

50:50

# Millionaire

Structure indicated by the letter E, which is part of the digestive system.

15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3 \*  
2 \*  
1 \*

Pharynx  
Crop  
Intestine  
Gizzard

# Crossword

# Hangman

This muscle originates from the third to fifth junction and inserts onto the medial border ; coracoid process of the scapula (10, 5).

## PECTORALIS MINOR

Congratulations !!!

Next word    End of game

Grade : 100 %

Grade in whole game : 10 %

# What activity?

games  
more interaction  
more games  
activites  
no breakout rooms  
hangman    more engagem  
videos  
millionaire    quizzes  
more mentimeters  
more quizzes    more videos  
more visual

# Games in Moodle

Dr. Sheila Faherty

School of Science & Computing GMIT



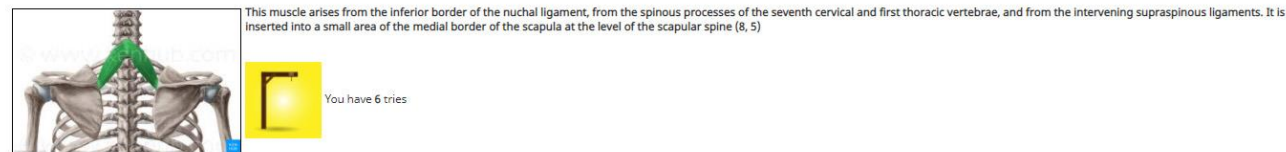
# Climbing the UDL Ladder...

## Digital learning tools

- ✓ Quizzes – well liked by students, formative assessment tool
- ✓ Crosswords – used for anatomy – problem solving activity for learning anatomical language.
  - ✓ Previously paper based but Moodle offered them digitally

Difficult for a student with dyslexia

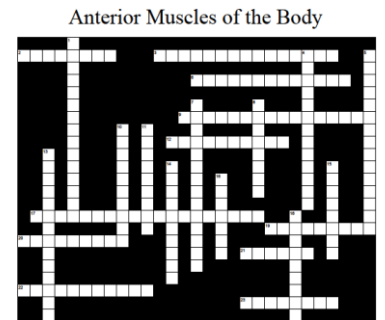
- ✓ Hangman – improved learning experience for this student
  - ✓ What works as an activity?



