Utilization

| Design | Development | Utilization | Management | Evaluation |

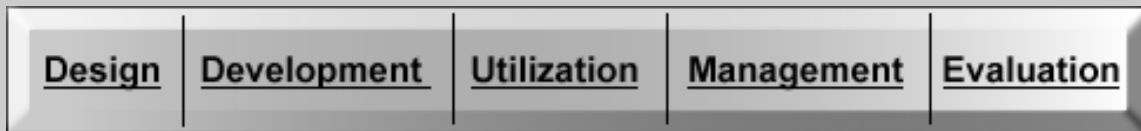| Introduction | About Me | Field of IT | Domains | Competencies |
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The domain of utilization has grown out of the use of audiovisual materials in instruction throughout the twentieth century, while gaining particular popularity post World War II (Wikipedia, 2006). After an instructional product is designed and developed the instructional designer then ensures that the product is utilized as intended. Utilization encompasses the systematic implementation and use of the instructional activities that are designed and developed for the learners to consume. In simple terms, utilization means "to put to use" (Merriam Webster Dictionary, 2006). In the context of Instructional Technology, utilization also includes putting the instructional product into operation within the context of the project.

Media Utilization:

Seels and Richey define Media Utilization as "the systematic use of resources for learning" (1994, p.46). Instructional designers choose appropriate and effective medial assets during the design and delivery phases to convey their instructional messages. After they have done so, the designer ensures that the selected media is functioning and is accessible to the users of the product. Media Utilization is guided by the results of instructional analysis phase of instructional design process. During the analysis phase, learner characteristics, environmental issues along with learning outcomes and selected instructional strategies are used to identify media specifications. These specifications are then used to plan the delivery of instruction. Thus, media selection processes are not only governed by learning outcomes and the instructional design strategies but also by the learner characteristics and environmental constraints. Instructional designers often use different media selection models to guide them in their decision making.

One example of a media analysis model, created by William W. Lee and Diana Owens is a synthesis of work from the cognitive sciences, including the cognitive mapping work of M. David Merrill (1982) and the learning capabilities work of Robert Gagne (1985), the process engineering of Hammer and Champy (1994) and the Human Performance Enhancement principles of Thomas Gilbert (1996).

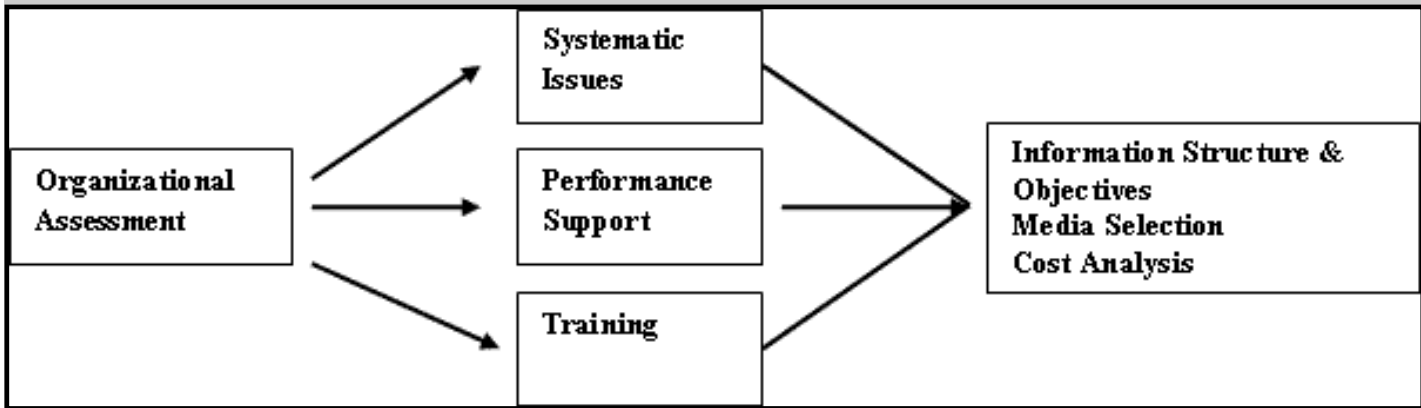***Media Analysis Model*** (Lee & Owens, retrieved 2006)

