

COMPREHENSIVE INSTRUCTIONAL DESIGN PLAN

Assignment 6

Brittany Haynes
MEDT 7490

Artifacts

Cell Organelle Creative Comic Strip/Infographic Project

Directions: For this project, you will create a comic strip or infographic giving a tour of the cell organelles and their functions. You will be working with a partner for this assignment and you will be graded both as a pair and individually. You will need to be sure to include the following organelles in your final product:

1. Nucleus
2. Mitochondria
3. Golgi Apparatus
4. Endoplasmic Reticulum (rough & smooth)
5. Ribosomes
6. Cell membrane
7. Cell wall
8. Chloroplast
9. Vacuole
10. Lysosome

Process:

Day	Participation
Monday: In your own words, define each of the organelles function and decide a storyline or design for your comic or infographic	
Tuesday: Begin storyboard planning for infographic or graphic	
Wednesday: Create Products using comic life, pixton, or piktochart.	
Thursday: Finalizing & Editing Presentations. PRODUCTS DUE TO TEACHER'S EMAIL BY END OF CLASS.	
Friday: Presentations.	Turn in recommendations

Items to be submitted for review:

- Product in digital format
- Brainstorming Notes
- Storyboard
- Completed Rubric (1 per group)
- Completed Checklist (1 per group)

Our group includes the following people and roles please sign below after you read the following statement: **I agree to evenly distribute work in order to create the best product from my group. Any issues with the group will be settled prior to Thursday so that all problems are resolved.**

Person	Role
1.	
2.	

Our group will be presenting a comic or infographic (circle or highlight one).

You can find some examples and more information of infographics (virtual posters) at these links: <http://www.coolinfographics.com/>, <http://piktochart.com/showcase/>

Presentation Rubric: Organelle Infographic/Comic Project

Student

Names: _____

CATEGORY	5	4	3	2
Preparedness	Student is completely prepared and has obviously rehearsed.	Student seems prepared but might have needed a couple more rehearsals.	The student is somewhat prepared, but it is clear that rehearsal was lacking.	Student does not seem at all prepared to present.
Listens to Other Presentations	Listens intently. Does not make distracting noises or movements.	Listens intently but has one distracting noise or movement.	Sometimes does not appear to be listening but is not distracting.	Sometimes does not appear to be listening and has distracting noises or movements.
Speaks Clearly	Speaks clearly and distinctly all (95-100%) the time, and mispronounces no words.	Speaks clearly and distinctly all (95-100%) the time, but mispronounces one word.	Speaks clearly and distinctly most (85-94%) of the time. Mispronounces no more than one word.	Often mumbles or can not be understood OR mispronounces more than one word.
Vocabulary	Uses vocabulary appropriate for the audience. Extends audience vocabulary by defining words that might be new to most of the audience.	Uses vocabulary appropriate for the audience. Includes 1-2 words that might be new to most of the audience, but does not define them.	Uses vocabulary appropriate for the audience. Does not include any vocabulary that might be new to the audience.	Uses several (5 or more) words or phrases that are not understood by the audience.
Posture and Eye Contact	Stands up straight, looks relaxed and confident. Establishes eye contact with everyone in the room during the presentation.	Stands up straight and establishes eye contact with everyone in the room during the presentation.	Sometimes stands up straight and establishes eye contact.	Slouches and/or does not look at people during the presentation.
Volume	Volume is loud enough to be heard by all audience members throughout the presentation.	Volume is loud enough to be heard by all audience members at least 90% of the time.	Volume is loud enough to be heard by all audience members at least 80% of the time.	Volume often too soft to be heard by all audience members.

Uses Complete Sentences	Always (99-100% of time) speaks in complete sentences.	Mostly (80-98%) speaks in complete sentences.	Sometimes (70-80%) speaks in complete sentences.	Rarely speaks in complete sentences.
Content	Shows a full understanding of the topic.	Shows a good understanding of the topic.	Shows a good understanding of parts of the topic.	Does not seem to understand the topic very well.

Information Rubric: Organelle Infographic/Comic Project

Student

Names: _____

CATEGORY	5	4	3	2
Organelle Definitions	All 10 organelle definitions are accurate and in students own words	All 10 definitions are accurate but only some (7-8) are in the students own words	Some (7-8) organelle definitions are accurate and few (5-6) are in the students own words	Few (6 or less) organelle roles are accurate and none of them are in the students own words.
Organelle Names and Roles	All organelle names are correctly spelled and matched with their roles within the cell.	All organelle names are correctly spelled but only some (8-9) are correctly matched with their roles within the cell.	Some (6-7) organelle names are correctly spelled and matched with their roles within the cell.	Few (5 or less) organelle names are correctly spelled and matched with their role within the cell.
Creativity/Originality	Several of the graphics used on the product reflect an exceptional degree of student creativity in their creation and/or display.	One or two of the graphics used on the product reflect student creativity in their creation and/or display.	The graphics are made by the student, but are based on the designs or ideas of others.	No graphics made by the student are included.
Storyboard	The storyboard is very well organized. One idea or scene follows another in a logical sequence with clear transitions.	The storyboard is pretty well organized. One idea or scene may seem out of place. Clear transitions are used.	The storyboard is a little hard to follow. The transitions are sometimes not clear.	Ideas and scenes seem to be randomly arranged.

