



EDSP 413/613 Comparative Approaches to Behavior and Classroom Management in Special Education

Department of Counseling, Higher Education, & Special Education

University of Maryland

Fall 2015

Instructor: Dr. Kelli D. Cummings, NCSP

Office: EDU 1311C

Phone: (301) 405-6498

Email: kellie@umd.edu

Class Meets: Tuesday, 4:15 - 7:00; Room EDU 2119

Office Hours: Mondays and Thursdays 1:00 – 3:00 and by appointment

Course Description

This course provides students with examples of how behavior is supported in classroom and school contexts. Emphasized in the main portion of the course are the principles that underlie learned behavior and how they are applied in various settings to support or change behavior.

This course is designed specifically for teachers and other professionals working with individuals with disabilities who require some form of behavior support planning. The application of specific strategies for the purposes of positively managing individual and group behaviors that encourage and support academic, behavioral, and social learning for all students in academic and social settings will be emphasized. In addition, the course will enable students to (a) design, implement, and evaluate individualized behavior support plans that derive from functional behavioral assessment, (b) use effective teaching strategies to build more relevant, efficient, and effective replacement skills, (c) facilitate generalization and maintenance of skills, (d) incorporate prevention strategies, (e) improve the aspects of the student's environment that relate to the problem behavior, and (d) incorporate, as appropriate, individually designed intervention procedures.

Required Textbook

Alberto, P.A. & Troutman, A.C. (2013). *Applied behavior analysis for teachers* (9th edition). Columbus, OH: Charles E. Merrill.

Supplemental Textbook (copies of chapters will be provided on Canvas)

Scott, T.M., Anderson, C.M., & Alter, P. (2012). *Managing classroom behavior using positive behavior supports*. Boston: Pearson

Required Materials

We will be using personal response devices – see clickers.umd.edu. The preferred device is a TurningPoint RF-LCD, which can be purchased at the bookstore or online through TurningPoint. These will be an important part of your grade so please have one and bring it to class each week. Register your clicker at clickers.umd.edu. Please note that it is unethical and would be considered cheating to use someone else's clicker in their absence (please see UMD policy on cheating later in the syllabus).

It is your responsibility to bring clickers to the classroom. If you forget to bring your clicker, you are entitled to have one and only one clicker assignment turned in by written answers.

In addition to clickers, we will often use our laptops or tablets in class to complete group work. If you have a laptop or tablet, please try to bring them to class each week.

Course Format

Lecture notes, homework, and other course documents may be found at www.elms.umd.edu under this course name. Necessary class handouts will be posted by noon each Wednesday; you are responsible for your copy. Please note that not all weeks will require lecture notes. Occasionally you will be asked to take notes on your own.

The effort you expend in this class is commensurate with the requirements for semester credit that are put forth by the University of Maryland. Plan to spend three hours in the classroom and three hours for readings and assignments for a total of six hours per week for the course.

Course Competencies

Upon completion of the readings, assignments, and study related to the course topics you will be able to:

I. Describe a Behavioral Model

1. Compare and contrast the assessment and intervention techniques used under the behavioral and other models.
2. Identify the four types of stimulus events that affect development and how they influence behavior.

II. Describe basic Behavioral Assessments

1. Write behavioral objectives that identify: the learner, the target behavior, conditions under which the behavior is to be displayed, and the criteria for acceptable performance.
2. Analyze a sequence of behaviors and identify antecedents and consequences of behaviors.
3. Describe and use time delay and task analytic assessments.

III. Collect and Graph Data

1. Define, identify and provide an example of each of the following observational methods: (a) permanent product, (b) frequency, (c) rate, (d) duration, (e) latency, and (f) interval.
2. Select an appropriate data collection system given an example of instruction.
3. Identify and describe the following graphing formats: (a) line, (b) cumulative, (c) ratio, (d) bar.
4. Plot a given set of data and label all parts of the graph.
5. Identify the trend of a given set of data and state whether an intervention was effective.

6. Define the term "reliability" and state why it is important

IV. Understand Strategies for Increasing Behavior

1. Define reinforcer and reinforcement.
2. Define reinforcer assessment and describe implementation.
3. Given a specific behavior, establish an appropriate reinforcement procedure, taking into account all of the following parameters:
reinforcement schedule, novelty, immediacy of delivery, amount, type of reinforcer, and pairing reinforcers.
4. Define negative reinforcement and describe how it affects behavior.
5. Distinguish negative reinforcement from punishment.
6. Explain the purpose of three types of contingency packages (i.e., group contingencies, contingency contracting, and token economies), describing the advantages and disadvantages of each.

