

# Task Analysis/Content Analysis

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T/TAC Parents' Portal Design Team

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3/1/2011

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## 1.0 Background

### 1.1 Purpose of Task Analysis

The purpose of conducting task analysis is to clarify the outcomes of instruction, decide which outcomes should be further analyzed and developed, analyze the components and requirements of those outcomes, arrange or rearrange those components into an instructional sequence, and determine the cognitive/affective/skill/learning requirements of those component tasks. (Jonassen, Tessmer, & Hannum, 1999). The result of task analysis is a blueprint for instruction. The instructional designer uses task analysis as a framework for building an instructional lesson or a learning environment. After completing the task analysis, the designer usually identifies instructional strategies and activities to engage and facilitate the learning requirements that were identified by the task analysis. (Jonassen, Tessmer, & Hannum, 1999)

### 1.2 Task Analysis for this project

The Design Team followed those procedures to conduct the Task Analysis:

1. Tied the "must haves" of the Performance Analysis/Needs Assessment document to individual tasks/needs of the users.
2. Identified the specific content informational needs of parents on a macro level.
3. Decomposed the parents' needs into functional behaviors including tasks and subtasks.
4. Structured two scenarios; parents of a recently identified child and parents who need ongoing support, based on data from Focus groups as well as from surveys sent to the parents' panel.

## 2.0 Project Overview

This project will enhance the value of the current T/TAC Online web site by re-purposing the site's content and identifying additional content needed to meet the needs of parents of children with special needs. The project will also (a) be inclusive of all adults who are the legal guardians of children with special needs, reflecting the dynamics of modern family structures, and (b) provide a solid foundation for creating a product with its own brand identity that is distinct from the educator-oriented T/TAC Online and that appeals specifically to those who are the legal guardians of children with special needs.

## 3.0 Task Analysis Method

### 3.1 Jonassen Taxonomies

The learning-outcome taxonomy is used to classify different types of learned capabilities, and is used to link tasks identified by the task analysis to the assessment of those tasks (Jonassen,

Tessmer & Hannum, 1999). The taxonomy also provides an outline of the instructional or learning strategies used to develop the tasks. Jonassen and Tessmer believe that current learning-outcome taxonomies should be “reconsidered in light of recent developments in education research and instruction technology. (1999)” They also believe that “advances in learning theory and technology have warranted a reconsideration of the standard classifications of learning outcomes. (Jonassen, Tessmer & Hannum, 1999)” Currently, research is being conducted on new outcomes within learning theory. More specifically, how these outcomes are impacted by technological innovations such as multimedia and Internet-based instruction.

### 3.2 Selected Taxonomies

The team selected methods using the “Procedure for Selecting and Using a Taxonomy for Classifying Knowledge and Skill” outlined by Jonassen, Tessmer, and Hannum (1999). Using this procedure, the team selected procedural and information processing analysis methods to conduct the task analysis. Procedural analysis “analyzes tasks by describing the procedure that must be executed to complete them. (Jonassen, Tessmer & Hannum, 1999)” This method is used for tasks that are predefined and consist of a linear sequence of steps that are observable. This method was used for specific tasks that parents must perform, for example, entering the site, using search engine, and becoming a member.

In contrast, “information-processing analysis (IPA) is one of the few task analysis methods that describe covert thinking performance. As such, it is particularly well suited for the analysis of complex tasks that have few overt indications of task performance. (Jonassen, Tessmer & Hannum, 1999)” This method takes into consideration that parents do not have a predefined path or end goal when conducting research or gathering information for concerning his or her child. Also, this method recognizes that the tasks the parents are performing represent a cognitive process; the parent is making the choices as opposed to being predefined by the job being performed. The task being performed is largely an internal thought process.

## 4.0 Task Decomposition

### 4.1 How Tasks were Selected

The included tasks are results of the Fall 2010 research, which have been approved by the Subject Matter Experts. Specific tasks were outlined in the TTAC Online walkthrough sessions held in the fall. The users’ comments and strategies from these sessions were then documented and analyzed, and combined into the “List of Tasks.”

### 4.2 The Order of Tasks

The included tasks are listed in the logical order according to how a parent might look for information. A parent whose child is “Recently Identified” would most likely look for the

definition of the child's special need, look for resources and then attempt to find education information. A parent who has been living with a diagnosis, "Ongoing Support," would be more likely to look for specific information on education and, potentially, rules and regulations.

