

Documentation is certainly a process in and of itself, and it is also a process within the educator. The following is the development of documentation as it progresses for and in the educator themselves:

- Develop habits of documentation
- Become comfortable with going public with recounting of activities

- Develop visual literacy skills
- Conceptualize the purpose of documentation as making learning styles visible, and
- Share visible theories for interpretation purposes and further design of curriculum.