

Destination 2018: Sustainability Lesson Plan

NAME: NARDIA CUMBERBATCH

CAMPUS: WEST

DISCIPLINE: LIBRARY; ALLIED HEALTH

The goal of this lesson plan is to help you decide why and where you will infuse sustainability to improve student learning. Remember that sustainability is not an "add-on" content area; rather, sustainability can be integrated into already existing lessons as in-class examples of concepts and as a context for activities and problem sets that promote critical thinking.

Week 1: Needs Assessment

This week you will write a needs assessment for your lesson, learn about SDG goals, and identify 3 goals that could align with your course and topic.

Needs Assessment

1. Write your Needs Assessment:

[\(examples\)](#)

All students in the class are currently working in the healthcare field, whether as an independent contractor or within an established facility. I encourage students to select a real world problem they have observed in the field or within their area of practice. The final project in the class is to write a literature review related to this problem. Prior to writing the final literature review students are required to formulate a research question and create a basic research proposal. Students struggle with formulating an open-ended research question.

2. Explain why you think infusing sustainability will help this need:

[\(examples\)](#)

Formulating an appropriate research question is a basic step required for students to complete their final assignment. If students cannot readily identify a problem within their workplace, I hope that infusing problems related to sustainability within the health care field might be another way students can make connection between their profession and the research process.

3. State where (course or area) you are infusing sustainability and the topic:

[\(examples\)](#)

Put your response here

HSA 4702: Research Methods and Information Literacy. The topic will be formulating an open-ended research question.

Research SDGs

Visit the [Sustainable Development Knowledge Platform](#) to research the Sustainable Development Goals.

4. Choose at least 3 of the SDGs of interest that could align with your topic and share why:
([examples](#))

Put your response here

Good health and well-being: Ensure healthy lives and promote well-being for all at all ages. My class is healthcare class so I think this goal fits best. Students can explore sustainability issues in their facility or how to maintain the healthy patient lives.

Reduced inequality: Reduce inequality within and among countries. Healthcare is impacted by costs, access, and affordability. Students can explore how one of these 3 items can impact patient health.

Quality Education: Ensure inclusive and quality education for all and promote lifelong learning. Health literacy is a problem in the U.S. This results in low knowledge of health information and awareness for patients, including the fact that patients have a difficult time keeping up with wellness discussions from the healthcare visits.

Week 1 Reflection

5. Now that you have completed this week's portion of the template, reflect on the following:

- I'm excited about engaging students in ideas of how healthcare is connected with sustainability.
- I have questions about resources/person that you might recommend for discussing current sustainability issues in healthcare facilities.

Week 2: Learning Outcomes/Research

This week you will write the student learning outcome for your lesson, explore lesson plan examples, look at a variety of classroom assessment techniques, and consider how you could incorporate the 3 Pillars of sustainability with a learning activity.

Student Learning Outcome(s)

The Student Learning Outcome is a statement of what the student will learn or be able to do because of this lesson. For more information on how to write a measurable learning outcome, review the following resources:

[How to write a Student Learning Outcome \(Slides 1 to 5\)](#) | Bloom's Taxonomy Resources - [Bloom's Taxonomy Action Verbs](#), [Bloom's Interactive Graphic](#), [Bloom's Taxonomy of Learning Domains](#)

6. Write your Learning Outcome:
([examples](#))

Students will be able to formulate an open-ended research question.

Sustainability Lesson Plan Samples

Explore the following resources for lesson plan ideas:

- [Sustainability teaching activities across the disciplines](#) (Repository developed by Carleton College)
- Lesson plans organized according to conceptual Sustainability Systems: [Water](#), [Energy](#), [Food](#), [Waste](#), [Landscape & Ecosystem](#), [Supply Chain](#), and [Quality of Life](#) (Developed by ASU faculty)
- [AASHE Curriculum Resources Hub](#) (requires login)

7. Of the lesson plans you've explored, pick 3 and share why you selected those:
([examples](#))

[Seeing Sustainability](#). I like the idea behind this project, however it would need to be augmented. I would like my students to focus their literature review (final paper) on issue in their workplace. Therefore, I would like students to think of a research question that could include an issue of sustainability within healthcare.

[Case study](#). I like the idea of using a case study and having students explore problem areas related to sustainability. I would do this as a group activity, however I would use these [hospital case studies](#) instead.

[Environmental Sustainability in Hospitals: Case studies](#). I prefer for my class final project to be a LifeMap project that relates directly to student's work environment, so I found the ESH report that included case studies or students could use the questions on page 15. These questions could be adapted to the Seeing Sustainability activity.

