***Instrument for SOP 1***

**Learning Styles Preferences based on VARK and Determining the Key Features and Functionalities of Mobile-Based Learning module for Cellular Reproduction**

Dear Respondents,

The undersigned request your assistance by answering this survey questionnaire entitled Learning Styles Preferences based on VARK and Determining the Key Features and Functionalities of Mobile-Based Learning module for Cellular Reproduction. This is to determine the preferred learning style of the students and determine an effective key features and functionalities of the mobile-based learning module that can enhance the students’ understanding towards the cellular reproduction. Please supply your answers to the following part and each items in the table.

**Researchers Made- Likert Scale Based Survey Questionnaire**

Name: Student 1

Grade and Section:

**Instructions:** Kindly indicate your level of agreement for each statement, using the following parameters below:

1 - Strongly Disagree  
2 – Disagree

3- Undecided  
4 - Agree  
5 - Strongly Agree

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Part I: Learning Style Preferences** | | | | | |
| **Statement** | **5** | **4** | **3** | **2** | **1** |
| ***I prefer to…*** |  |  |  |  |  |
| 1. learn through animations and videos that illustrate mitosis and meiosis. |  |  |  |  |  |
| 1. learn by listening to someone instruction and explanation rather than reading about cellular reproduction. |  |  |  |  |  |
| 1. learn when I can participate and actively involve in the discussion. |  |  |  |  |  |
| 1. learn through reading a detailed discussions about cellular reproduction. |  |  |  |  |  |
| 1. watch video presentations with step-by-step explanations to visualize and understand the concept of cellular reproduction clearly. |  |  |  |  |  |
| 1. learn using a recorded discussion as a learning material. |  |  |  |  |  |
| 1. learn through hands-on digital activities like virtual simulations. |  |  |  |  |  |
| 1. take down notes and use as a learning material. |  |  |  |  |  |
| 1. use a diagram and concept maps in learning complex concepts like cellular reproduction concepts. |  |  |  |  |  |
| 1. use verbal and audio instructions to guide my learning about cellular reproduction. |  |  |  |  |  |
| 1. learn by doing online tasks that allow me to apply concepts in real-time. |  |  |  |  |  |
| 1. learn when I’m able to read on my own and explore complex topics in detail. |  |  |  |  |  |
| 1. learn using interactive charts that visually demonstrate biological processes like cellular reproduction. |  |  |  |  |  |
| 1. learn biology topics through a question-and-answer discussion. |  |  |  |  |  |
| 1. learn through various activities that engage my senses and movement to reinforce concepts. |  |  |  |  |  |
| 1. learn through a reading and writing activities. |  |  |  |  |  |
| 1. use a colored-contents and images materials in learning biological processes. |  |  |  |  |  |
| 1. discuss or share my knowledge with others to deepen my understanding of the concepts. |  |  |  |  |  |
| 1. learn through exploring and manipulating various materials to understand cellular reproduction better. |  |  |  |  |  |
| 1. learn and engage with the discussion through a text-based explanations. |  |  |  |  |  |

**THE QUESTIONS PER LEARNING STYLE**

|  |
| --- |
| 1. Visual Learners |
| 1. I prefer to learn through animations and videos that illustrate mitosis and meiosis. |
| 1. I prefer to watch video presentations with step-by-step explanations to visualize and understand the concept of cellular reproduction clearly. |
| 1. I prefer to use a diagram and concept maps in learning complex concepts like cellular reproduction concepts. |
| 13. I prefer to learn using interactive charts that visually demonstrate biological processes like cellular reproduction. |
| 19. use a colored-contents and images materials in learning biological processes. |

|  |
| --- |
| 1. Aural Learners |
| 1. I prefer to learn by listening to someone instruction and explanation rather than reading about cellular reproduction. |
| 1. I prefer to learn using a recorded discussion as a learning material. |
| 10.I prefer to use verbal and audio instructions to guide my learning about cellular reproduction |
| 14. I prefer to learn biology topics through a question-and-answer discussion. |
| 18. I prefer to discuss or share my knowledge with others to deepen my understanding of the concepts |

|  |
| --- |
| 1. Kinesthetic |
| 1. I prefer to learn when I can participate and actively involve in the discussion. |
| 1. learn through hands-on digital activities like virtual simulations. |
| 1. I prefer to learn by doing online tasks that allow me to apply concepts in real-time. |
| 15. I prefer to learn through various activities that engage my senses and movement to reinforce concepts. |
| 19. I prefer to learn through exploring and manipulating various materials to understand cellular reproduction better. |

|  |
| --- |
| 1. Read/ Write Learners |
| 1. I prefer to learn through reading a detailed discussions about cellular reproduction. |
| 1. I prefer to take down notes and use as a learning material. |
| 1. I prefer to learn when I’m able to read on my own and explore complex topics in detail. |
| 16. I prefer to learn through a reading and writing activities |
| 20. I prefer to learn and engage with the discussion through a text-based explanations. |

**Guidelines:**

1. The survey-questionnaire contains 20 statements which were divided into four main categories determined through VARK (Visual, Aural, Read/Write and Kinesthetic). Each category has 5 statements that are randomly distributed.
2. The respondents are required to rate according to their preferred learning style using the following scale: 5 (Strongly Agree), 4 (Agre), 3 (Undecided), 2 (Disagree), 1 - Strongly Disagree.
3. The four categories have a corresponds 5 statements which will have an overall 25 points.
4. The respondents must obtain 20 point per category to indicate the most preferred learning style. If multiple categories reach 20 points or higher, the respondent may have a multimodal learning style.
5. After scoring, the results will be analyzed to identify dominant or combined learning preferences, which can guide the features of mobile-based learning module, ensuring they align with the diverse learning styles identified through the survey.