V. Understand Strategies for Decreasing Behavior

Decreasing Behaviors: Extinction, DRL, DRO, DRI/DRA,
Response Cost, Time-Out

1. Define punishment.
2. Discuss ethical and practical issues in the use of punishment.
3. Define and apply extinction, DRL, DRO, DRI/DRA, response cost, and time out when given a written description of challenging behavior(s)
4. Define "functional assessment" and "functional analysis"
5. Develop a functional assessment based on examples of students with challenging behaviors
6. Develop a positive behavioral support plan

VI. Describe and Utilize Strategies Associated with Stimulus Control

1. Describe, using a specific example, how to establish an environmental event or stimulus as a discriminative stimulus (S^D).
2. Define, identify and/or implement different types of prompting systems
3. Implement a time delay strategy
4. Identify and define different types of stimulus and response prompts
5. Describe strategies of shaping and chaining using simulated situations.

VII. Write Behavior Support Plans to Promote Generalization and Maintenance.

1. Define and describe implementation of instructional techniques that facilitate generalization and maintenance.

VIII. Write Behavior Support Plans that Promote Student Self-Control

1. Describe the use of self-monitoring, imagery, and verbal self-guidance given a specific situation
2. Describe and give examples of the use of self-recording using event recording, time sampling, and permanent product recording.

IX. Practice Responsible use of Applied Behavior Analysis

1. Describe three concerns about the use of Applied Behavior Analysis

2. Identify six rights that individuals have and must be considered in developing programs to change behavior.

Course Expectations & UMD Policies

1. *Attend all class periods and participate in class discussions and activities.* Regular attendance and participation in this class is required and is the best way to grasp the concepts and principles being discussed. Additionally, attendance will be documented across the semester. For any *unexcused absence* (i.e., an absence that does not meet the qualifying criteria, described below) that you accrue during the semester, points will be deducted from the 24 possible attendance and participation points for the course and **any points that would have been awarded for in-class learning opportunities will be missed**. A similar policy applies to assignments for this class. **Late work will not be accepted** except in cases of excused absences.

UMD Policy on Religious Observances, Illness, and other Excused Absences. University policy excuses the absences of students for illness (self or dependent), religious observances, participation in University activities at the request of University authorities, and compelling circumstances beyond the student's control. The University *provides students with excused absences* the opportunity to reschedule significant assessments (except in cases where the nature of the assessment precludes the possibility of rescheduling) OR to perform a substitute assignment without penalty. The student must notify his or her instructor of the reason for absence as soon as possible. ***Where the reason for absence from a scheduled assessment is known well in advance (for example, in cases of religious observance or participation in university activities at the request of University authorities), the student must inform the instructor by the end of the schedule adjustment period.***

2. *Come to class prepared to learn.* Success in this course depends upon being familiar with the readings, prior class assignments and related activities. Arrive to class on time, and bring necessary materials (i.e., clicker, handouts, assignments, questions) to every class. When you attend class, it is the instructor's expectation that you will be fully engaged in class activities. If you use your laptop for note taking, please refrain from noncourse related activities such as playing games, surfing the web, texting, or checking email. These behaviors, along with side conversations, are very distracting to the other students in the class as well as the course instructor. Please turn off or silence cell phones. If it is absolutely necessary to receive a call, notify the instructor, set the phone to vibrate, and take the call outside of the classroom. If it is noted that a student is regularly distracted or not engaged, engagement points will be subtracted accordingly.

3. *Engage in respectful discussions and be open to new or different ideas.* Throughout this class you will be challenged to think critically about the impact of cultural, sociological, and experiential differences from your own perspective as a learner as well as the perspective of a professional who is working with diverse learners. Please participate in discussions openly and respectfully using **person-first language** when speaking and writing about people with disabilities and other groups, and use acceptable terminology when addressing issues of gender, race, ethnicity, disability, sexual orientation, and other areas of diversity. Students are encouraged to take risks in class by asking difficult questions and sharing their stories and comments. It is acknowledged that the instructor or students may make mistakes in this regard, but it is everyone's responsibility to respond constructively to any conflicts or problems that arise. Language used in assignments and class discussions (written and spoken) should be respectful and professional at all times. All people will be treated respectfully in this course.

