

SHS



AIRs - LM in

Physical Education and

Health 3

Module 2



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Physical Education and Health 3

Module 2

First Edition, 2020

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Region I

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Physical Education and Health 3

Module 2



Target

In this module you can achieve optimum health and improve fitness goals with the different activities related to dancing. Here you can plan and perform different types of dances, monitor and evaluate outcomes from the previous activities.

To maximize the results of a physical fitness program there is a need to be acquainted with the Principles of Exercise and appropriate modification of the FITT - Frequency, Intensity, Type, and Time.

After going through this module, you are expected to:

1. self-assess health-related fitness (HRF) status, barriers to physical activity assessment participation and diet (PEH12FH-Ig-i-6);
2. set FITT goals based on training principles to achieve and/or maintain HRF (PEH12FH-li-j-7); and
3. engage in moderate to vigorous physical activities (MVPAs) for at least 60 minutes most days of the week in a variety of settings in- and out-of-school (PEH12FH-Ia-t-8).

Before going on, check how much you know about this topic. Do the following pre-test.

Lesson 2

Dance Fitness Goals



Jumpstart

Activity 1: Fit and Match

Directions: Match the following definitions with the corresponding answers from the words inside the box. Use the activity sheet provided.

A. Principle of Overload	D. Principle of Recovery
B. Principle of Specificity	E. Principle of Progression
C. Principle of Individuality	F. Principle of Reversibility

1. It refers to a particular activity that has to be performed to bring about specific adaptations.
2. In this principle, the overload must be done gradually so as giving time for the body to adjust.
3. In this principle, your muscles adapt to a higher workload over a period, thus an additional increase in workload.
4. It gives the idea that all people are different from one another, and fitness programs must be designed according to his need.
5. In this principle, any gains received through regular physical activity will stop if no longer active in performing the fitness program.
6. It reminds us that our bodies take the time to adjust to the physical stress of being active, allow adequate time for adaptation to occur.

Activity 2: Match and Dance

Directions: From the pool of words below, choose the appropriate answer to the following descriptions in Column A. Write the letter of your answer to Column B. Then on Column C, write *LM* if it is *locomotor* and *NLM* if it is *non-locomotor*. Write your answers on the activity sheet.

A. Bend	C. Hop	E. Leap	G. Slide	I. Swing
B. Gallop	D. Jump	F. Skip	H. Stretch	J. Twist

<i>Column A</i>	<i>Column B</i>	<i>Column C</i>
1. A glide followed by a quick close.		
2. A step and a hop using the same foot.		
3. A spring on one foot landing on the other foot.		
4. A spring from one foot landing on the same foot.		
5. The extension or hyperextension of the joints of the body.		
6. A spring on one foot or both feet, landing on both in any direction.		
7. A movement around a joint, either forward, backward or sideward.		
8. A series of stepping and cutting movements done either sideward or forward with one feet always leading.		
9. A rotation of some body parts around its long axis. It can only take place at the spinal, neck, shoulder, hip and wrist joints.		
10. A movement of the arms, legs, upper trunk, head or body as a whole in a circular or pendular fashion around a stationary center.		



Discover

Setting FITT Goals

Designing a fitness plan for dancing is challenging. Engaging physical activities such as dancing is one way of maintaining our body to be physically fit. After assessing your fitness status and identifying the barriers to physical activities, you will be able to set your fitness goals based on training principles to achieve and maintain health-related fitness (HRF).

Designing Personal Fitness Program

Everyone desires to be fit, free from diseases, and can move freely. Fitness program will take effect if the activities are carefully planned and fit to the needs of an individual. Dancing is a form of physical activity with simple to complex steps. Engaging physical activities such as dancing can help improve health-related fitness components such as cardiovascular endurance, flexibility, muscular strength and endurance, and body composition. It is suggested that dance fitness routine should come alternately using the FITT Principle (frequency, intensity, time and type of activity).

How to Start a Dance Fitness Program?

1. Setting goals – Setting and achieving goals is the most effective way to stay motivated about the activity. Goals and objectives should be attainable, adjustable, and allow for individual need.
2. Assessing fitness needs – Current fitness level is determined through the assessment result of the health-related fitness components.
3. Choosing the right activities for the program
4. Planning for the program – Consider the principles of physical training and FITT principle as guides.

*Getting medical clearance – It is advisable to secure medical certification from the physician before starting physical activities, especially if a person has a trace of medical history.

