

## Middle School Lesson Plan

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### *Teaching Inquiry: Engaging the Learner Within* **Lesson Planning Template**

#### **GENERAL INFORMATION**

**Librarian/Teacher(s):** Stephanie Rosalia, Karen Tighe, Michelle Graziano

**Lesson Plan/Unit Title: Develop Inquiry Skills**

**Appropriate Grade Level(s):** 4-6

**Required Times:** 6-8 weeks

**Library Context:** (Check one below)

Fixed

**Flexible**

Combination

Individualized Instruction

Stand-alone lesson

Lesson in a unit

Multiple lessons in a unit

**Collaboration Potential:**

None

Limited

Moderate

**Intensive**

#### **Overview/Objectives:**

1. Students will connect prior knowledge and brainstorm to formulate good questions.
2. Students will learn about Boolean operators to construct search options using their key words.

**Content Topic (s):** ELA and Informational Literacy skills

**Connection to Common Core Standards (list specific standards addressed):**

CC4.R.I.1

CC4.W.1.A

CC4.W.1.B

CC4.W.2

CC4.SL.4

CC4.SL.5

CC4.W.7

**AASL Standards for the 21-st Century Learner Goals: (Use as many as needed)**

**Standard/Indicator(s): (For objective/lesson 1)**

1.1.2; 1.1.6; 1.4.2; 2.1.2; 2.1.5; 3.1.3

**Standard/Indicator(s): (For objective/lesson 2)**

1.1.1; 1.1.4; 1.1.8; 1.2.2; 1.2.3; 1.2.4; 1.2.7; 1.3.1; 1.3.5; 1.4.2; 2.2.1; 2.4.1; 4.1.4

**Motivational Goals:**

1. Build on prior knowledge.
2. Convert vague, general goals into specific intentions and commitments by representing those goals in terms of specific, concrete "targets" or by defining proximal sub-goals.
3. Opportunities for children to take risks in new learning situations.
4. Opportunities for success for all.

**Assessment Methods and Criteria:**

**Rubric assessment (process, product, progress)**

1. Effective use of skills (key words and Boolean Operators)
2. Relevance and specificity of questions
3. Progress made

**NOTES (OPTIONAL)**

**Required Resources and Materials:**

1. Concept maps
2. Loose-leaf
3. Good question cubes
4. Discovery education video
5. Books
6. Database articles
7. Pre- selected websites
8. OPAC (online library catalog)
9. Boolean Machine

**Learner Profile (e.g., # students, special needs, reading levels, etc.):**

twenty-five 4th grade ELL students and twelve 6th grade special needs students

**Incoming Motivation Levels (Select all that apply):**

**Attention:**      Low      **Medium**      High

**Relevance:**    **Low**      Medium      High

**Confidence:** Low    **Medium**    High

**Satisfaction:** Low    Medium    **High**

## **INSTRUCTION AND ACTIVITIES: SESSION 1 (Lesson #1)**

**Objective:** Students will connect prior knowledge and brainstorm possible topics to formulate good questions.

**Setup/Preparation/Introduction:** Preparation for this activity would entail chart paper, use of Smart board tools, graphic organizers. Teachers and students will come to the library to formulate good questioning skills for their research reports. Prior to this lesson, students will have activated their prior knowledge by brainstorming and creating concept maps that will have questions students wonder about their chosen topic. They will bring these concept maps to the library. Our motivational/introductory activity would be to engage students by coming up with a definition of what a "good question" is. A good question/inquiry based question is a question that should require an explanation and not simply a one word answer. It should spark the student's curiosity and lead them to ask other questions.

This would be a good opportunity to encourage self-regulation. Help the students recognize that they need to have their questions done by the appointed time. Provide appropriate reminders for each student.

**Modeling/Direct Instruction/Guided Practice:** The librarian and teacher will model how to ask a good question using examples, such as "I want to know about dogs. What do I wonder about dogs? They will roll 2 "question cubes" (One cube is blue, which has the 5 W's on it and the other cube is red, which has action words on it.) and use the prompts to form a good question. Questions will be recorded on chart paper. This activity will be repeated several times as a whole class activity.

### **Independent Practice:**

1. Students will work independently to compose good questions about their chosen topic (10-15 min). They will each have the 2 "good question cubes" and piece of paper. They will roll the dice and formulate 6-10 "good" questions (3-5 of which will be their focus questions for their report of information). They will record their questions on loose-leaf paper. Derek and a few other students will be given 2 large foam dice with the same words on them as the "good question cubes."
2. Students will work in pairs to formulate good questions. The students will roll the dice and formulate a "good" question for their partner, and vice versa.

3. While students are working, the teacher and librarian will walk around, observe and assist as needed and informally assess student progress.

### **Sharing and Reflecting:**

As a whole class discussion, students will share one of their original questions and one of their "good" questions. We will record their work on chart paper. When all students have shared, the teacher will look at the composed list and ask the students to compare the lists of questions through answering. The teacher will generate responses to these questions: "What do you notice about the questions on the right? What do you notice about the questions on the left? Which list has more specific questions? Which list of questions would be more helpful when writing your report of information?"

### **INSTRUCTION AND ACTIVITIES: SESSION 2 (lesson plan #2)**

**Objective:** Students will learn about Boolean operators to construct search options using their key words.

**Setup/Preparation:** Prior to going to the library, the kids already selected key words and alternate terms /synonyms relevant to their topic.

### **INTRODUCTION:**

To aid in visual representation of how the number of results is altered depending on the Operator used. Different groups of students will be prompted to stand up using Boolean Operators: AND, OR, NOT. For example: everyone with hair AND pants; everyone with hair OR pants; everyone with hair NOT pants.....)

### **Direct Instruction/Modeling/Guided Instruction:**

Boolean operator will be defined as 3 words that expand or limit search results in a search engine or database.

### **Teacher Modeling:**

1. Using Boolean Machine on the Smart board, visually demonstrate in an interactive Venn diagram how each operator works.
2. Demonstrate a library catalog search to show how search results change based on the words you use (and, or, not.)

### **Modeling and Guided Practice:**

1. Librarian will model use of technology (guiding students through steps of creation) and show more examples, specifically of digital *Gatsby* presentation.



**Independent Practice:**

Activity sheet:

1. Students will link their Key Terms using Boolean Operators AND, OR, NOT to create search statements to identify relevant resources or sources of information about their topic.

**Sharing and Reflecting:**

Volunteers will execute their search on the Smartboard initiating whole class discussion.