Active Health Resource Package

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**Introduction:**

The purpose of this resource package is to act as a resource that I can look back at in the future when I become a teacher. This package contains my teaching philosophy, a lesson plan on Nutrition for a Planning 10 course, a lesson plan on The Heart for a Biology 20 course and three resources that I found helpful in my EPHE 246 Active Health class that I can use in the future.

**My Teaching Philosophy:**

Learning should be an active and interactive experience shared by students and teachers. Overtime, teachers should evolve into facilitators, and be there for open discussion of concepts, new technology and current events. I believe in an open-door policy. I want my students to feel comfortable enough around me that they can come and talk to me about anything. Especially as an active health promoter, I want students to understand that I am there to help and motivate. I am passionate about active health, and am constantly looking for new exciting ways to promote healthy living. However, I am not perfect, and I am susceptible to make mistakes. But, I learn from my mistakes and that is why I will succeed. When instructing I want to teach topics by vocally describing the concept, followed by illustrating it on the board and then apply the concept to an activity. The order in which I do this can be altered. The importance is that I want to address all learning types and styles by using alternative techniques. In addition, I feel students remember more when information is repeated, so repetition of concepts will occur often in my classroom. Specifically, in a physical education class I want to provide options for students. The beauty of active living is that there is variety, so why not incorporate variety at a younger age in physical education class? This way, students are able to become more self-directed and make decisions on their own regarding their health. Evaluation in an active health class will be based on an individual’s willingness to try, attitude, level of participation and improvement. In the classroom I feel that testing is necessary. As an educator, I feel that I will provide my students with all the information they need to succeed on all exams. Being able to comprehend a topic comes with having a willingness to try and learn it. Therefore, if I have provided my students with all the information they need to succeed then it is up to them to apply it. This way a student will learn how to apply information they learn throughout their life to appropriate situations.

**Lesson Plans:**

**BIOLOGY 30 LESSON PLAN: The Heart**

**Goals:**

To incorporate physical activity with learning how blood moves through the heart, the effect of exercise on blood flow and the effect of plaque build up in arteries on blood flow.

**Objectives:**

1. Each student will understand the structures of the heart.
2. Each student will understand how blood flows through the heart and body.
3. Each student will learn the impact exercise has on blood flow.
4. Each student will learn how plaque build-up in arteries impacts blood flow during exercise.

**Schedule:**

*Time allotted: an hour and twenty minutes*

* Floor and materials will be set up prior to class commencing (20 minutes)
* Students will come to class, and change in to a gym strip and running shoes (5 minutes)
* Discussion of question one in the handout. Explanation of structure represented on the floor, and the roles of each student in the activity. (15 minutes)
* Each student will be designated a role, and will set up at their positions (2 minutes)
	+ Superior vena cava (extra students), Right atrium, Tricuspid valve, Right ventricle, Pulmonary valve, Pulmonary artery (extra students), Pulmonary veins (extra students), Left atrium, Mitral valve, Left ventricle, Aortic valve, Aorta (extra students)
* The first cycle: A 1L milk jug filled half way with water will represent the blood. The jug will be passed from the teacher to the superior vena cava to start it off 🡪 the jug will be passed to the person representing the tricuspid valve 🡪 to the person representing the right ventricle 🡪 to the pulmonary valve 🡪 person(s) representing the pulmonary artery will carry the jug to the lungs (located in a corner in the room) 🡪 at the lungs the jug will be passed to the pulmonary vein person(s) who will carry it to the left atrium 🡪 the jug will be passed to mitral valve 🡪 to the left ventricle 🡪 to the aortic valve 🡪to the aorta 🡪 then the jug is carried to the body (located at a corner in the room) 🡪 jug transferred to superior vena cava person 🡪 cycle stops
	+ To help with remembering structures, students will say aloud the structure they represent when blood is passed to them. This way, students will learn the parts and how the blood is moving through the parts
* Make sure everyone understands how the blood if moving through the body
	+ Questions?
* The second time: once the first jug reaches the mitral valve a second jug will begin, and a third will begin.
	+ Students will move positions following return of the third jug
* Students will rotate in the direction that they passed the blood (18 minutes = includes from first cycle)
* To represent exercise the jugs of “blood” will be replaced with bean bags (15 minutes)
	+ More bags will be passed
	+ Students must work quicker and more efficiently to ensure blood is getting to the body
	+ Students will be timed to see how many bags can reach the body in one minute
* To represent the effect of plaque in arteries on exercise, three small hurdles will be placed along the pulmonary artery and the aorta to represent plaque (10 minutes)
	+ Students will be timed to see how many bean bags can be returned in one minute
* Open discussion of movement of blood through the heart, to the lungs and to the rest of the body (10 minutes)
	+ Questions? Comments?
* Students will change back into their street clothes (5 minutes)
* Using the information they learnt from the activity, students will complete the worksheet and hand it in at the beginning of the next class.

