Exhibit B.

Information for Teachers

The Effects of a Hybrid Secondary Course in Algebra I on Teaching Practices, Classroom Quality, and Adolescent Learning

INFORMATION FOR TEACHERS

PURPOSE OF THE STUDY:

Algebra I has emerged in recent years as a critical gatekeeper course, necessary to prepare students for the rigorous mathematics curriculum required for high school graduation and successful post-secondary experiences. Therefore, providing Algebra I teachers with the very best resources and professional development to ensure effective instruction has become a priority in Kentucky and across the nation. This research study is designed to evaluate, through a rigorous experimental design, an approach that combines online and technology enhanced instruction with face-to-face classroom instruction to address this need. This hybrid or "blended" approach has shown promising results in Kentucky and in research elsewhere.

Key Research Questions

The study will measure the effects of the hybrid instructional format on:

- Instructional practices of teachers,
- Classroom quality, and
- Mathematics learning of adolescents.

In addition, researchers will measure differences in effectiveness among students with different characteristics, such as gender, race/ethnicity, income, and age.

PROCEDURES

Teachers who receive the intervention in this study will apply the hybrid approach using the Kentucky Virtual High School's (KVHS) online course curriculum in Algebra I. They will be supported by extensive professional development in hybrid instruction and research-based practices for teaching Algebra I. The KVHS course is fully aligned with national and Kentucky standards for Algebra instruction. The results on improved instructional practices, classroom quality, and student learning will be compared to those in control sites in which Algebra I instruction will continue as it has with normal classroom instruction. Participating schools will be randomly assigned to either an intervention group or a control group and participating teachers will assume the intervention or control status assigned to their school.

Participating teachers in the intervention schools will begin professional development in June 2008 and will continue with facilitated online support of a master teacher as they implement the intervention in 2008-2009. Final analysis and reporting of the results of the study will be completed in spring 2010.

DATA COLLECTION AND MEASURES OF EFFECTIVENESS

The following data will be collected from teachers and students in the intervention and control groups. To gauge program effectiveness, outcomes in the intervention group will be compared with outcomes in the control group.

- **Student knowledge in Algebra I**: student scores from an Algebra I Assessment,

taking into account prior math performance.
- Sustained learning: student scores from the 10th grade plan will also be examined taking into account prior performance in mathematics.
- **Instructional Practices and classroom quality:** a range of indicators will be analyzed using data collected through (1) direct classroom observations and (2) teacher survey responses.

RISKS, BENEFITS, AND COSTS

- **Potential Risks.** There are no known potential risks for the study participants.
- **Protection Against Risks.** Participation in the study is voluntary for the teachers.
- **Potential Benefits.** It is anticipated that the Hybrid Algebra I courses will provide improved instructional practices, classroom quality, and student learning as compared to those in control sites.
- **Costs to the Teacher.** Study participants will not incur any costs as a result of participating in the Hybrid study.

ASSURANCE OF CONFIDENTIALITY

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, school or individual. We will not provide information that identifies you or your district to anyone outside the study team, except as required by law.

VOLUNTARY PARTICIPATION AND WITHDRAWAL

Your participation in this study is voluntary. You may decide not to participate or you may leave the study at any time. Your decision will not result in any penalty or loss of benefits to which you are entitled.

PARTICIPANT RESPONSIBILITIES

Schools	Teachers
• Have adequate technology and technology supports, as established and verified by KVHS • Agree to data collection plan • Agree to participation by all teachers of Algebra I	• Teach Algebra I during school year 2008-2009 • Agree to participate in data collection • Treatment teachers agree to participate in professional development and implement the classroom intervention to the best of their abilities.

RESEARCH SPONSORS AND SOURCE OF FUNDING

The research will be conducted by the Regional Educational Lab-Appalachia, housed at The CNA Corporation in Alexandria, VA, and is funded by the United States Department of Education, Institute of Education Sciences. The Principal Investigators for the study are Dr. Linda Cavalluzzo from The CNA Corporation and Dr. Deborah Lowther from Education Innovations, Center for Research in Education Policy (CREP), University of

Memphis, TN.
Implementation of the intervention will be supported by KVHS staff from the Kentucky Department of Education, and by master teachers of mathematics from the Collaborative for Teaching and Learning (CTL), a not-for-profit consulting and professional development organization based in Louisville, KY. The KVHS staff and the master teacher will serve as the primary facilitators for effective practices in Algebra I in a hybrid environment and will be available for support throughout the study.

QUESTIONS

If you have questions concerning…	**Contact**
Overall project, professional development requirements, etc.,	Linda Hargan or Jo Ann Mosier, CTL, 502-895-9500 lhargan@ctlonline.org or jmosier@ctlonline.org
Technology status, resources and study requirements	Terri De Yong, KDE, 502-564-4772 terri.deyong@education.ky.gov
Research design or specific data collection procedures or instruments	Linda Cavalluzzo, CNA, 703-824-2197 cavallul@cna.org Deborah Lowther, EI, 901-678-5645, dlowther@memphis.edu
Your rights as a research subject* *WIRB is a group of people who perform independent review of research.	Western Institutional Review Board® (WIRB®) 3535 Seventh Avenue, SW Olympia, Washington 98502 Telephone: 1-800-562-4789 or 360-252-2500 E-mail: ClientServices@wirb.com.