With the increasing emphasis on standardized testing to graduate from high school we feel the need to focus on improving students’ success on the Ohio Graduation Test (OGT). Specifically, we are going to focus on the Math section, and even more specifically we will focus on the Data Analysis and Probability Standard, although some of the materials may include other standards as well. From personal experience and through our research we have found that this is one of the weakest standards in the Math section for multiple reasons. First of all, from our own experience we know that it is not taught to the extent of the other standards because neither of us had a lot of experience with it and we are pretty fresh out of college. Second, a reason why it is sometimes overlooked is because there are so many other topics that need to be covered. Third, the Data Analysis and Probability sections are often put at the end of the textbooks and many of us have a hard time getting through an entire textbook due to so many topics to cover and lack of time. All of these findings tell us that we need to find a way to incorporate this standard into our everyday classes to give our students a better chance at passing the OGT. Another issue is the need to reach all students: special education, gifted and talented, and all those in between.

Between the two of us we are qualified to create a set of materials that addresses both of these issues.

In creating this set of materials we decided to first pick out benchmarks and indicators that we wanted to cover. We then came up with very drawn out lesson plans for each one. Some of the lesson plans were modified from lesson plans already in use and others were original creations. In designing the lessons we tried to make sure to be very detailed so that even a teacher that was not in the math field would be able to understand and use the materials. Another
thing we did was decide how we would modify each lesson for both special education and the
gifted and talented students in the building, so that everyone could benefit from the materials.

The design of the lesson plans is as follows. We begin with the title of the lesson, trying
to make it something rather catchy and fun for the students. Then we included a list of the
benchmarks and indicators covered by the lesson plan. Next, you will find a pre-assessment and
a post-assessment along with instructional tips to help in difficult situations. The meat of the
lesson plan is the instructional procedures that lay out exactly how the lesson plan should be
implemented. Following the instructional procedures are the differentiated instructional support
for special education and gifted and talented students. There are also extensions for the lessons in
this section of the lesson plan. A list of vocabulary terms that students will review or learn while
completing this lesson is mentioned next, followed by technology that will be used. The final
section that you will find is a list of attachments including student worksheets, pre-assessment
worksheets, post-assessment worksheets, and rubrics.

During the research phase of this project we found the Ohio Department of Education’s
Website to be extremely helpful. We were able to find articles relating to our topic as well as
sample lesson plans that helped to guide our set of materials. Another helpful source was the
content standards themselves. We looked there to find the benchmarks and indicators that we
thought would better the chance of students passing the OGT. After looking at the benchmarks
and indicators we then decided to look through our mathematics book for ideas on activities.

This set of materials that we have presented is a complete set of materials that any
teacher would be able to use. These materials can be used by one teacher, two teachers who are
co-teaching, or special education teachers. The materials can also be modified by anyone to meet
their teaching goals.
In examining our completed set of materials we feel extremely confident that our goals were met. By implementing these lesson plans into our yearly plans students will be much better prepared for the Data Analysis and Probability section of the OGT. We are also very confident in our differentiation of the lesson plans. Students at any ability level will be able to get the full effect of any lesson being taught. There should be no reason for students to feel either left out because they do not understand or bored because they are more advanced than the rest.