Domain of Management

The domain of management entails the planning, organizing, coordinating and supervising of instructional technologies (Seels & Richey, 1994). When dealing with management, instructional designers assume multiple roles and take on numerous responsibilities. Instructional designers assume leadership, motivational, and support roles when managing an instructional design project. As a project manager, instructional designers are responsible for a range of management activities. For example, as a manager of a technology project, instructional designers plan the project's scope, budget, constraints, and schedule. They are also responsible for assembling project team members, delegating tasks, and communicating effectively to ensure the success of an instructional design project. Regardless of a project's size, appropriate management will be a key factor to the successful implementation and institutionalization of instructional technologies within an organization. The domain of management consists of project management, resource management, delivery system management, and information management (Seels & Richey, 1994).

Project Management

According to Rothwell and Kazanas (1992), conceptually, project management introduces the process of assembling a unique team of people whose skills and knowledge match the technical and situational demands of a project. As a project manager, instructional designers use techniques and tools such as Gantt charts, PERT charts, critical path analysis, and Work Breakdown Structures (WBS) as methods to successfully meet a project's requirements (Schwalbe, 2007). By working with project sponsors, project team members, and stakeholders; instructional designers determine the goals of a project and then they plan, organize, coordinate, and supervise the design, development, and implementation of instructional technologies within an organization.

In order to properly manage a project, instructional designers sometimes refer to instructional design models that guide them through the process of managing an instructional design project from start to finish. Michael Greer's Instructional Development Project Management Model (1992) and Seels & Glasgow's ISD Model II: For Practitioners (1997) are just two examples of models that outline the process of managing the design, development, and implementation of instructional technologies. All of these models require instructional designers to conduct a thorough needs analysis.

Resource Management

Resource management refers to planning, monitoring, and controlling resources, such as: people, supplies, time, budget, and instructional materials (Seels & Richey, 1994). Instructional designers are responsible for justifying each type of resource as it pertains to the effectiveness of the instruction. Human resource management is often harder than determining any of the other necessary resources, such as supplies, facilities, and instructional materials. So, instructional designers often engage in human resource management to effectively utilize the people involved in a project (Schwalbe, 2007). A very significant sub-component to human resource management is motivation. Using motivation theories like Abraham Maslow's Hierarchy of Needs (1943) and Thamhain and Wilemon's Influence and Power (1977), instructional designers can influence human resources to ensure high quality products. Thamhain and Wilemon's theory argues that projects are more likely to succeed when project managers influence people using expertise and

work challenge rather than relying on penalty, money, and authority to manage a project (Schwalbe, 2007). Work challenge refers to assigning human resources to tasks that provide a level of enjoyment which results in intrinsic motivation. According to Maslow's Hierarchy of Needs, understanding individuals' motivations can help project managers ensure that human resources have their deficiency needs met so that they are motivated to take on work challenges that foster creativity (Maslow, 1943). Thus, it is important for the project manager to understand each team member's strengths in order to assign them to tasks that are comfortable with and capable of completing.

Delivery System Management

Delivery systems management refers to planning, controlling, and monitoring a combination of mediums and methods utilized to present information to learners (Seels & Richey, 1994; Ellington & Harris, 1986). Delivery systems management focuses on the hardware/software requirements, the level of support needed when presenting information to learners using a specific type of delivery system, and aligning instructional delivery systems so that they match instructional goals. Using information that is gleaned from the front-end analysis concerning learner characteristics, the context analysis, and the type of desired learning outcomes, designers determine which types of media will be appropriate. Delivery system decisions are made based on instructional goals and resource management systems (Seels & Richey, 1994). Instructional designers have increasingly begun to utilize learning management systems to deliver information to learners via a self-paced online environment. Learning Management Systems (LMS) are software applications that allow for administrative tasks that document, track, and monitor learners as well as provide activities such as assignments, assessments, and utilization of collaboration tools to engage learners (Ellis, 2009).

