

TASK ANALYSIS

Teaching by Task Analysis requires the teacher or therapist to identify all of the skills required for completion of a specific task.

The task analyst must break the task down into small teachable steps, determine the prerequisite skills or entry behaviours the student should have prior to learning the task, design the specific teaching strategies and procedures needed for the learner to acquire the task and determine what level of reinforcement will be provided during the teaching process.

Task analysis is a useful format to utilize for any skill, from academics to vocational tasks, you might teach to an autistic student.

In utilizing a task analytic approach, the following steps are considered in designing a specific task analysis:

1. Specify target behaviour.
2. Break down target behaviour.
3. Determine operant level (baseline).
4. Structure favourable environment.
5. Establish motivation.
6. Adapt child.
7. Shape desired behaviour.
8. Fade prompts and reinforcements.
9. Keep continuous objective records.

Mark Gold & Associates have incorporated the principles of task analysis into their "Try Another Way" system of training handicapped people. (1980). Their work has made a significant impact in the field of mental retardation and should be required reading for anyone involved with the adolescent and adult handicapped population. According to the "Try Another Way" system, there are three major components to task analysis: method, content and process.

Method refers to the way in which a task is to be performed. For a particular task, a subjective decision is made by the task analyst as to which method, of the methods available, is the best one. Care must be taken not to restrict the person to the same method the task analyst would use but to determine the method which would be the most appropriate for the student.

Content refers to the steps into which the method is divided. Each step is numbered and described in detail. The number of steps in a content task analysis will vary depending on the needs of the individual student. For example, brushing teeth could range from ten steps or less to twenty-five steps or more depending on the skill level of the client. The detailed description of the steps in the content task analysis is intended to provide each person who will be working with the student with a clear understanding of the steps involved in completion of the task. It is not meant to be used as a set of verbal instructions to be given to the client during the teaching process.

Process refers to the teaching strategies which will be utilized to teach the content. The process includes information on not only the format or method of presentation, but also on the feedback (verbal or physical assistance) which will be given to assist the student in learning the skill, as well as the types of reinforcers and schedule of reinforcement which will be given to provide motivation for learning.

Determining the method of presentation or format is dependent upon the task being taught, i.e. is it a single piece of learning or multiple pieces of learning.

Examples of single pieces of learning might be selecting the appropriate shape from a group of shapes. Match to sample, or selecting the one that is different, are examples of appropriate formats for teaching single pieces of learning. Examples of multiple pieces of learning might be operating a dishwasher or vacuum cleaner, brushing one's teeth or taking a shower. Most tasks are multiple pieces of learning. In this regard, the teaching format might be backward chaining, forward chaining or total task. In backward chaining, the last step is taught to criterion and reinforced, prior to teaching the second last step and so on, until the total task is learned. In forward chaining, the first step is taught to criteria and reinforced before the second step is taught.

Total task presentation requires the student to perform the whole sequence of steps. Assistance and reinforcement are then systematically decreased over trials until criterion is reached.

When writing your task analysis, it is essential that you operationally define the terminal behaviour. All relevant dimensions of the behaviour should be specified including the topography (form of the response), the duration or frequency of the response, the occasion, or when the response is to occur and the accuracy of the response.