

INFORMATION PAPER 3

DEVELOPING A BEHAVIORAL DEFINITION OF A PROBLEM

Developing a behavioral definition of a student's problem is an essential first step in a systematic approach to problem-solving. According to Bergan and Tombari (1976), when a problem is correctly identified and agreed upon by team members, a solution to the problem almost invariably results. Without such a definition, effective problem-solving is not likely to occur.

A behavioral definition of the problem allows the development of hypotheses and predictions about student behavior along with specific referral questions. These referral questions are used to develop a relevant meaningful assessment plan. In turn, the results of the assessment lead to the design of a relevant individually-tailored intervention.

The formulation of a behavioral definition of the problem should be the first step in every attempt to address the needs of an individual student. The behavioral definition should be developed through collaborative consultation among all members of the problem-solving team. The design and implementation of an assessment plan should stem from this behavioral definition and the resulting hypotheses and referral questions.

This paper will define what is meant by the "behavioral definition of a problem," will describe essential characteristics of the behavioral definition, and will identify basic procedures to be used in formulating such a definition.

DEFINITION

Developing a behavioral definition of a problem involves selecting specific problem behaviors, describing them precisely, and then using these descriptions to formulate hypotheses, predictions and referral questions that need to be answered in order to plan an intervention.

CHARACTERISTICS

A. A behavioral definition is stated in concrete, observable terms. In other words, the behavior itself, or the direct product of the behavior, is described in terms of actions that may be seen or heard. Non-observable behaviors (e.g., "understanding long division") should be translated into observable behaviors (e.g., "accurate completion of long division problems"). The problem behavior should be defined in such a way as to allow an observer who is unfamiliar with the student or the situation to easily recognize when the behavior has or has not occurred. It should also allow different observers to agree on whether or not the behavior has been demonstrated.

B. A behavioral definition is measurable. Occurrences of the behavior can be reliably counted or measured in some fashion. As in the example above, it would be very difficult to count the number of times that a student "understood" long division. It would be much easier to count the number of long division problems that the student completed correctly.

C. A behavioral definition is specific. The problem behavior is defined precisely so that it cannot be broken down into smaller components. For example, "appropriate classroom behavior" would not be sufficiently specific, since it might be broken down into any number of other behaviors such as hand-raising, attending to task or remaining in one's seat. A more specific definition might involve describing one of these behaviors (such as hand-raising) in precise terms.

D. A behavioral definition must lead to or have the potential to lead to interventions, not labels (Batsche, 1984). For example, defining a problem as "low cognitive ability" may lead to the application of a mental disability label for a student, but does not provide information on what or how to teach the

student. On the other hand, defining the problem as "poor accuracy on long division problems" can lead to relevant assessment and intervention procedures.

PROCEDURES

The formulation of a behavioral definition of a problem should occur in the first stage of collaborative consultation, and should be one of the outcomes of a problem identification interview between the person requesting assistance (consultee) and one or more consulting professionals. There are four basic steps:

1) Select target behavior(s). Frequently, the person requesting assistance will have a number of concerns about student performance. If this is the case, it may be helpful to select a few specific target behaviors upon which to focus initially. Zins and Ponti (1990) suggest that target behaviors should be prioritized by selecting: a) behaviors that are physically dangerous to the student or others; b) positive low-frequency behaviors in need of strengthening; c) behaviors that can be naturally reinforced in the environment; d) behaviors that are considered essential for development; or e) behaviors that maximize functioning in a variety of settings.

2) Define the target behavior(s) in behavioral terms. Again, the definition should be written in concrete, measurable, and specific terms. Efforts should be made to ensure that the behavioral definition is agreed upon by the person requesting assistance (consultee) and other team members. The problem must be defined to everyone's mutual satisfaction so that an appropriate assessment plan can be developed.

Alessi and Kaye (1983) offer a number of suggestions for writing behavioral definitions. They suggest that such definitions should be written in complete sentences using action verbs. Verbs such as "to be" or "to have" should be avoided. They also suggest that objects should be used in the sentences (e.g., "John will complete problems on the worksheet"). Definitions that require inferences about student performance should not be used (e.g., "Sue will develop an improved self-concept").

3) Use the behavioral definition to develop hypotheses and predictions about student behavior. The hypotheses will provide possible explanations about why the problem behavior is occurring. These explanations should be related to modifiable factors or causes for the problem (e.g., Bill is off-task because he is distracted by noises in the classroom). Hypotheses about inalterable factors or factors that only label the problem (e.g., Bill is off-task because he has a behavior disorder) should be avoided.

Once a set of hypotheses have been developed, they can be used to develop some predictions about student behavior under various circumstances. Predictions should be stated in terms of "If-then," or "When-then" statements. For example, one prediction about Bill's behavior might be that "if the classroom is very quiet, then Bill will not be distracted."

4) Write a set of assessment questions that need to be answered. The assessment questions developed by the problem-solving team should stem from the hypotheses and predictions generated in step 3. Appropriate measurement strategies should be selected to answer the assessment questions. The resulting data collection should provide the information necessary to either confirm or disconfirm the hypotheses. It should also provide information that will be helpful in understanding the student within the context of a specific setting. Such information might include a description of the student's current performance level in terms of the frequency, intensity and/or duration of the behavior. It might also include information regarding the desired acceptable level of performance, as well as information regarding antecedent and consequent events, and other relevant environmental factors.

SUMMARY

Developing a behavioral definition of a problem is a vital first step in effective problem solving, and should be a part of every problem-solving effort. If this first step is omitted, it will be difficult to

develop an appropriate assessment plan to collect the information necessary to design an individualized intervention.

REFERENCES

- Alessi, G. J., & Kaye, J. H. (1983). Behavioral assessment for school psychologists. Kent, OH: National Association of School Psychologists.
- Batsche, G. M. (1984). Referral-oriented, consultative approach to assessment/decision-making. Des Moines, IA: Department of Public Instruction.
- Bergan, J. R., & Tombari, M. L. (1976). Consultant skill and efficiency and the implementation and outcomes of consultation. Journal of School Psychology, 14, 3-14.
- Epps, S. (1985). Best practices in behavioral observation. In A. Thomas & J. Grimes (Eds.) Best practices in school psychology. Kent, OH: National Association of School Psychologists.
- Reschly, D. J., & Casey, A. (1987). Project Re-Aim: Relevant educational assessment and interventions model. Ames, IA: Iowa State University.
- Zins, J. E., & Ponti, C. R. (1990). Best practices in school-based consultation. In A. Thomas & J. Grimes (Eds.) Best practices in school psychology II. Washington, DC: National Association of School Psychologists.