The Principles of Physical Training

1. *Principle of overload* states that your muscles adapt to a higher workload over a period, thus an additional increase in workload.
2. *Principle of progression* states that the overload must be done gradually so as giving time for the body to adjust.
3. *Principle of specificity* refers to a particular activity that has to be performed to bring about specific adaptations.
4. *Principle of reversibility* states that any gains received through regular physical activity will stop if no longer active in performing the fitness program.
5. *Principle of individuality* gives the idea that all people are different from one another, and fitness programs must be designed according to his need.
6. *Principle of recovery* reminds us that our bodies take the time to adjust to the physical stress of being active, allow adequate time for adaptation to occur.

The FITT Principle

1. *Frequency* refers to number of times a physical activity is done in each week. According to the American College of Sports Medicine guidelines, it is recommended to exercise 3-5 days per week and for more optimal results, exercise can be done in most days of the week with a combination of light-moderate-vigorous activity.
2. *Intensity* refers to how much effort has been exerted during the physical activity. It describes how easy or how hard a person has to work in a certain activity, and it varies from one person to another. The determination of intensity depends on some individual factors such as exercise experience, relative level of fitness, and needs of fitness.

The intensity level target may be determined by computing the *target heart rate (THR) range* based on the results of an exercise stress test, considering the resting and exercise heart rate, with 60% to 80% intensity level (*Karvonen's Formula*).

For our example, a dancer, 21 years old, wants to get his target heart rate. He has a resting heart rate of 70 bpm.

The following are the easy steps to determine the intensity of the physical activity:

1. *Get the maximum heart rate.*
$$\text{MHR} = 220 - \text{age} \qquad \text{MHR} = 220 - 21$$
$$\text{MHR} = 199$$
2. Count resting heart rate (RHR) in one minute.

In our example, the dancer has a resting heart rate of 70 bpm.

$$\text{RHR} = 70 \text{ bpm}$$

3. Determine the heart rate reserve (HRR).

$$\text{HRR} = \text{MHR} - \text{RHR}$$

$$\text{HRR} = 199 - 70 = 129$$

4. Take 60% and 80% of the HRR.

a) $\text{HRR} \times 60\%$

$$129 \times 0.6 = 77 \text{ (4.a)}$$

b) $\text{HRR} \times 80\%$

$$129 \times 0.8 = 103 \text{ (4.b)}$$

5. Add each HRR% to RHR to obtain the target heart rate (THR) range.

a) $(4.a) + \text{RHR} = 77 + 70 = 147 \text{ bpm (5.a)}$

b) $(4.b) + \text{RHR} = 103 + 70 = 173 \text{ bpm (5.b)}$

Therefore, the target heart rate range is 147 to 173 beats per minute (bpm).

Activity 3: My Target Heart Rate

Directions: Compute your target heart rate range in five (5) steps. Fill in the blanks with your answers.

1. Get your maximum heart rate.

$$\text{MHR} = 220 - (\text{your age}) \quad \text{MHR} = 220 - \underline{\hspace{2cm}}$$

$$\text{MHR} = \underline{\hspace{2cm}}$$

2. Count your resting heart rate (RHR) in one minute.

$$\text{RHR} = \underline{\hspace{2cm}} \text{ bpm}$$

3. Determine the heart rate reserve (HRR).

$$\text{HRR} = \text{MHR} - \text{RHR} \quad \text{HRR} = \underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

4. Take 60% and 80% of the HRR.

c) $\text{HRR} \times 60\%$

$$\text{HRR} \times 0.6 = \underline{\hspace{2cm}} \text{ (4.a)}$$

d) $\text{HRR} \times 80\%$

$$\text{HRR} \times 0.8 = \underline{\hspace{2cm}} \text{ (4.b)}$$

5. Add each HRR% to RHR to obtain the target heart rate (THR) range.

c) $(4.a) + \text{RHR} =$

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ bpm (5.a)}$$

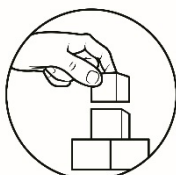
d) $(4.b) + \text{RHR} =$

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ bpm (5.b)}$$

Therefore, your target heart rate range is ____ to ____ bpm.