Collaborative Work Skills : Organelle Infographic/Comic Project

Student Name: _____

CATEGORY	4	3	2	1
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.
Quality of Work	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Time-management	Routinely uses time well throughout the project to ensure things get done on time. Group does not have to adjust deadlines or work responsibilities because of this person's procrastination.	Usually uses time well throughout the project, but may have procrastinated on one thing. Group does not have to adjust deadlines or work responsibilities because of this person's procrastination.	Tends to procrastinate, but always gets things done by the deadlines. Group does not have to adjust deadlines or work responsibilities because of this person's procrastination.	Rarely gets things done by the deadlines AND group has to adjust deadlines or work responsibilities because of this person's inadequate time management.
Preparedness	Brings needed materials to class and is always ready to work.	Almost always brings needed materials to class and is ready to work.	Almost always brings needed materials but sometimes needs to settle down and get to work	Often forgets needed materials or is rarely ready to get to work.

Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Problem-solving	Actively looks for and suggests solutions to problems.	Refines solutions suggested by others.	Does not suggest or refine solutions, but is willing to try out solutions suggested by others.	Does not try to solve problems or help others solve problems. Lets others do the work.
Working with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.

Client: Alicia Bannerman, Biology Teacher at Pebblebrook High School

Description of Re-designed lesson

This lesson was originally a simple chart that was given to students asking them to fill in the organelles, their roles, a picture, and an analogy. Ms. Bannerman has used this worksheet along with notes and other formative activities for the past few years however, students are still struggling with the connection between the organelles and their roles. So, to address this learning deficit and incorporate technology and visual literacy, we have decided to combine the learning goals of the worksheets into one project. In this re-designed project, students will work with a partner to creatively come up with a way using a comic or infographic to give a tour of the cell and its organelle roles. They will have several steps prior to creating the final product which include: defining the organelle role in their own words, brainstorming a storyline or design, and creating a storyboard or rough draft of their infographic. Each student will be paired by the teacher to make sure that grouping is equivalent and that students who may have a learning deficit will be working with those who can help them and vice versa.

The methods to assess/evaluate

In order to assess each students learning, there will be two rubrics used as well as a partner feedback survey that each student will fill out at the conclusion of the project. The two rubrics will assess the presentation and the content. The presentation rubric has 8 categories with point values ranging from 2-5. The content rubric has 4 categories also ranging from 2-5 points for each. The partner feedback form will address categories like flexibility, openness, ease of working, etc. to evaluate how well the partners worked with each other. Each of these categories

will be scored using a 4 point scale. Along with this project, students will be given a summative assessment that tests this information through multiple choice, short and essay questions.

Why is this the right solution?

Based on my learning in this course and through my research, I have learned that infographics greatly increase the engagement and level of learning in the science classroom. I have learned through the Davidson article that infographics can be used no matter what the topic is and with adequate research, even though the product seems simple, the learning is happening in the background. With all of my learning, I feel that coupling the textual literacy with visual literacy for this assignment will have a profound impact on the students learning and they will perform better on this section of their unit exam. Having students be more creative and participate in the process of learning seems to improve their retention and that is why I feel that this project is the right solution for this content piece.

ACRL Visual and Literacy Competency Standards

My plan addresses the ACRL Visual and Literacy Competency Standards numbers 2, 5, and 6. Standard 2 is addressed because even though students will be drawing their comic or infographics out before designing them, they will still be responsible for finding the computer generated images correctly and effectively for their final products. They will also have to select which images are appropriate and within their scope of use for the project. Standard 5 is addressed through the students properly using the images that they have searched in their chosen programs. They will also be using technology throughout the project for research and the creation of their final product. In their presentation, they will be addressing standard 5, elements 3 and 4 to communicate with the learning community about the images they have created. Lastly,

this project addressed standard 6 in both their planning process and their final product presentation by being able to use this project for further studying or connections in Biology, being careful about the placement of graphics in their comic or infographic, and they will be evaluating other students presentations based on their knowledge of visual literacy.

Reflection

In completing this assignment I was challenged to narrow down exactly which topic the students would benefit from the most in creating a visual aid. Although the content piece was a challenge, I also found it difficult to create a rubric for this project since it is something that I have not done before in my classroom. With these challenges and what I have learned in this course, I now want to incorporate a visual literacy aspect at least once in every unit. By doing this, I will be able to engage my students more and I should see them retain more information. Using visual literacy component in my classroom will also help me with differentiation for my ELL and exceptional education students. I feel that the use of these tools will not only help me become a better teacher but more of a facilitator and allowing students to take ownership of their learning.