

## **Training for Teachers in Technology Integration**

*Texas Education Code 21.0452(b)(5)*

### **Technology Integration in Curricula and Instruction with Activities Consistent with the Principles of Universal Design for Learning**

All teaching candidates are required to identify their strengths and weaknesses on the Technology Integration Matrix (TIM) and review the ISTE Standards for Educators. From this activity, students then determine what TIM skills they need to work on to further their skills in integrating technology into curricula and instruction. Students have multiple means of action they can take based on their self-assessments. This activity is a multiple-month, problem-solving project. Candidate choice governs the candidates' choices in designing how they will develop the use of technology in a student driven instructional classroom, how they will implement the student driven instruction, and how they will monitor the impact it has on classroom students' achievement. These candidates have multiple means of expression in the development of the project. Finally, Candidates will select how they will present their work along with an evaluation of student achievement. The project is student driven and outcomes are based on the classroom students' achievement.

### **Technology Integration with Data Analysis to Improve Students' Academic Achievement**

All teaching candidates are required to collect data through several TEA (TAPR) and school district web sites (individual campus reports) to analyze student achievement data. The content, grade level, school district and school that the clinical teachers use are their choice thus giving them multiple means of representation. The data is deconstructed to identify instructional challenges that the school is having and to inform instructional plans. The actions and the means by which the clinical and preservice teachers express their data is their choice. Some recommended data templates are provided and models of experienced teachers' work is presented so that there is a scaffolding of information by which the clinical and preservice teacher can use.

The candidates examine authentic teacher instructional plans, assessments, and rubrics. Then, the clinical and preservice teachers identify how classroom student data is managed and how to analyze the alignment of the classroom student's achievement of TEKS to the instructional plans. The authentic teacher assessments and student benchmark results are represented on Excel or Google spreadsheets. The spreadsheets contain a breakdown of student answers on each question of the benchmark. The candidates are required to construct, using one of the Google formats, a data informed protocol to analyze the alignment of assessments and classroom student outcomes. The clinical and preservice teachers work collaboratively to express and represent their own interpretation of the data. The analysis must include from the content benchmarks the reasons for successes and failure of individual questions. From the question analysis, students can construct Google templates and then determine reasons for success and failures of specific benchmark questions. Last, students can then determine reteaching and differentiated instruction that will impact classroom student achievement on

benchmarks. The data selected to present, how their data is presented, and how they support their instructional decisions is left up to them.

Based on clinical and preservice teacher content and grade level choices, they are to deconstruct five stimulus questions from the STAAR and identify the learning targets for each. Then students are required to plan how they will address these learning targets in a formative assessment and then plan instruction to deliver the content that will be assessed. The formative assessment is based on how the clinical and preservice teacher align that assessment with the TEKS and instructional plans. Students are encouraged to use other sources like Lead4ward to determine Readiness and Supporting Standards. This activity promotes student directed decision making supported with evidence from a Backward Design.