Information Management

Information management refers to planning, controlling, and monitoring information that is stored, transferred, or processed (Seels & Richey, 1994). Storing, transferring, and processing information are all different ways to manipulate information, but as an instructional designer it is important to see how these functions overlap. Storing information for instruction takes the form of the instructional materials that are developed during the development process. Transferring information occurs when utilizing integrated technologies (Seels & Richey, 1994). Processing refers to altering information so that it is suitable for the specified task (Lindenmayer, 1988). Instructional designers utilize information theories to understand how written and spoken language can be sequenced to present specific content to the learner. Acting as the information manager, instructional designers are responsible for making information easily accessible and user-friendly.
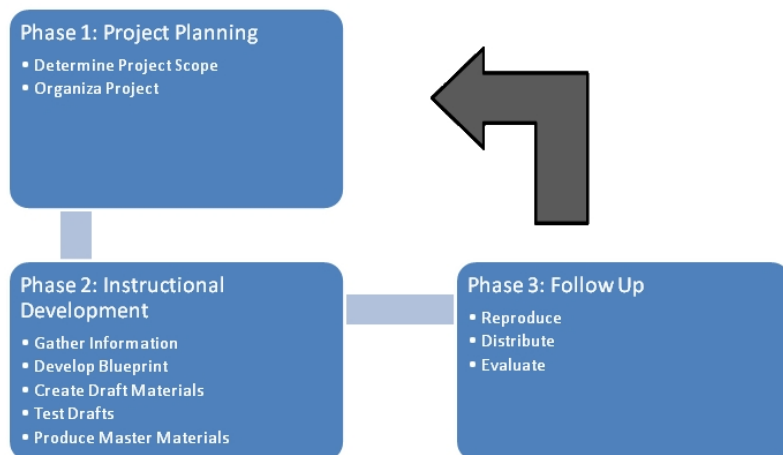
Knowledge management is an emerging step in information management process. Knowledge management requires instructional designers to facilitate the conversion of implicit knowledge (i.e. tacit knowledge, organization habits, organizational culture) into explicit knowledge (i.e. database information, policies, procedures) that can be utilized to help solve performance problems (Spector & Edmonds, 2002). Acquiring knowledge involves complex cognitive processing so that learners can perceive, communicate, reason, associate, and understand information to be applied within a specified context ("Knowledge", 2010). Acting as a knowledge manager, instructional designers focus on organizational goals to design, develop,

and implement a system of knowledge that shares organizational insights to promote knowledge sharing within an organization.

Appendices

Greer's Instructional Development Project Management Model (1992)

Michael Greer's project management model outlines the process of effectively managing an instructional development project. Greer's model does not account for front-end analysis because Greer's model assumes that a thorough front-end analysis has already been completed and training was deemed to be the most effective solution (Greer, 1992).

Phase 1: Project Planning
• Determine Project Scope
• Organiza Project

Phase 2: Instructional Development
• Gather Information
• Develop Blueprint
• Create Draft Materials
• Test Drafts
• Produce Master Materials

Phase 3: Follow Up
• Reproduce
• Distribute
• Evaluate

Instructional Development Project Management Model (adapted from M. Greer, 1992)

Seels and Glasgow's ISD Model II: For Practitioners (1997)

Seels and Glasgow's instructional design model assumes that project management is the context within which design occurs. Seels and Glasgow's model (1997) calls for the formulation of a project management plan. The model breaks the instructional design process into three phases:

- "needs analysis management;
- instructional design management; and
- implementation and evaluation management" (Seels and Glasgow, 1997, p. 177).