Figure 13: Media Analysis Model

Image adapted from:

http://www.astd.org/NR/rdonlyres/900E19EF-121E40BCBBBCCD15BD25F47F/0/WhitePaperMediaAnalysisFinal.pdf

From A Systematic Approach to Media Selection by William W. Lee and Diana Owens

Diffusion of Innovations: Diffusion of an Innovation, as depicted by Everett Rogers (1995) is "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p.5). The goal of any instructional design project and/or product is to bring about some change to an organization or system. Implementing a change in any system can be challenging. Therefore, the implementation of a change is something that needs to be managed. The diffusion of an innovation is intended for the change to be adopted into the system. According to Rogers, the adoption process includes five stages:

- Awareness
- Interest
- Evaluation
- Trial
- Adoption

Diffusing the innovation is a necessary step in successfully implementing the change. Specific communication modes and methods will be chosen in order to successfully execute the diffusion of the innovation. The diffusion plan and processes will vary depending upon the project; however the overall goal is to carefully plan awareness, interest, trial and adoption of the innovation so that it can be seamlessly infused into the organization. This will allow for the implementation of the innovation and without implementation it is impossible to determine if the change is effective and has an impact (Rogers, 1995)

Roger's *Diffusion of Innovation* Theory and model clarifies five attributes of an innovation. Table 3 summarizes the five attributes of innovation.

Table 3: *Roger's Five Attributes of the Diffusion of an Innovation*

Attributes	Description

Trialability	The degree to which an innovation may be experimented with on a limited basis
Observability	The degree to which the results of an innovation are visible to others
Complexity	The degree to which an innovation is perceived as difficult to understand
Compatibility	The degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of learners
Relative advantage	The degree to which an innovation is perceived as better that the previous

Rogers also states that adopters of any new innovation or idea could be categorized as: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. The five categories, a brief description and the percentage of people that fall into that category are displayed in Table 4.

Table 4: *Roger's Five Categories of Adopters*

Category	Description	% of people
Innovators	Venturesome, educated, multiple info sources, greater propensity to take risk	2.5%
Early Adopters	Social leaders, popular, educated	13.5%
Early Majority	Deliberate, many informal social contacts	34%
Late Majority	Skeptical, traditional, lower socio-economic status	34%
Laggards	Neighbors and friends are main info sources, fear of debt	16%

Source: Diffusion of Innovations by E. Rogers, 1995. Copyright 1995 by The Free Press.

Implementation and Institutionalization:

Implementation occurs after the design process is completed and the product or innovation is essentially put into use in the organization. The diffusion plan should be completed and likely will continue throughout the implementation process. Implementation processes may occur for various length of time depending on the scope of the project. Implementation implies that not only has the innovation been adopted but that it is actually being utilized.

"Institutionalization is the continuing, routine use of the instructional innovation in the structure and culture of an organization" (Seels & Richey, p. 47). Institutionalization allows for the assimilation and daily use of an innovation by the organization. Institutionalization will occur after successful implementation of the innovation. Institutionalization implies that the innovation has been infused into the organization at such a level that it has become a part of the organization. Through careful planning and effective implementation processes, an instructional designer can ensure that an instructional innovation is integrated into the cultural norm of a system. For example, organization leaders may choose to adopt a new software program and train their staff to utilize it. Assuming that the product has been designed and developed and the training has been conducted and adopted, if the product is used on a regular basis it is "institutionalized".

Policies and Regulations:

"Policies and regulations are the rules and actions of society that affect the diffusion and use of instructional technology" (Seels & Richey, 1995, p. 47). Any organization has some level of policies, procedures and regulations that serve to govern the function and inner-workings of the organization. When designing instruction and implementing any changes into an organization it is important that policies and regulations that may pertain to the project and organization are carefully considered. Without this consideration and analysis an aspect of the design project could become contradictory to a preexisting policy or regulation that would negate the effectiveness of the project. For example, in an educational system there are specific terms of acceptable use. Prior to adopting a web-based instruction program the decision making body of the organization would need to review at least the acceptable use policy to ensure that the product fits the guidelines of the policy. In terms of instructional design projects, typical policies and regulations may include but are not limited to: copyright law, standards for equipment and programs, creation of teams to support instructional technology, *Acceptable Use Policy,* and *Online Code of Conduct*.

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