**PROSPECTIVE MENTOR TEACHERS *FOR PROJECT-BASED INSTRUCTION* –**

**HIGH SCHOOL**

Thank you for considering being a mentor teacher for the Teach North Texas (TNT) program at the University of North Texas. We are looking to place students into 9th, 10th, 11th, or 12th grade classrooms in a PBL school.

**Course Description**

Project-Based Instruction (PBI) is the capstone course in the sequence of professional development courses in the College of Education (Knowing and Learning, Classroom Interactions, and PBI) that TNT students take prior to Apprentice Teaching. PBI is the course in which a number of the major principles and themes of the TNT program—inquiry-based teaching and learning, integration of mathematics and science content; infusion of technology in representation, analysis, modeling, assessment and contextualization of content; immersion in intensive field-based experiences; and a focus on designing equitable learning environments—are synthesized as the students develop an intellectually challenging project-based instructional unit. When students complete PBI, they are fully prepared for Apprentice Teaching.

The field experience for PBI includes both observation of the mentor teacher, and an intense one-week teaching experience that is either problem-based or project-based in nature. PBI Students work with either a math or science mentor teacher that is experienced in PBL to design, plan, prepare, and implement a series of lessons that lead to either the creation of an artifact by high school students, or to the solution to a complex problem. The problem is interdisciplinary in nature and requires multiple modalities of learning from high school students. PBI students evaluate student learning through the use of rubrics that they develop based on the nature of the problem or project and the cross-disciplinary skills that are expected to be competently displayed by the high school students.

PBI students are required to complete a preliminary professional portfolio that showcases their work as a pre-service teacher and work as a science/math undergraduate student. This portfolio showcases not only inquiry-based teaching experiences, but also thoughtful improvements to their teaching skills as they complete the program. In addition, students are required to show how they can do science or mathematics as a scientist or mathematician does, demonstrate how to meet the needs of the diverse students in today’s classroom, and demonstrate how they effectively integrate technology into their lessons. This portfolio will serve as the starting point for the final professional portfolio that is completed in Apprentice Teaching.