4. *Turn in assignments on time.* All assignments must be completed before the beginning of class and submitted on or before the assigned due date. **Late work will not be accepted.** All work submitted for

the class must be legible, clearly organized, and proofread. Illegible work will not be graded. When emailing assignments, the email time stamp associated with the submission will be used to determine whether to apply the late penalty. *All work submitted via email should include the **author's last name and title of the assignment** in the subject line (i.e., "Smith Homework 1" not "Homework 1")* as well as in the **body of the submitted document** to avoid the late penalty.

5. *Complete your work carefully, individually, and with academic integrity.* All written assignments must be completed individually except when a group assignment is specified. Assignments must be prepared in a professional manner. All papers should have a professional appearance (i.e., are word processed) and should be carefully proofed for correct spelling, punctuation, and grammar. Additionally, papers should be focused on the specific content of the assignment, demonstrating professional, mature thinking. Points will be deducted if the manner in which the assignment is presented is unprofessional. No handwritten assignments will be accepted unless it is anticipated to be completed in class.

The University of Maryland is one of a small number of universities with a student-administered Code of Academic Integrity and an Honor Pledge. The Code prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures. The University of Maryland Honor Pledge proposed by the Student Honor Council and approved by the University Senate, reads:

I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or assignment).

Unless you are specifically advised to the contrary, the Pledge statement should be handwritten and signed on the front cover of all major papers, projects, or other academic assignments submitted for evaluation in this course. Students who fail to write and sign the Pledge will be asked to confer with the instructor. Compliance with the code is administered by the Student Honor Council, which strives to promote a community of trust on the College Park campus. The instructor is required to report instances of academic dishonesty to the Honor Council. Other allegations of academic dishonesty should also be reported directly to the Honor Council (301-314-8204).

6. *College of Education Foundational Competencies:* The College of Education Foundational Competencies Policy was adopted in November 2010 and specifies the professional criteria expected of all Teacher Candidates in the College. Performance that meets the Foundational Competencies is expected across all professional settings, including university-based coursework and field placements. If concerns arise in any professional setting, a referral will be made to the Teacher Candidate's advisor. Each Teacher Candidate and Supervisor will complete the Foundational Competencies evaluation at the end of each field placement experience. Additional Foundational Competencies evaluation forms may be completed if concerns arise during a field placement or in any professional setting. These evaluations will be reviewed along with the candidate's performance across all program requirements and coursework. Continuation in the Special Education teacher certification program depends on both satisfactory completion of all coursework and satisfactory ratings on the Foundational Competencies (8/3/05; updated 8/18/11).

7. *Course Evaluations (CourseEvalUM):* Your participation in the evaluation of courses through CourseEvalUM is a responsibility you hold as a student member and feedback is confidential and important to improve teaching and learning at UMD as well as to the tenure and promotion process. Go

to www.courseevalum.umd.edu to complete your evaluations. **For Masters students:** Occasionally fewer than five Masters students are enrolled in the class and thus the CourseEvalUM system does not generate a review form for students in 613. In cases such as these, the College of Education has developed an anonymous Qualtrics survey that will be sent out in lieu of the CourseEvalUM request. Please complete this survey to ensure that the 613 students' voices may be heard.

Your feedback is very important to me, I take your comments very seriously, and I want to know what's working well for you (as well as anything that is not working) as soon as possible. As a result, there are multiple ways of providing feedback in this class outside the end-of-year evaluations. Mid-course evaluations, "exit tickets" (to be completed during class time), and confidential feedback through my faculty mailbox in Benjamin 3214, are three ways that I encourage you to let me know your thoughts on the course so that I have a chance to make improvements throughout the entire semester.