Classroom Assessment Techniques

Explore the following resource for Classroom Assessment Techniques:

- [101 Strategies to Demonstrate the Essential Competencies](#) – a college of classroom assessment techniques aligned to the essential competencies of a Valencia educator prepared by Valencia faculty Donna Colwell and Kevin Colwell
- [50 CATs by Angelo and Cross](#)
- [Classroom Assessment Techniques](#) by Northwest Evaluation Association

8. Of the CATs you've explored, pick 3 and share why you selected those:
([examples](#))

Reorder Steps in a Process (101 Strategies). I review the research cycle with students. I could create an interactive assess to help students understand the importance of background research which includes different ways of identify a topic or research question. I'd prefer this to be a drag and drop activity and could use H5P.

Journal. I currently have 2 journal prompts in my class; geared towards students teaching their topic to another student or reflecting on something they would change in their own behavior. Getting students to reflect on an aspect of sustainability within their facility would get them to generate a potential topic idea if done at a simple level. For example my students have already mentioned going paperless in their discussion prompt as something that should or will change in their facility. The journal prompt could ask them if there is something similar that might need to be adjusted in their facility/department based on the Seeing Sustainability lesson plan.

Minute paper (50 CATs). This is a simple activity that can help provide insight into what students have learned (and how they might use it) and adjustments I may need to make for future activities. I can also address the questions directly with students.

3 Pillars Activity Idea

Review the 3 Pillars Worksheet.

9. Describe an activity that incorporates the 3 pillars:
([examples](#))

Students will review one case study. As part of a journal prompt, students will reflect on 3 prompts.

The questions could be:

1. What are the ENVIRONMENTAL concerns in this case study? Ex. Impact of humans, use of resources, waste management
2. What are the SOCIAL concerns in this case study? Ex. ethical concerns, work/life balance, worker longevity,
3. What are the ECONOMIC concerns in this case study? Ex. impact on finances, supply chain, quality assurance

Week 2 Reflection

10. Now that you have completed this week's portion of the template, reflect on the following:

- a. I'm excited about providing students with an opportunity to explore potential sustainability issues within their healthcare facility.
- b. I have questions about... (none at this time).

Week 3: Putting it All Together

The goal for this week is to create an activity that incorporates the SDG, CAT, and connection to the 3 Pillars of sustainability.

SDG Selection

11. Choose the SDG that aligns best with your Needs Assessment/Student Learning outcome and explain why:
([examples](#))

I have chosen the SDG: Good health and well-being - Ensure healthy lives and promote well-being for all at all ages. My students will be able to explore sustainability issues in their facility or local community as another option for formulating a potential research topic.

CAT Selection

12. Choose the CAT that aligns best with your Needs Assessment/Student Learning Outcome and explain why:
([examples](#))

The CAT that best aligns with my Needs Assessment and Student Learning Outcome is journaling. The journaling activity prompts will 1) help students reflect on an area of need within their facility or community's health, 2) helps students generate a potential topic idea, and 3) provides me with an additional opportunity to give students one-on-one feedback.

3 Pillars Activity

13. Describe how you will incorporate the 3 Pillars into your activity:
([examples](#))

As part of a journal prompt, students will reflect the following 3 prompts.

The questions could be:

1. What are the ENVIRONMENTAL concerns in this case study? Ex. Impact of humans, use of resources, waste management
2. What are the SOCIAL concerns in this case study? Ex. ethical concerns, work/life balance, worker longevity,
3. What are the ECONOMIC concerns in this case study? Ex. impact on finances, supply chain, quality assurance

Activity Draft

14. Create a draft of the activity using the SDG, CAT, and 3 Pillars:
([examples](#))

Discussion #2: Why we need evidence based practice?

Evidence-based health care is a common buzzword today, but it has been a part of medical literature for years.

Step 1: Review the Florida State University's definition of [Evidence Based Practice](#) (Definition of Evidence-Based Medicine section only).

Step 2: Review Article #1 ([U.S. Technologists Radiation Exposure Perceptions and Practices](#)). The link to the article should go straight through to the library database.

Note: You will also revisit this research study for the Article Critique #1 assignment, which will be submitted in two parts. For this discussion post, we will explore the literature review (pages 311-313), or summary of existing research related to the article's main focus.

Step 3: You can post by selecting **Reply** below. Minimum word count = **100 words**.

A. In your post, describe one change in practice that resulted from evolving data (evidence) shown in the article listed above.

B. Give us your professional opinion as to why you think some of these "[ah ha](#)" moments took so long to implement.

C. Explain what happens when evidence based practice or protocols are ignored or misused?

D. Share a practice or protocol you have observed in health care (either in your field or health care in general) about which you think evidence is needed to evaluate its impact. (This question begins the research question idea generation).

