

Learning in VR

Survey Flow

Standard: Introduction (6 Questions)
Standard: Post-Learning Test (29 Questions)
Block: Personal satisfaction & engagement with the learning material (20 Questions)

Branch: New Branch

If

If Condition Non-Virtual Environment Is Not Selected

Standard: Virtual presence questions (6 Questions)
Standard: VR novelty questions (2 Questions)
Standard: Human Avatar Q's (1 Question)

EndSurvey:

Page Break

Start of Block: Introduction

Page Break

Q22 Participant Number

Q18 Condition

- Non-Virtual Environment (1)
- Virtual - No Tutor (2)
- Virtual - Human Tutor (3)
- Virtual - Block Tutor (4)

Q19 Age

Q20 Gender

- Male (1)
- Female (2)

Q55 Subject of Study

Q65 Do you have any learning disabilities which could impact your performance?

Yes (1)

No (2)

Prefer Not to Say (3)

Page Break

Q67 Please complete the following test. Take your time and read the questions carefully. This test is negatively marked to discourage random guessing. Therefore, if you don't know the answer you can leave it blank. Once you have moved on from a question you won't be able to revisit the question. Good Luck!

Q54 Arrange the following stages from 1 to 7 (7 marks)

(If you do not wish to answer this question leave the stages in the order presented, if you rearrange any of the stages the whole question will be marked)

- _____ Impons stage (1)
 - _____ Gresians stage (2)
 - _____ Furlagane stage (3)
 - _____ Negirans stage (4)
 - _____ Arderlons stage (5)
 - _____ Borgavari stage (6)
 - _____ Levorg stage (7)
-

Q26 What is the name of the planet that Crixwins inhabit? (1 mark)

- Arun (1)
 - Arilia (2)
 - Alun (3)
 - Kurin (4)
-

Q30 How are the caverns on the planet's surface created? (1 mark)

- Left behind when Crixwins emerge from the ground (1)
 - A type of flora (Gritin) form sacs of spores underground, once the spores are released, a crater is left behind. (2)
 - A type of flora (Lo'roon) form sacs of spores underground, once the spores are released, a crater is left behind. (3)
 - A type of flora (Gritin) cause vibrations which travel through the soil. (4)
-

Q31 What forms once the gas secreted by the Crixwin cools and sublimates in the cavern? (1 mark)

Q32 What are the purposes of the vines which form when the gas cools? (2 marks)

- They prevent the caverns from collapsing (1)
 - They are used to absorb nutrients from the soil (2)
 - They are what form the Crixwins organs (3)
 - They are what form the Crixwins Skeleton (4)
-

Q33 What is the name of the first organ that Crixwins develop? (1 mark)

- Ufrot (1)
 - Vines (2)
 - Gritin (3)
 - Epidermal tissue (Skin) (4)
-

Q34 What is the initial function of the Crixwin's brain? (1 mark)

- Regulation of the respiratory system (1)
 - Motor Control (2)
 - Consciousness (3)
 - Directing the flow of vital nutrients and processes (4)
-

Q35 In what developmental stage does a Crixwin develop consciousness? (1 mark)

- Stage 7 (1)
 - Stage 4 (2)
 - Stage 5 (3)
 - Stage 3 (4)
-

Q36 Which is the most pivotal stage in a Crixwin's development? (1 mark)

Q37 How do Crixwin's detect sound? (1 mark)

- Sensory systems which are developed for hearing (1)
 - Proprioception (2)
 - They sense the vibrations (3)
 - They cannot detect sounds (4)
-

Q38 What is used to form the skeleton AND what is the name of the skeleton? (2 marks)

Q39 What is secreted into the Crixwin's interior cavity? (1 mark)

- A gaseous substance (1)
 - Spores (2)
 - Irwigs (3)
 - Crixjuice (4)
-

Q40 In what stage does the Crixwin's digestive and respiratory systems develop? (1 mark)

Q41 Where is the respiratory system located? (1 mark)

Q42 How does the Crixwin take in the atmosphere? (1 mark)

- Through a selectively permeable membrane on the epidermis (1)
- Via large permeable sacs (irwigs) scattered throughout the epidermis (2)
- Via small pockets (irwigs) scattered throughout the epidermis (3)
- Via the Ufrot (4)

Q43 What is the name given to the Crixwin equivalent of blood? (1 mark)

Q45 In what stage does the Crixwin's eyes and mouth develop? (1 mark)

Q46 How many digits does a Crixwin have? (1 mark)

- 12 (1)
- 20 (2)
- 10 (3)
- 16 (4)

Q47 From what do the mouth and eyes develop? (1 mark)

- Irwigs (1)
 - Vines (2)
 - Epidermal tissue (3)
 - Ufrot (4)
-

Q48 At what stage does a Crixwin develop teeth? (1 mark)

- Stage 8 (1)
 - Stage 6 (2)
 - Stage 7 (3)
 - They do not have teeth (4)
-

Q49 What do Crixwins eat? (1 mark)

Q50 What natural instincts do Crixwins possess? (1 mark)

- Mating with other Crixwins (1)
 - Which creatures are suitable prey (2)
 - Avoidance of toxic material (3)
 - Which trees yield the best sap (4)
-

Q51 When do Crixwins reproduce? (1 mark)