**Application to all learners: Staged Self-Directed Learning Model**

Stage 1 learner: ***Dependent***

🡪 Information will be given vocally by the teacher prior to students working on their own

* Students who do not fully grasp the questions they do on their own prior to the activity will better understand them after the activity. They will have the opportunity to look back at their previous answers and correct them before handing in their assignment.
* Students will be coached in the first couple rounds to ensure that everyone understands in which way the blood moves
* Students will retain the information better due to repetition and active participation

Stage 2 learner: ***Interested***

* Active and fun way to learn how blood moves through the heart
* Involves the entire class
* Goals can be made to be more efficient and quicker in passing the blood

Stage 3 learner: ***Involved***

-Students are asked to fill in questions prior to the activity using their textbook and other sources.

**Handouts:** Please see attached.

* Worksheet
* Worksheet answer key

**Supplies:**

* 4 colors of electrical tape
* Black electrical tape
* Signs representing structures and pathways
* Pylons
* 3 x 1L milk jugs filled half way with water
* Bean bags
* 2 pylons and a hockey stick = hurdles
* Stop watch

**Appendix Items:**

Heart Contraction and Blood Flow: <http://www.nhlbi.nih.gov/health/dci/Diseases/hhw/hhw_pumping.html>

Biology 30: The Heart

Name:

Date:

Mark: \_\_ /14

1. Using the website, <http://www.nhlbi.nih.gov/health/dci/Diseases/hhw/hhw_pumping.html>, use the information on Heart Contraction and Blood Flow to organize how blood flows through the heart, to the lungs and to the rest of the body. (5 marks)

2. Briefly explain the three conditions that were practiced in class? (at rest, exercise, plaque) (2 marks)

3. How did exercise effected blood flow through the body? (2 marks)

4. Why does heart rate increase in response to exercise? (1 mark)

5. How did plaque build up in arteries effect blood flow? (2 marks)

6. Did this activity better your understand of how blood flow throughout the body? (1 mark)

7. Would you like to do more activities like this one? (1 mark)

**PLANNING 10 LESSON PLAN: Nutrition**

**Goal:**

To equip students with the knowledge they need to make smart and healthy decisions when shopping for food in the future.

**Objectives:**

1. To analyze nutrition choices prior to any discussion on health
2. To discuss major components of each food group: what they include, benefits and serving sizes
3. To discover how cost and making healthy decisions impact grocery shopping
4. To discuss and analyze barriers preventing us from making healthy food decisions, and to discuss overcoming these barriers
5. To learn how to analyze nutrition labels, and be able to identify which item is healthier

**Schedule:**

*Time allotted: An hour and twenty minutes*

* Students come in class , get organized in groups of 3 or 4, and the teacher provides instructions for the first grocery shopping activity (5 minutes)
* Groups select dinner from grocery flyer (10 minutes)
* Group representative vocalizes their decisions: information written down on a large chart at the front of the class (5 minutes)
* Discussion (30 minutes)
	+ Food choices
	+ Food groups
	+ Benefits of food groups
	+ Portion sizing
* Groups will be given 7.00 dollars to buy their dinner for one person (15 minutes)
	+ Must include all four food groups!
	+ Designate serving sizes
	+ Do not go over budget!
* Open discussion: (10 minutes)
	+ Was cost a factor?
	+ Do you think you will be able to make these choices in the future when you are living on your own?
	+ What barriers may you face that will make you choose less nutritious food items?
	+ How will you overcome these barriers?
	+ Did you learn anything from this assignment? Is there anything you would change?
* Complete worksheet till the end of class: due at the beginning of next class. One handed in per group (5 minutes)

**Application to all learners: Staged Self-Directed Learning Model:**

Stage 1 learner: ***Dependent***

🡪 Information will be given vocally by the teacher prior to students working on their own

-Four food groups

-Benefits of each food group

-Serving sizes: recommended serving size for each food group

-Compare/Contrast nutrition labels

Stage 2 learner: ***Interested***

 -Grocery shopping activity prior to cost and food groups being proposed

 -Hands on comparison of nutrition labels

Stage 3 learner: ***Involved***

 -Open discussion about the choices that were made in the grocery shopping activity

 -Grocery shopping activity when cost and food groups are applicable with open discussion

 -healthy decision making handout (for marks)

**Handouts:** Please see attached.

* Worksheet
* Worksheet answer key

**Supplies:**

* Overhead
* Whiteboard Chart
* X# Grocery flyers
* 1 cup measure
* ½ cup measure
* Deck of cards
* Baseball
* Hockey puck
* Kraft Peanut Butter jar and Natural Peanut Butter jar
* Mini-Wheats box, Harvest Crunch cereal box, Cinnamon Toast Crunch cereal box and All Bran cereal box
* Skim milk jug and 2% milk jug

**Appendix items:**

<http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>

**Examples of Each Category: Overhead**

|  |  |
| --- | --- |
| Vegtables and Fruit | Grain Products |
| Meat and Alternatives | Milk and Alternatives |

Planning 10: Healthy Decision Making Handout

Name(s):

Date:

Mark: \_\_ / 8

1. Using the grocery flyer provided, select items that you will use to cook dinner tonight:

2. Did you make any alterations to your dinner plan once we discussed the importance of the four food groups? If so, what did you change?