3. *Type* of activity determines the kind of activity a person should settle to achieve a fitness goal. It is determined by following the principle of progression and specificity. To attain a higher level of fitness, select the type of physical activity that challenges the body to accept an increase of work and that answers your need.
4. *Time* refers to the duration or the length of session of a physical activity. It is inversely related to intensity for the more intense a work is done, the shorter time it is performed. That is, if intensity is increased, time and frequency should be decreased, vice versa.

After reading the concepts, you can now proceed to do the activities to work on.



Explore

Activity 4: Let's Recall the Dance Steps

Directions: Fill up the table. In the given types of dances, enumerate two basic steps on the following fitness components. You can write an example/title of the dance below each type of the dance. Write your answers on the activity sheet.

<i>Types of Dances</i>	<i>Cardiovascular Fitness</i>	<i>Flexibility</i>	<i>Muscular Strength and Endurance</i>
Folk Dance (ex. Sayaw sa Bangko)			(ex. jumping)
Ballroom Dance (ex. Cha-Cha)			

Activity 5: Do the Household Chores

Directions: Observe the routinely activities of your family members. List down 5 activities and categorize the observed movement (locomotor or non-locomotor) from the activity they have done throughout the day.

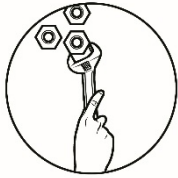
<i>Activities at Home</i>	<i>Movement description and observation</i>	<i>Fundamental movement observed</i>
Example: Washing the dishes.	Stays in place, only arms and hands are moving while washing the dishes	Non-locomotor
1.		
2.		
3.		
4.		
5.		

Activity 6: How Intense Are You in Dancing?

Directions: Perform basic steps in *Match and Dance* as fast, as many times, or as long as you can for 30 seconds. Use your heart rate monitor, and record your heart rate before and immediately after the activity. Between each exercise, walk slowly and rest for 1 minute. Refer your answer to your computed THR.

<i>Activity</i>	<i>Time</i>	<i>HRF Component</i>	<i>Heart Rate Before</i>	<i>Heart Rate After</i>
Bending	30 sec			
Gallop	30 sec			
Hopping	30 sec			
Jumping	30 sec			
Leaping	30 sec			
Skip	30 sec			
Sliding	30 sec			
Stretching	30 sec			
Swinging	30 sec			
Twisting	30 sec			

1. In what activities did your heart rate reach above 80% of your HRR? Why do you think that occurred?
2. In what activities did your heart rate reach within 60% - 80% of your HRR? Why do you think that occurred?
3. In what activities did your heart rate remain below 60% of your HRR? Why do you think that occurred?
4. In which activities did you feel out of breath? Why do you think that happened?



Deepen

Activity 7: My Dance Fitness Plan

Directions: Determine your weakest component and strongest component. Refer to your results obtained in your HRF Self-Assessment and How Intense Are You in Dancing. Then following the fitness plan table, select dance steps from *Match and Dance* and *Do the Household Chores* as activities guided by the Principles of Exercise and the FITT goals. Use your activity sheet.

- A. Rank the health-related fitness components by writing 1- 5, where 1 is the weakest and thus, should be given top priority in making your fitness plan.

- ___ 3-Minute Step Test (Cardiovascular Endurance)
- ___ Zipper Test (Flexibility)
- ___ Sit-and-Reach (Flexibility)
- ___ Basic Plank (Muscular Strength and Endurance)
- ___ Push-up (Muscular Strength and Endurance)

- B. Results obtained in your activity on “How Intense Are You in Dancing?”

Activity/ies with a heart rate above 80%: _____

Activity/ies with a heart rate within 60-80%: _____

Activity/ies with a heart rate below 60%: _____

<i>FITT Goals</i>	<i>Frequency</i> (Indicate Days of the Week)	<i>Intensity</i> (Light, Moderate, Vigorous)	<i>Type</i> (Form of exercise, selected physical activity)	<i>Time</i> (Total fitness plan not less than 60 minutes)
Parts of the Fitness Plan				
Warm-up				
Work-out			a.	
			b.	
			c.	
			d.	
			e.	
Cool-down				

Activity 8: My Daily Dance Fitness Record

Directions: Plan activities for the whole week that will help you organize your dance performance. Base your activities from your Dance Fitness Plan. Perform the physical activities. Wear proper clothing when performing the exercise. Use the provided activity sheet.