Assignments

- A. *Special Topics Presentation.* Students will be assigned to groups of four to five and the instructor will ask each group to draw lots. Based on the result of the lots, topics will be assigned related to the application of ABA procedures in a specialty area. Students will define the topic in their own words and provide two examples of how it is implemented in a classroom setting. With help from the instructor, each group will also identify one piece of empirical research from an academic journal and describe the purpose of the research, how the procedures were implemented, and the results. The groups will subsequently summarize this information in an 8-10 minute Power Point presentation. Each member of the group must participate in the presentation. Articles must be emailed to Dr. Cummings by September 17th no later than 4pm. This assignment is worth **20 points**.
- B. *Exams.* Two exams and a final will be administered during the semester. The exams will cover the material (lecture, reading, and class activities) presented up until the test date; they will be cumulative. Questions will require recall, recognition and application of principles to hypothetical situations. Each exam will be **worth 75 points**.
- C. *Data-based Project.* Each student is required to complete a data-based project. This project involves weekly observation and measurement of the behavior of someone other than you. When selecting a behavior to observe, be sure that it is *observable, measurable, and repeatable*. Your topic should be emailed to Dr. Cummings no later than midnight on October 9, 2015. The proposal will be worth **5 points**.
Please include the following in your description of your topic:
- a. operational definition of the behavior
 - b. description of the setting in which your observations will occur
 - c. data collection system that you will use to record your target behavior
- This project has two parts to it. **Part I** involves collecting ABC data on the behavior that is approved. Remember, an ABC analysis involves identifying the antecedent and consequent events for a particular behavior. The conditions and procedures you use should be consistent. You should hand in no more than five pages that contain the following:
- a. the behavior you chose to observe and your rationale for selecting the behavior.
 - b. an operational definition of the behavior.
 - c. an ABC

- d. an interpretation of the ABC that includes your hypothesis about what factors may be contributing to the behavior and your hypothesis as to the function the behavior.

The ABC is due on November 6th by midnight.

Once steps a-d are completed you will begin **Part II** of this project (in other words, **PART II CAN ONLY BE STARTED ONCE PART I IS COMPLETED**). Part II will involve the collection of observable data (e.g., frequency, duration, latency, etc.). **THESE DATA MUST BE COLLECTED ON DAYS THAT FOLLOW THE COMPLETION OF PART I.** You will need to have between 3-5 data points across at least three days. Part II should contain the following:

- e. the type of data being collected (i.e., rate, %, #)
- f. the specific procedures used to collect data and any tools (stopwatch) needed for data collection.
- g. a graph of your data and a raw data collection sheet.
- h. a discussion of changes in behavior observed over time.

You should use headings to present clearly each part of your project as listed above. You are welcome to share any draft with me prior to the due date. **The data collection section is due on December 2nd. This assignment in total is worth 55 points (including the initial proposal).**

E. *Functional Assessment Project.* Each student will be provided with descriptions of different students and the challenging behaviors they exhibit during classroom instruction. You will then

1. describe how a functional assessment would be conducted to evaluate the possible functions of the behavior.
2. describe the patterns of behavior that would lead you to suspect the behavior was maintained by positive reinforcement, negative reinforcement, sensory consequences, or access to tangible items.
3. Finally, you will need to identify possible interventions, based on the function of the behavior.

This project is due on December 4th. This assignment worth 15 points.

F. *Out of Class/In Class Application Assignments.* During the semester there will be a class application activity, which will build on readings for that week. There will be four **such assignments that will count for course points. Two of these will be completed in assigned work groups during class time.** These will be due after class or the next day uploaded to ELMS or via Google doc. There will be **two out of class Application Assignments** that will be done individually. This assignment is worth **40 points** (10 points for each activity). For each of the application assignments, the instructor will give a sheet with the instruction for each assignment. Some activity might be based on a scenario or a video.

1. In class Due 9/15 Defining behavior + Behavioral objectives
2. Out of class Due 9/23 ABC Data
3. Out of class Due 10/14 Data recording –presentation- analysis
4. In-class Due 11/24 Decreasing Behaviors: Extinction, DRL, DRO, DRI/DRA, Response Cost, Time-Out

- a. **In class:** Defining behavior and objectives: In groups of two, each group will operationally define behaviors and write objectives using behavioral format. In addition, each group will identify the four components of each objective.
- b. **Out of class:** ABC Data: each student will be assigned two scenarios *or* a case study. Using a chart, students should operationally define the behavior of each case study, and identify the antecedents, behavior, and consequences.
- c. **Out of class:** Data recording: each student will be assigned a scenario and asked to identify an appropriate data collection system, describe how it would be implemented, graph sample data, and provide an interpretation of the effectiveness of the intervention.
- d. **In class:** Decreasing behavior: students will be divided into groups of two. Each group will be given a list of procedures for reducing behavior and will define each procedure, explain how each procedure is implemented and give an example of how it would be used.

