

# Duke TIP Mystery-Based Learning

## Decision Point Template

Here is a template to create the outline for designing your own Mystery-Based Learning Decision Point activity! This activity could be presented in a learning management system, in a hyperdoc, as an in-class scavenger hunt--the options are endless! The most important characteristics of this activity are that it's authentic, immersive, urgent, and empowering for the student.

### Overarching Mystery to Solve

**What is the larger mystery question students are attempting to solve for the entire experience? (This is broader context for this more narrow Decision Point task)**

### Student Role

**What role can students take on that will empower them to solve the mystery and make numerous decisions along the way? There will be ways to “teach” them content knowledge related to this role, but they should be an expert in the field and/or a key decision maker for this mystery. This could be a very specific occupation (i.e. CDC Detective) or a general position (i.e. epidemiologist), depending on the nature of your investigation.**

## Decision Point

**What is a single decision students will need to make on their way to solving the larger mystery?**

<u>Content Knowledge, Skills and Standards for Decision</u>	<u>Artifacts/Presentation of Content</u>
What just-in-time content is necessary for making this decision?	How will this information be presented in an authentic way using technology tools?

<u>Case and Plot Details for Decision</u>	<u>Artifacts/Presentation of Case Details</u>
What case-specific details do students need to make this decision? What about the storyline must be revealed by this point?	How will this information be presented in an authentic way using technology tools?

<u>Decision Point Product and Format</u>
How will students share their decisions with peers? What product can they create that will be authentic, and/or maintain the immersion and the storyline? How will this product be shared?

## **OPTIONAL: Overarching Product**

**How will students share their solution to the overarching mystery, including pertinent research and justifications, in a way that is authentic and immersive? What format would the product take, and how will they share it in a way that encourages feedback?**

## **Explanations and Examples**

### **Overarching Mystery to Solve**

This is the larger, complex mystery that students will wrestle with throughout the case experience:

1. What is the patient's diagnosis?
2. Is the defendant guilty?
3. How do we prevent this disease from spreading?

### **Student Role**

What role can students take on that will empower them to solve the mystery and make numerous decisions along the way? There will be ways to “teach” them content knowledge related to this role, but they should be an expert in the field and/or a key decision maker for this mystery.

1. Resident Doctors at a hospital
2. Jurors on the trial
3. CDC Disease Detectives

## Decision Point

A **decision point** is a single decision students must make as part of a larger mystery they are attempting to solve:

1. Is the patient dehydrated? (an early patient assessment as part of a large, complex medical diagnosis students must make)
2. Should the photos be allowed as evidence? (a single evidence decision as part of a full trial where students determine verdict)
3. What is the location of transmission for the outbreak? (determining one characteristic of many in an attempt to define and prevent the spread of a new disease)

## Content Knowledge, Skills, and Standards for Decision

To keep the case authentic and urgent, students should only receive content and skill knowledge directly related to and necessary for the task at hand.

1. What are the signs and symptoms of dehydration? What does a normal vs. an abnormal physical exam show?
2. What are the rules for allowing or not allowing specific evidence in the courtroom? Who is able to make this determination?
3. Outbreaks of diseases, particularly new diseases, often originate from one location. Plotting dates in + and - format based on a common 0 (onset of symptoms).

## Artifacts/Presentation of Content

1. Short video about dehydration, short article about dehydration, Thinglink of a normal physical exam presentation.
2. Judge Voki speech to jurors about evidence rules and rulings.
3. Email from Director Shah, Patient files (Google Slides) with images of patients, travel documentation, symptom progression notes, etc.

## Case and Plot Details for Decision

What case-specific details do students need to make this decision? What about the storyline must be revealed by this point?

1. The patient's vital signs; the patient's physical exam results; additional medical chart information, such as presentation at arrival; details about where and how symptoms began.
2. The images are gruesome, and could sway jurors with sympathy; the testimony of the victim.
3. Travel locations and dates for all potential patients; symptoms and dates of

progression.

## Artifacts/Presentation of Case Details

How will this information be presented in an authentic way using technology tools?

1. Chart of patient vital signs (LMS page), physical exam results (Thinglink and Google Doc), medical file with charts and patient information (Google Slides).
2. Defense Voki of objection, previous testimony (videos, Google Docs), previous evidence for case (varies).
3. Patient files (Google Slides) with images of patients, travel documentation, symptom progression notes, etc.

## Decision Point Product and Format

One of the most crucial aspects of making a decision is sharing that decision back out. How will students share their decisions with peers? What product can they create that will be authentic, and/or maintain the immersion and the storyline? How will this product be shared?

1. Voki of student (in the role of the doctor) sharing his/her conclusion about dehydration with the patient, along with next steps for treatment and/or further testing.
2. Discussion in the learning management system with the student (in the role of juror) making a recommendation about whether or not the judge should allow the evidence and why, followed by a Google Forms vote based on peer recommendations.
3. Google Map of the patients' travels, including dates s/he was in each location. Sharing of maps in a Padlet. Google Form voting of location and dates of transmission based on own map and peer maps.

## OPTIONAL: Overarching Product

What products or performances would be an authentic way for experts in the field to convey a well-researched decision? Utilizing edtech tools to simulate authentic products or performances should help maintain the immersive experience, while also providing galleries of work and avenues for feedback.

1. Voki sharing the final diagnosis with the team, based on jigsaw research of potential diagnoses and a review of final scans and blood work.

2. Voki sharing final verdict with fellow jurors, based on review of all evidence and testimony (organized in a Thinglink and shared), closing arguments, and final directions from the judge.
3. Voki delivering speech to the public and a Google Drawings infographic with information about the characteristics of the disease, the location of transmission, and the prevention and response protocol.