<i>Day of the Week</i>	<i>Activities</i>	<i>Resting HR</i>	<i>Exercise HR</i>	<i>Recovery HR</i>	<i>Remarks</i>
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					

Activity 9: Mix and Match Warm-up Dance

Directions: Based from your activity on “Match and Dance,” make your own dance by combining the different steps. You can simply record your performance using *TikTok* App or any other applications. Practice, perform, record and send your performance via messenger, email, post on teacher’s or on your Facebook timeline, or if there is no internet connection, save it to a saving device such as flash drive or memory card and submit it.

Rubrics

Criteria	5 pts	4 pts	3 pts	2 pts	1 pt
Effort	Puts forth 100% of the best effort; consistently focused.	Portrays good effort but at times needs to be reminded to be focused.	Portrays good effort but frequently needs to be reminded to be focused.	Portrays effort but has difficulty to maintain focused.	Does not put forth the best effort; easily distracted.
Level	Able to consistently match body movements with the beat with keen sense of rhythm.	Able to consistently match body movements with the beat but with few errors.	Able to consistently match body movements with the beat but with frequent errors.	Able to match body movements with the beat but with a support from others.	Unable to consistently match body movements and with limited ability to do the patterns.

Patterns	Incorporates all listed activities/patterns in dance composition.	Uses 8-9 of the listed activities/patterns in dance composition.	Uses 6-7 of the listed activities/patterns in dance composition.	Uses 4-5 of the listed activities/patterns in dance composition.	Uses 1-3 of the listed activities/patterns in dance composition.
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Great work! To check if you had learned the lesson, proceed to the next page and take the assessment.



Gauge

Summative Assessment

I. Identification.

1. It refers to the number of times a physical activity is done in each week.
2. It is a principle which states that your muscles adapt to a higher workload over a period, thus an additional increase in workload.
3. It refers to the duration or the length of session of a physical activity.
4. It describes how easy or how hard a person has to work in a certain activity, and it varies from one person to another.
5. It refers to a particular activity that has to be performed to bring about specific adaptations.

II. Multiple Choice.

1. What determines the kind of activity a person should settle to achieve a fitness goal?
A. frequency B. intensity C. type of activity D. time
2. How is the intensity level target determined?
A. by setting the goals C. by computing the THR
B. by counting the RHR D. by increasing the frequency
3. Which of the following principle states that any gains received through regular physical activity will stop if no longer active in performing the fitness program?
A. overload C. progression
B. specificity D. reversibility
4. Following the FITT goals based on training principles, what should be done if the intensity increase?
A. time should be decreased C. stop doing the physical activity
B. time should also be increased D. the type of activity should be changed
5. Arrange the following steps on how to start a dance fitness program:
1. Setting goals
2. Assessing fitness needs
3. Planning for the program
4. Choosing the right activities for the program
A. 1, 2, 3, 4 B. 1, 3, 2, 4 C. 4, 3, 2, 1 D. 2, 4, 3, 1

III. Compute the target heart rate range in five (5) steps.

Ezekiel, 16 years old, wants to monitor his heart rate before he will perform for a dance number on a school program. His resting heart rate is 75 bpm. Compute his target heart rate. Show your solution.

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Answer Key

Activity 1 : Fit and Match

1. B
2. E
3. A
4. C
5. F
6. D

Activity 2: Match and Dance

Column A	Column B	Column C
1	G	LM
2	F	LM
3	E	LM
4	C	LM
5	H	NLM
6	D	LM
7	A	NLM
8	B	LM
9	J	NLM
10	I	NLM

Summative Assessment

- I. Identification
1. frequency
2. principle of overload
3. time
4. intensity
5. specificity

- II. Multiple Choice
1. C
2. C
3. D
4. A
5. B

III. Computation

1. Get the maximum heart rate.
 $MHR = 220 - (\text{age})$ $MHR = 220 - 16$
 $MHR = 204$
 2. $RHR = 75$ bpm
 3. Determine the heart rate reserve (HRR).
 $HRR = MHR - RHR$
 $HRR = 204 - 75 = 129$
 4. Take 60% and 80% of the HRR.
a) $HRR \times 60\%$
 $HRR \times 0.6 = 77$ (4.a)
 $HRR \times 0.8 = 103$ (4.b)
b) $HRR \times 80\%$
 5. Add each HRR% to RHR to obtain the target heart rate (THR) range.
a) (4.a) + RHR =
 $77 + 75 = 152$ bpm (5.a)
b) (4.b) + RHR =
 $103 + 75 = 175$ bpm (5.b)
- Activities 3-9 (Answers may vary)
nge is 152 to 175 bpm.