BATTEY LESSON PLAN

Name: A. BATTEY **Grade:** 9th grade

Subject / Lesson Observed: Algebra

Topic: Patterns; Linear & quadratic equations

This lesson is a continuation of the study of patterns; recognizing, describing, and extending patterns

Learning Intentions / Lesson Objectives: What do you expect students to know?
Understanding of linear functions as a mathematical representation of proportional relationships (M3e); Solves equations symbolically, graphically, and numerically, especially linear, quadratic, and exponential equations; and the use of the quadratic formula for solving quadratic equations (M3j).

Success criteria: What will students do to demonstrate that they have attained the objective?

- Students will recognize, describe, and extend patterns with linear and quadratic equations
- Students will represent patterns numerically, algebraically, and geometrically
- Students will use problem-solving strategies, and will explain the strategies and rationale for selecting specific strategies.

Learning Activities:

Warm up

- Students will complete a table with patterns to review prior knowledge (chapter I)
- Students will be selected to present their work for class review

Review of learning intentions and success criteria

- Teacher will review the learning intentions and success criteria with the students

Teacher Directed Activity

Presentation of problem and directions, learning expectations

- Teacher will explain the problem, directions, and expectations for learning

Teacher monitored Activity

Application/problem-solving

- Students will work in small groups to solve the problem, and to complete the success criteria

Student presentation of learning

- Students will present and explain their work to their peers

How will you assess student learning?

- Formative:
    - Teacher will circulate, review work during application
    - Questions to extend thinking and assess understanding
    - Students will present their learning to the class

    - Students will write to explain their learning and why they selected specific problem solving strategies
- No summative assessment of learning planned for this lesson

Materials:

- Gummy bears in bags (manipulatives)
- Class materials (handouts, etc)
- Students have calculators available for their own use

Are there any special circumstances of which the observer should be aware? (e.g. new students, special events, other adults / paraprofessionals in the classroom)

No