TEACHERS OF TOMORROW NT 700.3PBP LESSON PLAN TEMPLATE

NAME: Roxanne Springman **SUBJECT/GRADE: Technology Education/8th**

CERTIFICATION AREA: Technology Education

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS:	**(Grade 8)** (1) Computational thinking--foundations. The student explores the core concepts of computational thinking, a set of problem-solving processes that involve decomposition, pattern recognition, abstraction, and algorithms. The student is expected to: (A)The student is expected to decompose real-world problems into structured parts using pseudocode;
PERFORMANCE MEASURE/ASSESSMENT	Students will read and interpret a sample real-world problem representing “debit card transactions" as short logical steps individually.. Then they will organize the steps in pseudocode constructs that represent each step in logical order. They will justify their reasoning, and if it’s correct, they will move on to creating and justifying their own pseudocode like they did with the sample, but representing how they study for an exam at home. Student performance will be measured through knowledge checks referencing their justification of both pseudocodes; the completed study routine pseudocode using a rubric assessing clear steps, logical order, correct use of pseudocode constructs, and completion.
LEARNING OBJECTIVE(S):	The student is expected to decompose real-world problems into structured parts using pseudocode, by organizing their study routine into logical steps organized through pseudocode constructs.
OBJECTIVE STATEMENT (must include performance measure)	*“Today, we will learn how to break down a real-world problem into short, logical steps using a sample pseudocode. This will help us describe steps of an algorithm in a way that is understandable and organized. You’ll explain your reasoning by annotating your sample sheet. By the end of this lesson, you will show what you’ve learned by writing and justifying your own pseudocode that explains how to solve a real-world problem you have in a clear and logical way.”*
PURPOSE OF LEARNING	*“We are learning this today because real-world problems are complex algorithms and usually take extra steps to complete. Programmers, architects, engineers, designers, and even employees at Nasa break big problems into basic parts so they are organized and easier to solve. Learning how to create pseudocode helps you organize your thinking and justify solutions to others, which is a skill you will use in everyday situations.”*

EXPLICIT CONNECTION TO PRIOR LEARNING	*“In 7th grade, you learned about basic algorithms through step-by-step instructions in flowcharts. You practiced following sequences and identifying repeated actions. Today you will build on that knowledge by looking more closely at how organized steps and variables are used to change information in pseudocode in a logical pattern."*