

### **Question 1. Designing and Evaluating Interventions:**

School District 2 has just spent \$4 million on new software to help faculty and staff keep an electronic database of all children's Individualized Education Plans (IEPs articulate yearly educational goals), behavioral assessments, recommended behavioral treatments, and all data collected during treatment sessions. Two months after all faculty and staff attended two-day workshops on how to use the software program, the school district has mandated that all faculty/staff use the program on a regular basis. It is now required that data be entered at the end of each workweek. Despite the new requirement, compliance is terrible. Only 25% of faculty/staff are entering the required information, the rest still use paper and pencil format and simply don't transfer the information to the computer system. The district superintendent would like to implement a behavioral treatment to solve this noncompliance issue.

- 1) Briefly describe explain *how one might determine the possible reason(s)* for such a low compliance rate. Be sure to include at least two possible reasons for low compliance in your answer.
- 2) Using one of the reasons described in part 1 above, describe (in detail) what type of intervention you would implement to solve the behavioral deficit (noncompliance). Be sure to include specific information about the procedures you would recommend to ensure desired behavior change.
  - a. Describe a single subject research design you would use to evaluate the effects of your intervention on noncompliance.
  - b. Please include specific information about the strengths of the design chosen (you should feel free to compare the design to other possible research designs available).

**Question 2. Theory and Practice of Applied Behavior Analysis:**

Define and discuss the philosophical assumptions of behavior analysis, including lawfulness of behavior, empiricism, experimental analysis, and parsimony.

Define and discuss the dimensions of Applied Behavior Analysis provided by Baer, Wolf, and Risley (1968).

### Question 3. Measurement and Graphing:

Margaret is frustrated at work because her meetings always begin late! She has been collecting data on the effectiveness of an intervention to increase the timeliness of meeting start-times. To measure the timeliness of meetings, she recorded the scheduled start time of the meeting and the time the meeting actually began – reported in minutes. The dependent variable was minutes started late. Meetings “began” when all members of the group were present in the room and the group leader began speaking to the group. During baseline she simply recorded the number of minutes late a meeting began. For intervention Margaret began e-mailing reminders to everyone in the group. The reminders noted when the meeting was scheduled to begin and the topics on the agenda.

Since Margaret attends two different types of meetings, she decided to evaluate the effects of the intervention with a multiple baseline design across meetings. Using the data below:

1. Construct an accurately labeled multiple baseline graph in Excel
2. Copy and paste the graph into a Word document
3. Below the graph describe the results of Margaret’s evaluation. Make sure to include comments on experimental control.

Weeks	Meeting 1	Meeting 2
1	15	24
2	19	6
3	12	29
4	8	32
5	17	18
6	18	27
7	7	6
8	8	8
9	3	5
10	4	0
11	0	0
12	10	0
13	2	0
14	0	0
15	2	0

#### Legend:

Gray is Baseline

Yellow is  
Intervention

**Question 4. Principles, Processes, and Concepts:**

Respond to all parts of this question:

1. Define and provide examples of behavior, response, response class.
2. Define and provide examples of stimulus control.
3. Define and provide examples of generalization and discrimination.
4. Define and provide examples of functional relations.
5. Define and provide examples of positive and negative punishment.

**Question 5. Behavioral Assessment and Functional Assessment:**

Describe the basic procedure for conducting a functional analysis (experimental manipulation). Include: the purpose, typical conditions (and how they are conducted), and sequencing of conditions.

Illustrate (a simple hand drawn graph will do) a pattern of results showing an escape function of a learner's problem behavior.

Identify the advantages and disadvantages of functional analysis as an approach to the broader functional behavior assessment.