G. Participation. Class attendance and participation are also evaluated throughout the semester. Students will be evaluated based on their participation in small group activities, class discussion, in-class presentations, and ability to engage in reflection. Approximately halfway through the course, I will ask you to evaluate yourself using the rubric posted at the end of the syllabus. I will then provide my evaluation and you will receive an average midterm participation score (12 pts. possible). We will repeat the process at the end of the course for the average final participation score (12 pts. possible). **(24 points total)**

Extra Credit: In the interest of fairness and equity, there are **no** extra credit assignments or special arrangements available to make up for low performance on any graded course work. The instructor may, however, provide opportunities for class-wide extra credit – but there is no guarantee of extra credit throughout the semester.

In this class you will have several opportunities for self-evaluation and formative assessment data for your own performance. If anyone is struggling with the material, consider joining a peer study group and make arrangements to see me right away.

A Note on Grading and Feedback in this Course: Most of your assignments will be graded in Canvas as electronic submissions. My grading style is to make comments *and annotations* on the papers you submit. In order to see my **comments**, please click on the "view feedback" button. Scroll to the bottom of this page for details: <https://guides.instructure.com/m/4212/1/54359-how-do-i-view-instructor-comments>.

In order to see my **annotations**, another step is required. *This is the most important step for you to see my individualized comments and suggestions for your work.* Please follow the detailed instructions on the following help page and see me for assistance if you have any trouble:

<https://guides.instructure.com/m/4212/1/352349?data-resolve-url=true&data-manual-id=4212>

Additional UM Policies

Accommodations for Students with Disabilities: If you have a documented disability, contact Disability Support Services (301-314-7682) to ascertain the specific accommodations that may need to be provided. The rules for eligibility and the types of accommodations a student may request can be reviewed on the DSS web site at http://www.counseling.umd.edu/DSS/receiving_serv.html *It is the*

student's responsibility to notify the instructor at the beginning of the semester of any documented disabilities so that I can ensure reasonable accommodations are made to assist learning and evaluation in the class.

Assistance for Students in Distress: If you feel you are encountering problems that hamper your academic performance or life on campus, contact the Counseling Center 301-314-7651 or Mental Health Services 301-314-HELP for resources or referrals.

Course Incompletes: In compliance with University of Maryland Policy, *incompletes are given only in rare and extreme situations* that truly prevent the student from completing course work during the regular course schedule. Incompletes will **not** be awarded simply due to unfinished course work.

Office of Student Conduct: If a student displays disorderly or disruptive behaviors in class or poses a concern for violence, he or she will be referred to the Office of Student Conduct – this may result in being charged under the University's Code of Student Conduct or being referred for counseling or mental health interventions, if appropriate. 301.314.8204 or studentconduct@umd.edu.

COURSE CALENDAR

Date	Topic	Chapters + Addt'l Readings
9/01	Introduction to the Class Models of Behavior	1
9/08	Principles of Applied Behavior Analysis Operational Definitions	1 3
9/15	Behavioral Objectives	3
9/22	Behavioral Assessment Review for exam	Scott Ch. 2*
9/29	EXAM I	
10/6	Methods of Recording Behavior	4
10/13	Data Analysis and Displays Guest lecture: Jon McGill of Baltimore City Schools	5
10/20	Increasing Desired Behaviors	8
10/27	Decreasing Harmful Behaviors Review for exam	9
11/3	EXAM II	
11/10	Functional Behavioral Assessment Developing Function-Based Behavioral Interventions	IRIS Module: Classroom Management Part 1** 7
11/17	Establishing Stimulus Control	10
11/24	Generalization Self-management	11 12
12/01	Responsible use of ABA Positive Behavioral Interventions and Supports in Schools	2 Scott Ch. 1; Ch. 11
12/08	Review for final exam	

*All Scott chapters are available on Canvas

**Visit <http://iris.peabody.vanderbilt.edu/module/beh1/#content> and complete all five (5) assessment questions. Bring answers to class on 11/10/15 and we will review the answers and have a class discussion.