At the same time, instructional designers utilize diffusion of innovation strategies during each phase to ensure that successful implementation and institutionalization occurs.
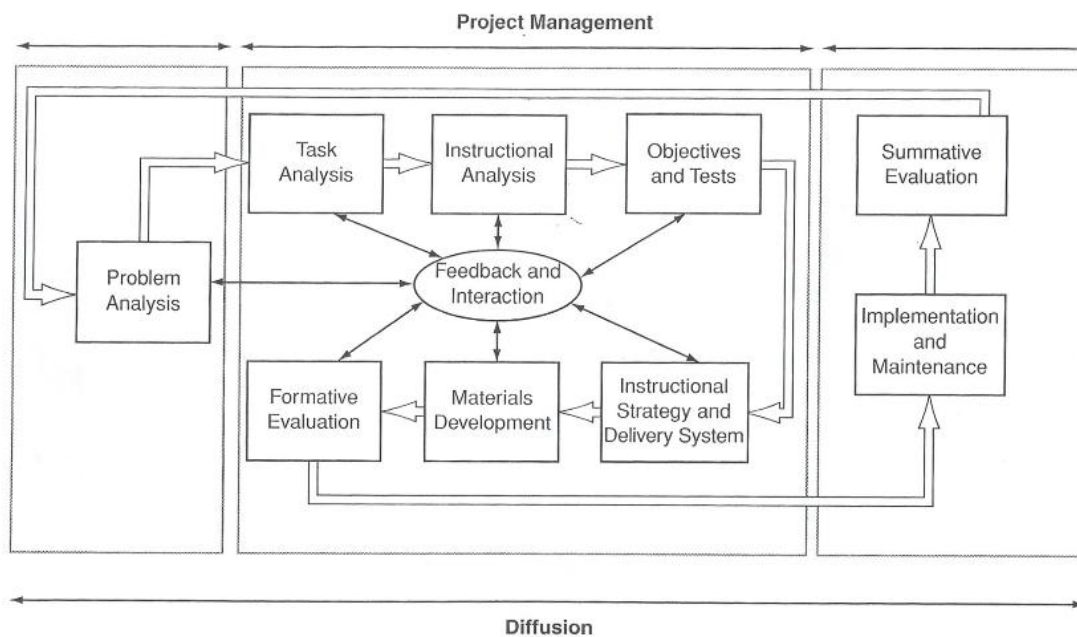
ISD Model II: For Practitioners (adapted from B. Seels & Z. Glasgow, 1997)
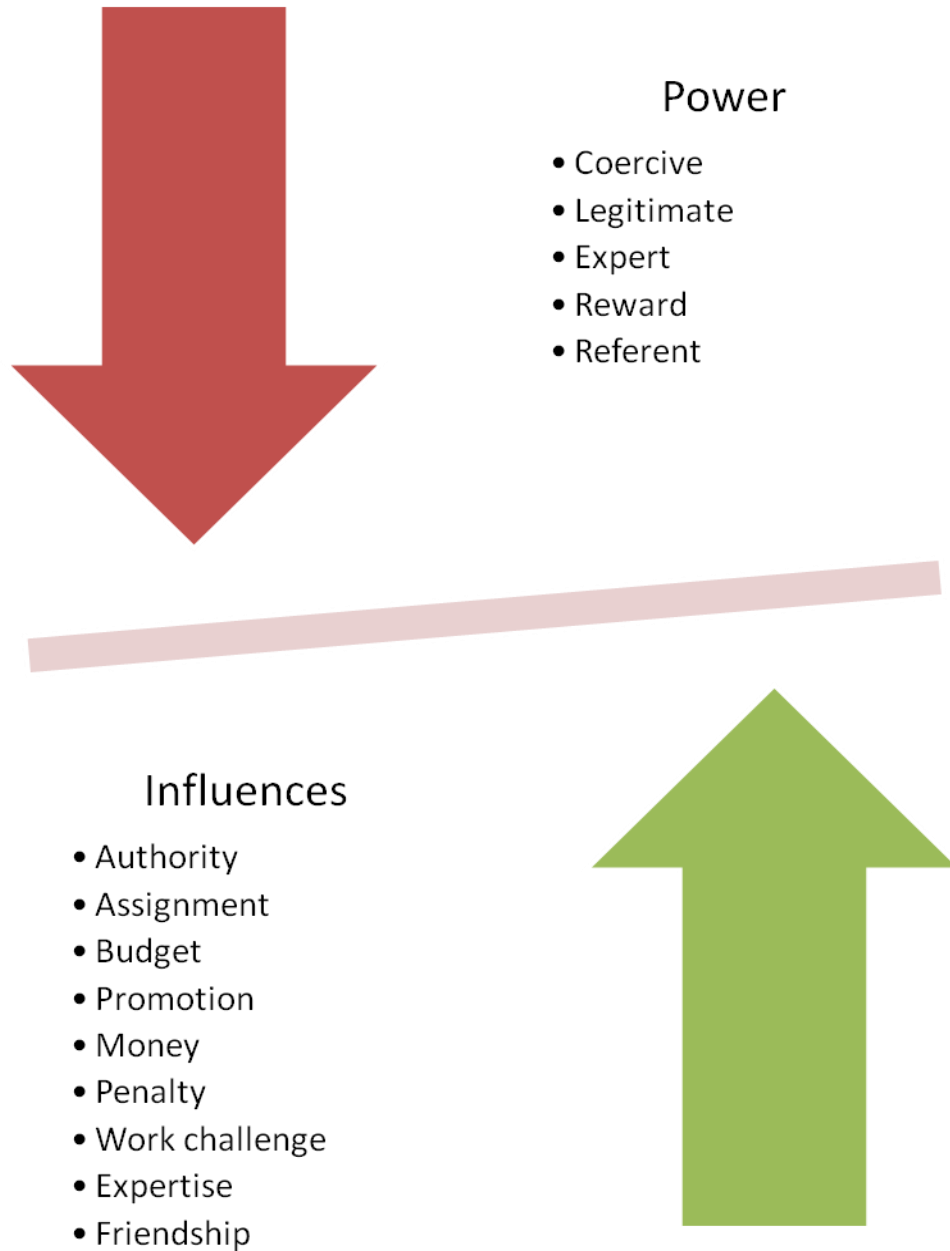
Maslow's Hierarchy of Needs (1943)

