

EXHIBIT D

Memorandum of Understanding Between Regional Education Lab-Mid-Atlantic and the XX School <Date>

This represents a memorandum of understanding between the Regional Education Lab-Mid-Atlantic (the Lab), CompassLearning, and the XX School to participate in a mutually beneficial research project to evaluate the Odyssey® Math program. (This document clarifies respective roles and responsibilities and also delineates costs and commitments to sustain this federally funded project. The Lab, XX School, and CompassLearning (the developer of the software and related training) are making this agreement in good faith and with the expectation that the document will become binding. However, all parties recognize and acknowledge that final execution of the agreement depends on the U.S. Department of Education's approval.

BACKGROUND

The XX school will be one of approximately 30 to be included in an evaluation designed to address three research questions: (1) Do Odyssey® Math fourth grade classrooms outperform control classrooms on the mathematics subtest of the Terra Nova CTBS Basic Battery? (2) What is the effect of Odyssey® Math on the math performance of males and female students? (3) What is the effect of Odyssey® Math on the math performance of low and medium/high achieving students?¹ This evaluation is authorized by the United States Department of Education's Institute of Education Sciences. The Lab is housed at the Pennsylvania State University, in partnership with Rutgers University, ICF-Caliber, The Metiri Group and Analytica.

Odyssey® Math was developed by CompassLearning, Inc., and is a computer-based mathematics curriculum designed to offer students opportunities to engage in more challenging mathematics in interesting contexts. CompassLearning based the curriculum on the fundamental premise that for students to achieve at the highest levels in mathematics, they must first understand basic concepts of mathematics and then build new knowledge and understanding through rich and rigorous mathematics content. The software should be used a supplement to your school's current curricula. Teachers must complete six days of professional training prior to its use, in order to learn how to use the software and all of its components. CompassLearning will provide the training as well as (WHAT KIND & HOW MUCH??) follow-up support.

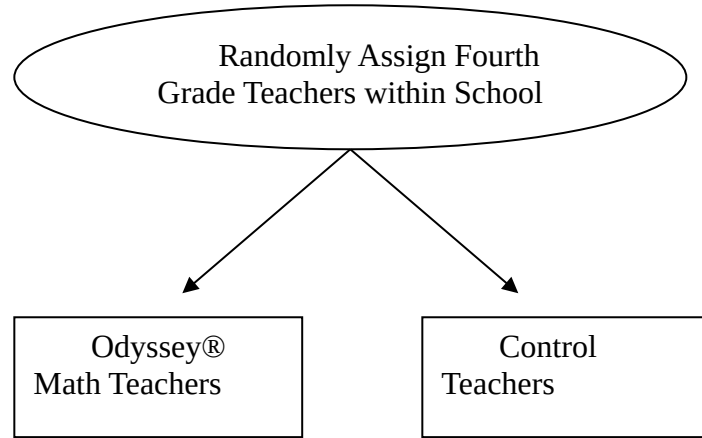
The study will rely on a random assignment design, the strongest possible design for obtaining unbiased and reliable measures of program impacts. Implementing this design requires the random assignment of teachers and their classrooms to treatment (i.e., use the Odyssey® Math software program and participate in related training) and the control (i.e., classrooms carry out their business as usual) conditions. The Lab will determine the random assignment procedures and it is critical that teachers and students stay within these conditions throughout the duration of the study. Switching students and teachers after assignment severely undermines the quality of

¹Low achieving students are defined as ones who score at the third grade level or below on the Terra Nova at pretest. Students who score above this point are in the medium/high achieving category.

the design. Any modifications must be discussed with the REL-Mid-Atlantic prior to implementation to determine whether or not the school may continue in the project. Please note that the study has budgeted for providing control teachers with Odyssey® Math training and software at the conclusion of the study.

The evaluation of the Odyssey Math® will focus on fourth grade teachers and their students. The study will be conducted during the ___ academic year. As noted above, the study is occurring simultaneously in multiple schools. Within each school, we expect the random assignment will allocate teachers (and all of their associated classrooms although we assume one teacher per class) in the following way:

Figure 1: Illustrative Random Assignment within each school for the Odyssey® Math Evaluation



The Lab assumes a school will typically have about four teachers available for assignment, although this actual number is not required. We will also try, whenever possible, to make sure there are equal numbers of teachers per condition per school

A number of steps are required to implement this study. While most of the burden of study implementation falls on the Lab, there are certain responsibilities to be shared by the school staff, effort for which they will be compensated. The following key activities describe the respective roles of the evaluation team, CompassLearning staff, and school staff.