ASSIGNMENT CALENDAR

Assignment Name	Points Possible	Due Date
Special Topics Presentation	20	Article to Dr. Cummings by 9/17 To be presented in-class 10/6, 10/13, 10/20, 10/27, or 11/10 (presentation date depends on topic)
Exams (3)	150 (75 points per exam)	9/29, 11/3, final exam TBA mid-semester
Data-based Project	5 – proposal 25 – part I 25 – part II 55 points total	Proposal to Dr. Cummings by 10/9 Part I: 11/6 Part II: 12/2
Functional Assessment Project	15	12/4
Application Assignments	40 (10 points per assignment)	In-class due 9/15 Out-of-class due 9/23 Out-of-class due 10/14 In-class due 11/24
Participation Evaluation	24 (average of 12 points at midterm and final)	10/13 12/8
TOTAL	304	

GRADING: Point values will be assigned to exams and assignments. Final letter grades will subsequently be assigned on the basis of overall class performance. Please note: It is possible to earn the following grades in this class: A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F. The “+” and “-” have been added to grades in order to allow for more nuance and precision in the evaluation process. Grades will be assigned according to the following chart:

98-100% = A+	78-79% = C+
92-97% = A	72-77% = C
90-91% = A-	70-71% = C-
88-89% = B+	68-69% = D+
82-87% = B	62-67% = D
80-81% = B-	60-61% = D-

Special Topics Presentation rubric

Item	Description	Points Possible
1	Defines the topic and provides two examples of its use in a classroom setting	6
2	Describes the purpose (2 points), participants (2 points), procedures (3 points), and results (2 points) of the application article.	9
3	Presentation (PowerPoint) is well prepared, informative, effective, and not distracting, length of presentation is within the assigned time limits, information was well communicated and equal participation of each group member.	5
TOTAL		20

Example:

Topic is, "reinforcement."

- Provide a complete operational definition (slide 1)
- Describe a brief history of using reinforcement strategies (slide 2)
- Describe one example of the strategy's use in a classroom (slide 3)
- Describe a second example of the strategy's use in a classroom (slide 4)

Tell us about the application study your group selected

- Provide the title of the article (slide 6)
- Tell us the purpose / research question presented in the study in just a few words (slide 7)
- Describe the participants in the study (slide 8)
- Describe the procedures the authors used (slide 10)
- Describe the results reported by the authors and answer the question, "Did the authors address their primary purpose/research question?" (slide 11)

20 points possible

Participation Rubric

Criteria	← Likert Scale →				Score
	3	2	1	0	
Attendance & Promptness* *Excused absences are not counted but if more than one, a remediation plan may be established	Student is always prompt and regularly attends classes for the entire session.	Student is late or leaves early once or twice, but regularly attends class for the full session.	Student is late or leaves early <i>more than</i> once or twice OR has one unexcused absence.	Student has more than one unexcused absence OR is otherwise regularly late to class or leaves early.	
Level of Engagement In Class	Student routinely offers ideas and asks questions at least once per class – in large and small group discussions.	Student offers ideas and asks questions in small group or large group but not both.	Student talks in small group discussions but does not share ideas with other groups.	Student fails to contribute to class by offering ideas or asking questions.	
Listening Skills	Student listens when others talk, both in small groups and in class discussions. Student incorporates or builds off of the ideas of others.	Student listens when others talk, both in small groups and in class discussions. Only sometimes reflect on others' comments.	Student listens when others talk, both in small groups and in class discussions. Usually does not reflect on others' comments.	Student may or may not listen in small groups, but does not actively listen to whole group instruction/ discussions. .	
Preparation	Student is always prepared for class with assignments and required class materials.	Student is often prepared for class with assignments and required class materials.	Student is rarely prepared for class with assignments and required class materials.	Student is not usually prepared for class with assignments and required class materials.	
TOTAL =					/12

DATA-BASED PROJECT RUBRIC: PART I

DESCRIPTION OF BEHAVIOR AND RATIONALE FOR SELECTING IT	4
OPERATIONAL DEFINITION OF BEHAVIOR	4
ABC	
STRUCTURALLY CORRECT	3
OBSERVABLE TERMS USED	2
10 OBSERVATIONS	2
SUMMARY	
INCLUDES OBSERVABLE TERMS	2
REFLECTS ABC DATA	4
LOGICAL CONCLUSIONS	4

DATA-BASED PROJECT RUBRIC: PART II

TYPE OF DATA COLLECTED	3
PROCEDURES USED TO COLLECT DATA	6
RAW DATA COLLECTION SHEET	3
GRAPH OF DATA	3
DISCUSSION	5
INCLUDES OBSERVABLE TERMS AND AVOIDS EXPLANATORY FICTIONS	2 (ALL or none)
REFLECTS DATA	1
LOGICAL CONCLUSIONS	2