Title

Case Study: An Application of Scientific Method to the Nursing Process

Description

The purpose of this lesson is to help you move forward in your career and introduce you to the field of nursing. You will use the Scientific Method along with the Nursing Process to solve a nursing problem.

During this lesson you will reach the following goals:

- Develop critical thinking and communication skills.
- Apply the Scientific Method to solve a real-world problem.
- Use the Nursing Process to resolve a medical problem.

Learning Objectives

By the end of this lesson, you will be able to:

- Recall personal problem-solving techniques.
- Discuss concepts related to the Scientific Method.
- Identify the six steps of the Scientific Method.
- Solve a medical problem using the steps of the Scientific Method.
- Complete a Patient Plan of Care form using the Nursing Process.
- Design and deliver a presentation about using the Scientific Method to solve a problem/make a decision.

Course Topics

1) Scientific Method  
2) Nursing Process  
3) Nursing Care Plan

Participation Activities

During this 90-minute lesson, you will participate in the following activities:

- Group discussions
- Quiz
- Case studies
- Presentation delivery
Lesson Syllabus

Required Supplies

- Walk Around Survey Worksheet
- Scientific Method Quiz
- Case Study Guided Practice Worksheet
- Case Study Evaluation Worksheet
- Pen or pencil, one per learner

Grading Plan

You will participate in six activities for this lesson. Of the six activities, only the activity below is graded.

- Nursing Process Case Study Evaluation (10 Points)

Activity Checklist

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<tr>
<th>COMPLETE</th>
<th>DESCRIPTION</th>
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<tr>
<td>WARM UP</td>
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<td></td>
<td>• Think-Pair-Share Activity</td>
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<tr>
<td>INTRODUCTION</td>
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<td>• Presentation</td>
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<td>• Scientific Method Walk Around Activity</td>
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<td>PRESENTATION</td>
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<td>• Scientific Method Song Video</td>
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<td></td>
<td>• Scientific Method Quiz</td>
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<td>GUIDED PRACTICE</td>
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<td>• Scientific Method Case Study</td>
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<td>EVALUATION</td>
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<td>APPLICATION</td>
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<td>• Presentation and Review Activity</td>
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Take Home Activity

Application Presentation and Review: Think about and select a problem (decision) in your personal life that you can solve (make a decision) using the Scientific Method. Create a short presentation outlining how you will use the Scientific Method to solve the problem (make the decision).

After you complete your presentation, you will review three presentations, of other students, using the following format: 1) List three things you learned from the presentation. 2) Two things you wished the presentation addressed. 3) One thing that you really loved about the presentation. Based on your available resources, you may use one of the presentation delivery options below.

Presentation Delivery Options

1) Digital Presentation: Learners will display the presentation in an online forum that allows a medium for review (Slide Share, Prezi, etc.) using any multimedia components that they choose (i.e., video, text, illustrations, photographs, animation). Encourage learners to be as creative as they wish.

2) Oral Presentation: Learners deliver the presentation in front of the class using any multimedia components they choose (i.e., video, text, poster board, PowerPoint, audio), if any. Encourage learners to be as creative as they wish.

3) Visual Presentation: Learners deliver the presentation in a visual form like a poster board with photographs, props, etc. Encourage learners to be a creative as they wish.

Key Terms and Concepts

Scientific Method: “The scientific method is a process for experimentation that is used to explore observations and answer questions.” (Steps of the Scientific Method, n.d.)

Nursing Process: a series of five organized steps designed for nurses to deliver patient-focused care: assessing, diagnosing, planning, implementing, and evaluating. It is a modified version of the Scientific Method. (The Nursing Process, n.d.)

Nursing Plan of Care: a written plan based on the patient’s assessment data, diagnosis and goals that nurses as well as other health professionals caring for the patient can access (The Nursing Process, n.d.)
Lesson Syllabus

Supplemental Resources

Below are links to videos, articles and tools you can use to learn more about the topics in this lesson.

**Nursing**

*ADPIE: The Nursing Process* is a YouTube video that explains the Nursing Process in more detail. [https://youtu.be/cIGiSRE3u1o](https://youtu.be/cIGiSRE3u1o)


The Occupational Outlook Guide provides information about a career in nursing. [https://www.bls.gov/ooh/healthcare/registered-nurses.htm](https://www.bls.gov/ooh/healthcare/registered-nurses.htm)

O*NET Online provides information about a career in nursing. [https://www.onetonline.org/link/summary/29-1141.00](https://www.onetonline.org/link/summary/29-1141.00)

**Scientific Method**

*The Scientific Method: Steps, Terms and Examples* is a YouTube video that explains the Scientific Method in more detail. [https://youtu.be/BVfI1wat2y8](https://youtu.be/BVfI1wat2y8)

**Free Online Presentation Tools/Platforms**

Slide Share [https://www.slideshare.net/](https://www.slideshare.net/)

Prezi [https://prezi.com/](https://prezi.com/)

Piktochart [https://piktochart.com/](https://piktochart.com/)