Letters: ABCDEFGHIJKLMNOPQRSTUVWXYZ

Grade : 0 %

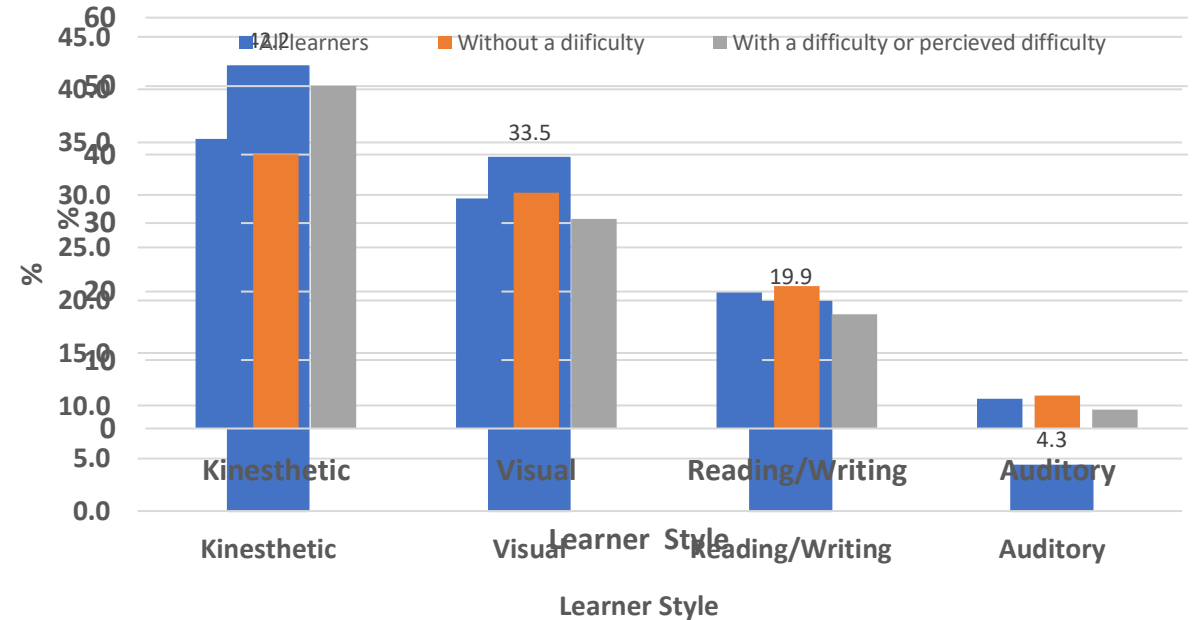
Grade in whole game : 0 %



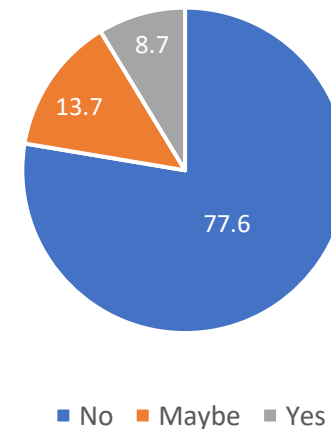
- ACROSS
- 2 Closes the jaw and elevates mandible (6)
  - 3 Closes mouth and protrudes the lip (12, 4)
  - 6 Supinates forearm, flexes elbow (8, 5)
  - 8 Closes eyes, squints, blinks, winks (12, 5)
  - 12 Flattens the cheek, shows (10)
  - 17 Flexes the neck, rotates the head (18)
  - 19 Hip flexor, keeps the upper body from falling backward when standing erect
  - 20 Long, thin, superficial running muscle, normally belonging to the extension of the thigh. This muscle moves both the hip and knee joint. Hip joint: thigh flexion, thigh abduction, thigh external rotation. Knee joint: leg flexion, leg internal rotation (9)
  - 21 Calf muscle which originates in the fibula, which allows for plantar flexion (that is, they increase the angle between the foot and the leg) (5)
  - 22 Raises corners of the mouth (11)
  - 23 Muscle which starts at the inferior part of the ischiofemoral recess (on the pubic bone) and extends down to the upper medial (medial) shaft of the tibia, or tibiae and allows for hip abduction (8)
- DOWN
- 1 Adducts and flexes the humerus (11, 5)
  - 4 A muscle in the quadriceps; muscle is attached to the hip and helps to extend or raise the knee. This muscle is also used to flex the thigh. The only muscle that can flex the hip (6, 6)
  - 5 Capable of both pronation and supination of the forearm (15)
  - 7 Elbow extension (antagonist to biceps brachii) (7, 8)
  - 8 Pulls the corners of the mouth inferiorly (8)
  - 10 Elbow flexion (12)
  - 11 Flattens eyebrows (9)
  - 13 This muscle originates in the superior aspect of the pubis, below the pubic tubercle. It inserts at the middle third of the linea aspera of the femur along the medial lip. It adducts and flexes the thigh at the hip.
  - 14 Straight of the nose, closes jaw (10)
  - 15 Digastric lingual. Toe extension and dorsiflexion of the foot (6, 6)
  - 16 Arm abduction (7)
  - 18 Covers anterior surface of foot to attach to lateral sides of medial (1st) metatarsal and 1st metatarsal. allows for plantar flexion/raises the foot (9)

# Survey Population

- 161 students, 73% Biology  
27% Anatomy & Physiology
- No significant difference between learner styles in both groups.
- 9 % (n=14) of students had a learning difficulty.
- Further 14% (n=22) perceived that they **may** have a learning difficulty.



Learning Difficulty





# Data Analysis- Likert questions on Hangman & Millionaire



Likert scale data was reduced by principal component analysis in SPSS.

14 questions on games

PCA analysis analyses correlations between variables – determine a smaller number of components to explain all the correlations in a more succinct solution.

Fourteen variables – on games distilled into three factors.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0.859

Bartlett's Test of Sphericity,  $p < 0.0000$

# Components

<b>Millionaire 32%</b>	<b>Hangman 22%</b>	<b>Learning 14%</b>
Millionaire_ I was motivated to get a good/perfect score in the game.	Hangman is a good learning tool for my style of learning.	Hangman_ I learned more from doing (playing) the game rather than I did from watching a video/lecture.
Millionaire is a good learning tool for my style of learning.	Hangman I enjoyed this game	Hangman_ Images linked to the game helped me visualise the structure and link this to the spelling.
Millionaire_ enjoyed this game.	Hangman was fun.	Millionaire_ I learned more from doing (playing) the game rather than I did from watching a video/lecture.
Millionaire is fun	Hangman I was motivated to get perfect score	Hangman helped me learn how to spell anatomical/biological jargon.
Millionaire helped me learn how to spell anatomical/biological jargon.	Hangman helped me learn how to spell anatomical/biological jargon.	
Images linked to the game helped me visualise the structure and link this to the spelling		
Millionaire_ I learned more from doing (playing) the game rather than I did from watching a video/lecture.		



# UDL Ladder: Inclusion

Same LO different activity: Not all activities are equal.

A variety of games improved learner experiences.

Learning by doing – not by listening

VLE enables us to adapt to learner styles for engagement