### 4.3 List of Tasks

The tasks are broken down into two different categories, Recently Identified, which is based on the Portrait of John and Ongoing Support, which is based on the Portrait of Diane. John is a stay-at home father; he has three children, ages 16, 10 and 4. The 4 year old, Rose, has cerebral palsy and was diagnosed less than a year ago. Though Rose is in pre-school currently, her speech /language skills have not developed as of yet. John and his wife are hoping they can find a kindergarten class for Rose where she can also receive the speech therapy that she needs.

Ongoing Support is based on The Portrait of Diane. Diane's son, James, is 16 and was diagnosed with ADHD at the age of 6. James is about to move on to college and Diane is anxious to help her son transition to this new environment. Over the past 10 years, Diane has actively researched educational resources concerning ADHD and she wants to know where to find additional relevant resources.

## Recently Identified

### 1.0 Find Definitions

- 1.1 Search through list of definitions
  - 1.1.1 Choose definition
  - 1.1.2 Read definition
- 1.2 Look for additional resources
  - 1.1.1 Contact medical/health services professionals
  - 1.1.2 Contact other parents
  - 1.1.3 Look for "written" resources
    - 1.1.3.1 Look through list of relevant documents
    - 1.1.3.2 Identify reputable/reliable sources
    - 1.1.3.3 Choose document
    - 1.1.3.4 Read document
  - 1.1.4 Connect with advocacy groups

### 2.0 Determine impact of diagnosis on education

- 2.1 Contact local schools
- 2.2 Contact medical/ health services professionals
- 2.3 Contact other parents
- 2.4 Look for special needs research
  - 2.4.1 Look through list of relevant documents
  - 2.4.2 Identify reputable/reliable sources
  - 2.4.3 Choose document

2.4.4 Read document

## 2.5 Connect with advocacy groups

### 3.0 Research additional information about specific disability

3.1.1 Contact medical/health services professionals

3.1.2 Contact other parents

3.1.3 Look for "written" resources

3.1.3.1 Look through list of relevant documents

3.1.3.2 Identify reputable/reliable sources

3.1.3.3 Choose document

3.1.3.4 Read document

3.1.4 Connect with advocacy groups

### 4.0 Identify next steps

4.1 Research healthcare options

4.1.1 Contact health professionals

4.1.2 Look for "written" healthcare resources

4.1.2.1 Look through list of relevant documents

4.1.2.2 Identify reputable/reliable sources

4.1.2.3 Choose document

4.1.2.4 Read document

4.1.3 Connect with advocacy groups

4.1.4 Contact other parents

4.2 Research education options

4.2.1 Look for "written" research

4.2.1.1 Look through list of relevant documents

4.2.1.2 Identify reputable/reliable sources

4.2.1.3 Choose document

4.2.1.4 Read document

4.2.2 Contact other parents

4.2.3 Contact advocacy groups

4.2.4 Contact local schools

4.3 Identify home activities/recreation options

4.3.1 Contact other parents

4.3.2 Look for relevant resources online

4.3.2.1 Look through list of relevant documents

4.3.2.2 Identify reputable/reliable sources

4.3.2.3 Choose document

4.3.2.4 Read document

4.3.3 Contact community groups

4.3.4 Search local resources

## Ongoing Support

### 1.0 Contact other parents

### 2.0 Discover how to move through Pre-K to 12

- 2.1 Discover how to move through Pre-K (Refer to 2.3)
  - 2.1.1.1 Research impact of diagnosis on education (See 2.0)
  - 2.1.1.2 Research transition to K
- 2.2 Discover how to move through K-3 (4-6/7-9/10-12)
  - 2.2.1.1 Research tutoring
  - 2.2.1.2 Find list of services
  - 2.2.1.3 Contact medical/health services professional
  - 2.2.1.4 Contact other parents
  - 2.2.1.5 Connect with advocacy groups