- When they reach full maturity and mate with other Crixwins (1)
 - When a Crixwin is nearing the end of its life (2)
 - When Crixwins release spores from an irwig (3)
 - When the crixjuice contains excess nutrients (4)
-

Q52 What is the lifespan of a Crixwin? (2 marks)

Q53 Arrange the following phrases into the correct order (From stage 1 to stage 8) (8 marks)

(If you do not wish to answer this question leave the phrases in the order presented, if you rearrange any of the phrases the whole question will be marked)

- _____ The newly formed neurological organ (ufrot) continues directing nutrients from the soil into the construction of the skin and skeleton (1)
- _____ The Crixwin's digestive and respiratory systems develop, and the vital Crixjuice is secreted into the Crixwin's interior cavity (2)
- _____ The gas sublimates into solid vines and absorbs nutrients from the soil (3)
- _____ The Crixwin's eyes and mouth develop, allowing it to see and eat, and marking the end of its biological development (4)
- _____ Gas is secreted into a type of hole in the ground by a parent Crixwin (5)
- _____ The vines use nutrients from the soil to form the first part of the brain (6)
- _____ The Crixwin lives its life, learning more about its environment and building on the basic knowledge provided by the ufrot's subterranean development (7)
- _____ The Crixwin emerges (albeit blind and without a mouth) from its kurin and its body undergoes the changes necessary for life on the surface (8)

End of Block: Post-Learning Test

Start of Block: Personal satisfaction & engagement with the learning material

Q55 Please answer the following questionnaire about your personal satisfaction and engagement with the learning material, by rating how strongly you agree or disagree with the statements. Remember this questionnaire is subjective, there are no 'right' or 'wrong' answers.

Q2 The learning experience captured my interest

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q3 I found it easy to focus on the information provided

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q4 The method of learning was appealing to me

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q5 I was very absorbed in the learning experience

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q6 I enjoyed the learning experience

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q7 I put a lot of effort into learning the information

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q8 It was important for me to learn effectively so that I could perform well on the test

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Display This Question:

If Condition != Virtual - No Tutor

Q9 The presence of the tutor increased my motivation to learn

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Display This Question:

If Condition != Virtual - No Tutor

Q10 The presence of the tutor was NOT distracting

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Display This Question:

If Condition != Virtual - No Tutor

Q11 I liked the tutor which was present in the learning experience

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Page Break

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q60 I would prefer a tutor which was more realistic in terms of appearance

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q61 I would prefer a tutor which was less realistic in terms of appearance

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q62 I would prefer a tutor which was less realistic in terms of behaviour

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q63 I would prefer a tutor which was more realistic in terms of behaviour

- Strongly agree (1)
 - Agree (2)
 - Somewhat agree (3)
 - Neither agree nor disagree (4)
 - Somewhat disagree (5)
 - Disagree (6)
 - Strongly disagree (7)
-

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q68 I would prefer a tutor which was more realistic in terms of appearance

- Strongly agree (1)
 - Agree (2)
 - Somewhat agree (3)
 - Neither agree nor disagree (4)
 - Somewhat disagree (5)
 - Disagree (6)
 - Strongly disagree (7)
-

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q69 I would prefer a tutor which was less realistic in terms of appearance

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q70 I would prefer a tutor which was less realistic in terms of behaviour

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Display This Question:

If Condition = Virtual - Human Tutor

Or Condition = Virtual - Block Tutor

Q71 I would prefer a tutor which was more realistic in terms of behaviour

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Display This Question:

If Condition = Virtual - No Tutor

Q64 I would prefer to have a tutor present in the learning environment

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

End of Block: Personal satisfaction & engagement with the learning material

Start of Block: Virtual presence questions

Q25 Please answer the following questionnaire about how immersed you were in the environment and your feelings of virtual presence. Remember this questionnaire is subjective, there are no 'right' or 'wrong' answers.

Q12 How engaged were all of your senses?

- Not at All (1)
 - Slightly (2)
 - Moderately (3)
 - Very (4)
 - Completely (5)
-

Q13 How aware were you of events occurring in the real world around you?

- Not at All (1)
 - Slightly (2)
 - Moderately (3)
 - Very (4)
 - Completely (5)
-

Q14 To what degree did your experiences in the virtual environment seem consistent with your real world experiences?

- Not at All (1)
 - Slightly (2)
 - Moderately (3)
 - Very (4)
 - Completely (5)
-

Q15 To what degree did you feel confused or disoriented at the end of the experimental session?

- Not at All (1)
 - Slightly (2)
 - Moderately (3)
 - Very (4)
 - Completely (5)
-

Q16 Were you involved in the experimental task to the extent that you lost track of time?

- Not at All (1)
- Slightly (2)
- Moderately (3)
- Very (4)
- Completely (5)

End of Block: Virtual presence questions

Start of Block: VR novelty questions

Q56 Have you experienced Virtual Reality before taking part in this experiment?

Yes (1)

No (2)

Display This Question:

If Have you experienced Virtual Reality before taking part in this experiment? = Yes

Q57 Estimate how many times you have experienced VR (NOT including this tutorial)

1-3 (1)

3-5 (2)

5-7 (3)

10+ (4)

Page Break

End of Block: VR novelty questions

Start of Block: Human Avatar Q's

Display This Question:

If Condition = Virtual - Human Tutor

Q58 Did you notice anything odd about the human avatar? (if YES please specify)

Yes (1) _____

No (2)

End of Block: Human Avatar Q's