1 – Protecting the integrity of the design. As Figure 1 shows, each school will have its own treatment and comparison condition. It is therefore important for school staff to understand that they will have different ways of teaching math (some classrooms will use the Odyssey® Math software as a supplement and others will not) within the fourth grade. Casual contact between treatment and control teachers regarding the study is reasonable and to be expected. It is important however that control teachers are not given access to the software or related training materials until after the study is over.

2 – Notification to Parents and Students. The Lab will work with the school to inform parents, students, community members and other stakeholders of the study. The school will provide contact information for parents/guardians so that they are given a chance to remove their children from the study. Students removed from the study are not removed from Odyssey® Math or control classrooms; however REL-Mid Atlantic will not collect data on these students. In addition, students must assent to data collection (completion of the Terra Nova pre and posttests). School staff should remain cognizant that students can refuse or stop testing at any time, for any reason and without penalty.

The school will offer suggestions for how to promote participation in the study. This may include providing space for posters and notifications in school newspapers.

3 – Random Assignment. The Lab will work closely with school staff to implement random assignment, although ANALYTICA, a Lab partner, will independently implement the random assignment algorithm. REL- Mid-Atlantic will make every effort to accommodate concerns, requests or questions including providing information and documentation of the assignment procedure. Control group teachers, and their students will be asked to complete the same surveys as those who are in the program. Again, they may not use Odyssey® Math until the study has been completed, as this would impair the study design.

4 – Collecting initial (pre-treatment) achievement data. During the fall, the Lab will administer the 70-minute Terra Nova CTBS Basic Battery (Basic Battery), published by CTB/McGraw-Hill at central testing locations. REL-Mid-Atlantic will provide refreshments to students after the data is collected.

5 – Teacher background surveys. A ten-minute survey will be administered at the beginning of the study to learn more about teachers' experience with mathematics instruction and use of technology. Teachers will receive a stipend to compensate them for the time they spend filling out the form.

6 – Accommodate observations of the treatment and control conditions. The lab will conduct a series of observations (about three per year) to document the use of Odyssey® Math and mathematics instruction in the control classrooms. REL-Mid-Atlantic will schedule these meetings in coordination with principals and teachers.

7 – Collecting post-treatment data. At the end of the academic year REL-Mid-Atlantic will administer a posttest using the Terra Nova with similar conditions as in the pretest.

8 – General information. School staff will provide general information about the school and make-up of each classroom and will fill out general consent forms.

9 – Tracking. Odyssey® Math use will be tracked by computerized logs stored on a secured network accessible only by permission from the network administrator. As noted above, the software should be used as a supplement to existing curricula for about 60 minutes per week. Although large deviations from this are not anticipated, the Lab will ask school staff to explain them if any are noted.

10 - Financial Support for the evaluation will be provided by the Lab to the School. School staff participating in the training will be compensated in the amount of _____. This will cover time and stipends provided for filling out surveys. Payments will be offered on a quarterly/annual/semi-annual (as negotiated at each school site) basis.

11 - Confidentiality of Data. Responses to this data collection will be used only for statistical purposes. The reports prepared for this study will summarize findings across the sample and will not associate responses with a specific district or individual. We will not provide information that identifies you or your district to anyone outside the study team, except as required by law.

12 – Training and Support. CompassLearning will provide professional development training and subsequent support in a manner that reflects typical implementation of Odyssey® Math. Deviations from their normal implementation will be reported to the Lab. CompassLearning will provide, free of charge, additional support and training to control teachers in subsequent years, as an incentive to promote school participation.

PARTNERSHIP AGREEMENT

The signatures below indicate the agreement of The Lab, CompassLearning and School XX to engage in the research partnership described above. All parties believe that the responsibilities and effort as described above reflect reasonable judgments as to what will be involved in efficient and effective conduct of the research, and all parties agree that the compensation to School XX is fair and reasonable for their effort on behalf of this partnership.

Agreement with the Above Memorandum of Understanding

For Regional Education Lab-Mid-Atlantic

SIGNATURE

SIGNATURE

TITLE

TITLE

DATE

DATE

For XX School:

SIGNATURE

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For CompassLearning, INC:

SIGNATURE

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