### 3.0 Locate Educational Rights

- 3.1 Read Regulations
  - 3.1.1 Read about Federal Regulations
    - 3.1.1.1 Search through list of regulations
    - 3.1.1.2 Choose regulation
    - 3.1.1.3 Read regulation
    - 3.1.1.4 Look for additional resources
      - 3.1.1.4.1 Contact other parents
      - 3.1.1.4.2 Look for “written” resources
        - 3.1.1.4.2.1 Look through list of relevant documents
        - 3.1.1.4.2.2 Identify reputable/reliable sources
        - 3.1.1.4.2.3 Choose document
        - 3.1.1.4.2.4 Read document
      - 3.1.1.4.3 Connect with advocacy groups
  - 3.1.2 Read about State Regulations
    - 3.1.2.1 Search through list of regulation
    - 3.1.2.2 Choose regulation
    - 3.1.2.3 Read regulation
    - 3.1.2.4 Look for additional resources
      - 3.1.2.4.1 Contact other parents
      - 3.1.2.4.2 Look for “written” resources
        - 3.1.2.4.2.1 Look through list of relevant documents
        - 3.1.2.4.2.2 Identify reputable/reliable sources
        - 3.1.2.4.2.3 Choose document
        - 3.1.2.4.2.4 Read document
      - 3.1.2.4.3 Connect with advocacy groups
  - 3.1.3 Read about Local Regulations

- 3.1.3.1 Search through list of regulation
- 3.1.3.2 Choose regulation
- 3.1.3.3 Read regulation
- 3.1.3.4 Look for additional resources
  - 3.1.3.4.1 Contact other parents
  - 3.1.3.4.2 Look for relevant resources
    - 3.1.3.4.2.1 Look through list of relevant documents
    - 3.1.3.4.2.2 Identify reputable/reliable sources
    - 3.1.3.4.2.3 Choose document
    - 3.1.3.4.2.4 Read document
  - 3.1.3.4.3 Connect with advocacy groups
- 3.2 Resolve disagreements
  - 3.2.1 Find out where to resolve disagreements
  - 3.2.2 Find out with whom to resolve disagreements
  - 3.2.3 Find out how to resolve disagreements
  - 3.2.4 Find and agree on available services
- 3.3 Discover Education Requirements
  - 3.3.1 Contact medical/health services professional
  - 3.3.2 Contact other parents
  - 3.3.3 Look for “written” resources
    - 3.3.3.1 Look through list of relevant documents
    - 3.3.3.2 Identify reputable/reliable sources
    - 3.3.3.3 Choose document
    - 3.3.3.4 Read document
  - 3.3.4 Connect with advocacy groups
  - 3.3.5 Contact educational personnel

#### **4.0 Find availability of services/facilities**

- 4.1 Contact other parents
- 4.2 Look for relevant resources
  - 4.2.1 Look through list of relevant documents
  - 4.2.2 Identify reputable/reliable sources
  - 4.2.3 Choose document
  - 4.2.4 Read document
- 4.3 Contact community groups
- 4.4 Search local resources

#### **5.0 Find Post Secondary Opportunities**

- 5.1 Research Programs
  - 5.1.1.1 Look through list of relevant programs
  - 5.1.1.2 Identify reputable/reliable programs
  - 5.1.1.3 Choose program



- 5.1.1.4 Read about program
- 5.2 Contact other parents
- 5.3 Contact advocacy groups
- 5.4 Research non-educational opportunities
  - 5.4.1 Research employment opportunities
  - 5.4.2 Research housing options