Journal Reflection: Generating Real World Research Ideas

Goals of this Activity

- This journal reflective activity is intended to encourage you to identify areas of need within your community or facility.
- This journal reflection is worth 10 points.

Explore Your Comprehensive Community Health Needs Assessment

- Explore the [Central Florida Community Health Needs Assessment 2016 Report by Central Florida Community Benefit Collaboration](#). This Comprehensive Community Health Needs Assessment (CHNA) between Lake County, Orange County, Osceola County, and Seminole County was produced in conjunction with Aspire Health Partners, Florida Hospital and Orlando Health.
- Or you can search and review for your facility's (or local) community health needs assessment on Google (ex. community health needs assessment Jackson Memorial Hospital).

In your journal prompt, reflect on the following questions:

1. What is one area of health that needs to be addressed in your local community? (Include the link to the Community Health Needs Assessment that you reviewed).
2. What are the ENVIRONMENTAL concerns associated with the identified health need? List at least one. (Ex. Impact of humans, use of resources, waste management)
3. What are the SOCIAL concerns associated with the identified health need? List at least one. (Ex. ethical concerns, work/life balance, worker longevity, patient group, social services)
4. What are the ECONOMIC concerns associated with the identified health need? List at least one. (Ex. impact on finances, supply chain, quality assurance, insurance, taxes)

Discussion #3: Writing A (Your) Research Question

In the process of creating the foundation for your [final paper](#) in the class, we will continue the process by formulating two potential research questions.

Step 1: Reflect on the research ideas you generated during [Discussion 2](#) and [Journal Reflection: Generating Real World Research Ideas](#).

Step 2: Review Narrowing the Focus of the Question (page 29 of your textbook). Before your post, begin thinking about (and create) your list of possible research questions. ([Explore the Tips for this post.](#))

Step 3: In your discussion post, take your top two choices and present them using the model in the text, Box 3-2 on page 28. Minimum word count is **100 words**. You can post by selecting **Reply** below.

- Note: You might not have more than 3-4 objectives, but you should have at least 2.

15. Explain how the activity aligns with your Needs Assessment/Student Learning Outcome
([examples](#))

During Discussion 2, students reflect on an article that discusses the radiologic technologist's role in over radiation in today's environment and their role in decreasing this problem. The journal activity will enable students to generate a research idea based on a real world problem they have identified in the field or within their area of practice. Students will review their facility's health assessment and will identify one area of health need in their local community. The subsequent discussion post will help students translate their research ideas into an open-ended research question.

Week 3 Reflection

16. Now that you have completed this week's portion of the template, reflect on the following:

- a. I'm excited about implementing this activity in my Fall course (it's too late for my summer course).
- b. I have questions about...nothing at this time.

Week 4: Lesson Plan Draft

This week you will finalize your activity and create directions for students.

17. Prepare a set of instructions on how to facilitate this activity.

(examples)

Answer the following questions:

What prior knowledge will students need to be successful with this activity?

Student will be required to know how to perform a Google search (or know how to get their facility's community health needs assessment (CHNA)).

What needs to be setup prior to delivering the lesson?

This activity will be part of an online course, so I will need to set up the journal prompt.

What resources and materials will you need?

Student will be required to review their facility's CHNA or review the example provided.

How do you plan to introduce the topic?

This activity will be introduced during Module 3 of the course, after a discussion of the concept of evidence-based practice. During this discussion prompt, students reflect on the need for evidence-based practice and its importance in their field.

How will you keep students engaged?

Students will be engaged through the brainstorming process involved in the journal reflection.

Step-by-step run of the activity

- This activity will be a second activity in a 3 part series that will help students to generate a research question based on a real world problem they have observed in the field or within their area of practice.
- I have revised an existing discussion prompt so that students are more clearly prompted to identify “one practice or protocol you have observed in health care (either in your field or health care in general) about which you think evidence is needed to evaluate its impact.”
- Students will find their CHNA and complete the journal prompt.
- After the two graded activities above, students will complete the final activity an existing discussion prompt. The prompt asks students to generate 2 potential research questions (including a discussion of the problem statement, research question, aim/goal, and research objectives).

Now that you have addressed the questions above, include directions in the draft of your activity

The directions are included above.

Week 4 Reflection

18. Now that you have completed this week’s portion of the template, reflect on the following:

- a. I’m excited about providing students with another way to identify health related problems within their local community, helping them formulate a research question related to the problem, and most importantly helping them actively research something they could do about said problem.
- b. I have questions about...