3. What is the recommended number of food guide servings per day for each member in your group?

4. Was cost a factor when selecting serving sizes for your dinner plan? Did you have to remove items based on cost?

5. Do you think you will be able to use the information in today’s class and apply it in the future?

6. What are three barriers you may face in the future that will prevent you from making healthy decisions?

7. How will you overcome these barriers?

8. What is one thing you learnt from this assignment? Is there anything you would change?

**Resource Items:**

1. **Integrated Resource Package**

Integrated Resource Packages (IRPs) are provincial curriculum documents. They outline the goals of each subject, the aim, objectives and how the curriculum can be introduced to students. In addition, IRPs provide educators with resources they can use to help teach the curriculum that may make a larger impact then a lecture. Each IRP is based on grade and subject. Therefore, I will be using the physical education and biology IRPs in the future. Since I am on my way to becoming a teacher, it is incredibly important that I understand and review the IRPs for the curriculum I will be teaching because they outline exactly what objectives must be met. As a teacher it is my role to relay the information in the curriculum to the students in the most efficient way, but it is also important that I motivate the students to learn as well. As an active health promoter, it is especially important that I stay up to date with the curriculum because health trends and topics are always changing, and it is important that I am providing my students with the correct information that they can apply in the future. I will constantly be using this resource throughout my career as an educator because it outlines what needs to be taught to the students. Moreover, it is incredibly important that I stay up to date with the IRPs that are relevant to the area I am teaching because they are subject to change. I will use this resource in the future to design my lesson plans around, and I will use it to help grade students based on their comprehension of the curriculum.

1. **Staged Self-Directed Learning Model**

The staged self-directed learning (SSDL) model is based on the idea that there are four stages of learning, one being dependant and four being self-directed. As a student moves from stage to stage their progression towards greater self direction increases, thereby increasing their ability to motivate and drive themselves towards success. In this model, the goal is for teachers to eventually become facilitators rather than coaches. The SSDL model helps teachers identify and categorize the types of students they are teaching. This helps teachers formulate lesson plans based on the needs of their students. Because this model is based on their student’s progression towards greater self-direction, the needs of their students may change as the year progresses. This model is of great importance to me, as an aspiring teacher, because it reflects my personal teaching philosophy. In particular, I want students to be self motivated when it comes to their active health. It is less difficult for a student to be conscious of their health when they are constantly reminded of it at school. But, once that constant reminder no longer exists, the concept can be forgotten. Therefore, developing a student’s self direction when it comes to active health is incredibly important. I will use this resource in the future to help develop lesson plans. There will always be a variety of learners in my classroom. It is important that I generate lesson plans that incorporate all learning ability’s so I do not bore or confuse my students. Overall, I want to provide my students with the tools they need to succeed on their own outside of school.

1. **PE Central**

PE Central is a website that provides teachers, parents and students with the latest information on age specific physical education programs. PE Central offers health and physical education teachers with a wide array of lesson plans, motivational tactics and fun facts that have been proven successful by educators in the United States. PE Central is a website created by educators for educators. This website is a great resource for me, as an aspiring teacher, because it has a large selection of lesson plans to generate ideas from, and active health concepts are incorporated into each lesson. PE Central is a great resource for educators that are not sure how to incorporate health and physical activity into their lesson plans, or for educators that are looking for new ways to motivate their students. After all, obesity and inactivity in youth is a growing concern in North America. Therefore, if educators could learn new and motivating ways of incorporating health and physical education information in the classroom then maybe youth will become more aware of their health and the benefits of being active. I recently used this resource to help formulate two active health lesson plans. There was such a great selection of ideas, and the lesson plans were concise and easy to follow that I have no reason not to use this resource again. I personally, used ideas from the website and generated my own spin of them. However, regardless of where the lesson plan comes from, any attempt to inform our youth about living an active and healthy lifestyle is a good one. I plan on using this resource in the future as I am sure I will come to roadblocks in my career where I am out of new and motivating ideas, and hopefully, in the future, I will be able to add lesson plans that I found successful to this website.

**Conclusion:**

With the completion of my resource package I have developed a teaching philosophy, two practical lesson plans that I can apply in the future and I have found three resources that will help me build lesson plans in the future. I have established that I am passionate about staged self-directed learning, a hands on approach, learning in a motivating environment, and creating an atmosphere that maximizes my student`s potential for success.

**References:**

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