## 6.0 Find News & Research

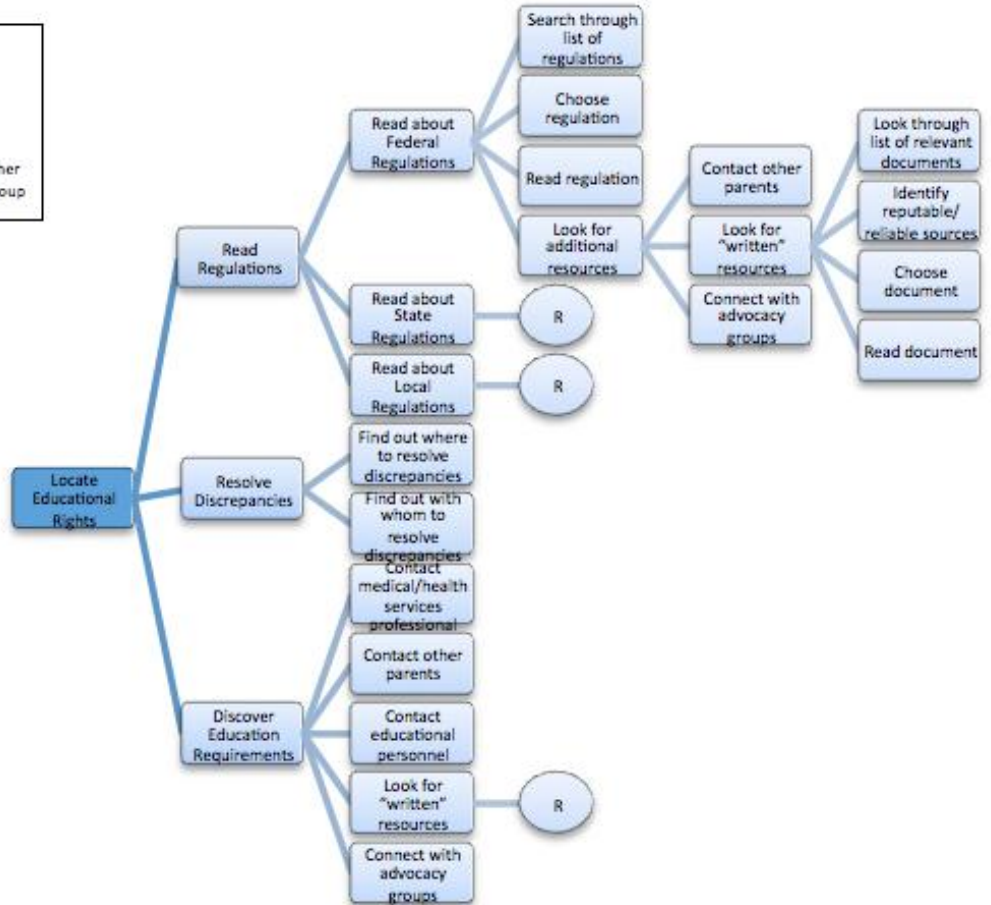
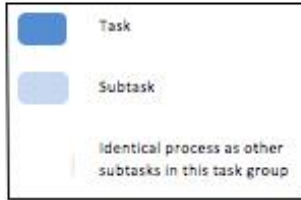
- 6.1 Find News
  - 6.1.1 Search through list of news
  - 6.1.2 Choose news
  - 6.1.3 Read news
  - 6.1.4 Look for additional resources
    - 6.1.4.1 Contact medical/health services professional
    - 6.1.4.2 Contact other parents
    - 6.1.4.3 Look for “written” resources
      - 6.1.4.3.1 Look through list of relevant documents
      - 6.1.4.3.2 Identify reputable/reliable sources
      - 6.1.4.3.3 Choose document
      - 6.1.4.3.4 Read document
    - 6.1.4.4 Connect with advocacy groups
- 6.2 Find Research
  - 6.2.1 Search through list of research
  - 6.2.2 Choose research
  - 6.2.3 Read research
  - 6.2.4 Look for additional resources
    - 6.2.4.1 Contact medical/health services professional
    - 6.2.4.2 Contact other parents
    - 6.2.4.3 Look for “written” resources
      - 6.2.4.3.1 Look through list of relevant documents
      - 6.2.4.3.2 Identify reputable/reliable sources
      - 6.2.4.3.3 Choose document
      - 6.2.4.3.4 Read document
    - 6.2.4.4 Connect with advocacy groups

## 7.0 Plan My Child's Education

- 7.1 Find services
  - 7.1.1 Instructional
    - 7.1.1.1 Other state services
- 7.2 Find assistive technology
- 7.3 Find resources on transition
- 7.4 Find activities

- 7.5 Find resources on behavioral support
- 7.6 Research special education process
  - 7.6.1 Referral
  - 7.6.2 IEP
  - 7.6.3 Evaluation
  - 7.6.4 Eligibility
  - 7.6.5 Monitoring
  - 7.6.6 Annual review

4.4 Visual



## 5.0 Conclusion

### 5.1 How this Informs the Decisions

This Task Analysis reports the broad activities parents of children with special needs perform to support their children's education, specifically, tasks which the Design Team believes will affect the design of the website. This data has been extracted and synthesized from research performed in focus groups, site walkthroughs, subject matter expert interviews, and parent surveys. The information in the Task Decomposition section will allow the team to identify areas of important content as well as inform the processes involved in important site features. Further information identifying the presence and importance of content areas will be provided in the Task and Content Analysis Document.

### 5.2 Next Steps

The 2010-2011 Mason Design Team will create a Task and Content Analysis document that identifies and prioritizes missing content. In addition, the team will create flowcharts and wireframes to be delivered to the T/TAC Technical Team for build out.