Abraham Maslow (1943) argued that "unique qualities of human behavior: love, self-esteem, belonging, self-expression, and creativity" facilitate the decision-making process that allows individuals to be responsible for their own destiny (Schwalbe, 2007). Maslow's theory provides instructional designers with a hierarchical representation of needs that must be met for each individual on a project team. If individuals have all their basic needs met, then they can be motivated to take on work challenges that foster creativity (Maslow, 1943)
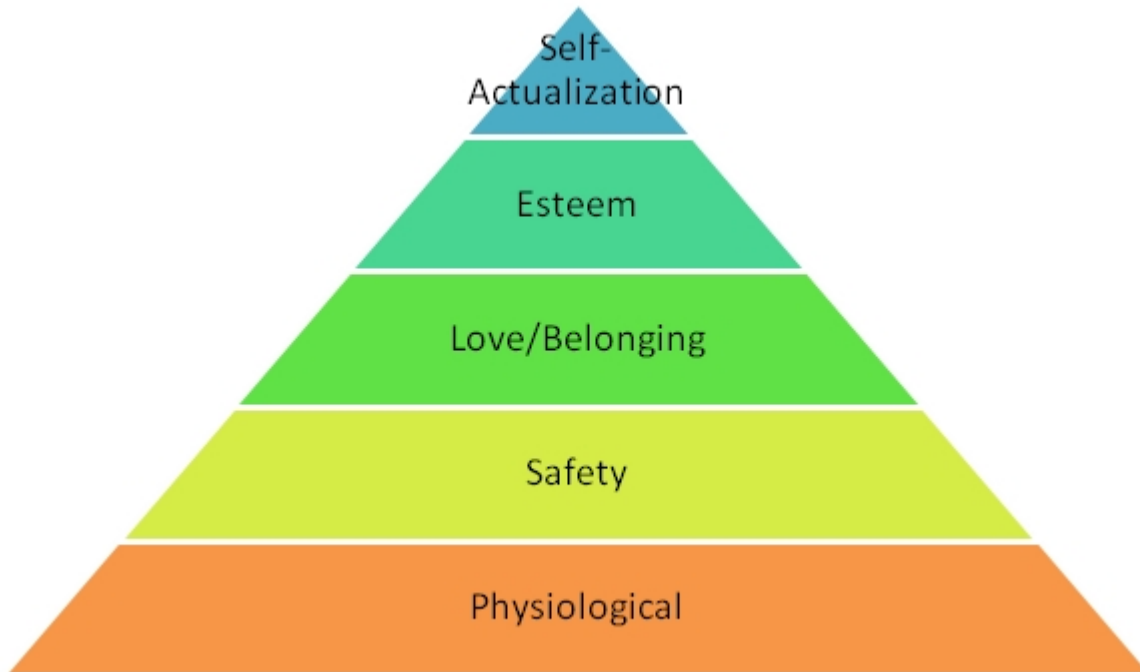
Hierarchy of Needs (adapted from A. Maslow, 1943)

Thamhain and Wilemon's Influence and Power (1977)

Thamhain and Wilemon's theory is utilized by instructional designers to determine what type of power and influence is necessary to motivate project team members. Power is considered to be more significant than influence (Schwalbe, 2007). The following graphic represents the balance between the different types of power and the different ways to influence people. As project managers, instructional designers must strike a balance to ensure the success of a project.

Power
- Coercive
- Legitimate
- Expert
- Reward
- Referent

Influences
- Authority
- Assignment
- Budget
- Promotion
- Money
- Penalty
- Work challenge
- Expertise
- Friendship

Thamhain and Wilemon's Influence and Power (adapted from Thamhain and Wilemon, 1997)

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