

## Topics in Applied Linguistics: Virtual Reality (VR) enhanced language learning

### **Task 4 “Introduction to Virtual Reality”**

If we look at the evolution of mankind, we quickly notice that this evolution has continued over the decades with more new developments. From cave painting, which was a method for communicating ideas, useful facts and events among people, to the hieroglyphs on pyramid walls to the latest technology- virtual reality.

Every intellectual development brought us a little further into the digital age. This is why virtual reality is currently experiencing a huge hype. To go into the matter in more detail, the concept of “virtual” is described by Webster’s New Universal Unabridged Dictionary (1989) as “being in essence or effect, but not in fact”.

Nowadays the key elements in experiencing virtual reality are roughly divided into four core areas- virtual world, immersion, sensory feedback, interactivity.

The virtual world can be described as the content of a given medium which solely exist in the mind of its originator. One of the most important thing is that a virtual world can exist without being presented in a virtual reality system. This means that figures, music and landscapes are connected in a way that the viewer is looking at a system that brings various objects and interactions closer together in a physically immersive, interactive presentation. All this is experienced via virtual reality.

Furthermore, when taking a closer look at “immersion” we can say that it is the sensation of being in an environment, which can be a purely mental state or can be accomplished through physical mean. An alternative world could be a representation of an actual space that exists elsewhere, or it could be a purely imaginary environment. When reading science fiction books or playing for example a Harry Potter computer game, alternative worlds are also transmitted to a person. Through the power of imagination, somebody can put themselves in the protagonist’s shoes and receive superpowers or the ability to talk to objects.

Sensory feedback is an essential part of virtual reality, which is obtained on the basis of physical position. Above all, the visual sense receives feedback. Here the system tracks the

movement of a specific person. A typical VR system tracks the participant's head and at least one hand or an object held by the hand.

However, in order for virtual reality to appear interactive, it should at least react to user's actions. An example here would be to influence a computer-based world or to change one's point of view within a setting. Interactive fiction can be defined in terms of the ability of the player to interact with the world by changing location, picking up or dropping objects, flipping, switches etc.

Technology has also become an integral part of our school system. Although many critics are still in disbelief, it is a fact that English teaching and learning could benefit from virtual reality.

On the one hand can our digital generation experience a totally different learning process itself through virtual reality, due to the stimulation of all senses. And on the other hand, can a pedagogue use this advantage to meet all the requirements regarding their learning styles (visual, auditory or kinetic). As a matter of fact, students will have an active rather than passive experience.

For instant, the use of technology can be applied to teaching subjects around London, New York or even to the hometown of the students. A teacher should ask himself/herself the question why they let their learners stubbornly learn facts about sights and the city by heart to which they can't even draw a connection. Through the digital word, a sightseeing tour could be designed in which not only special features are within reach. But also, can a fun and effective learning environment be created.

In summary, it can be said that an outstanding visualization, which wouldn't be possible in a traditional classroom could be provided through the use of technical aids. This would not only increase the engagement of students but also improve the quality of education.

## **Task 5 “Grocery shopping and cooking task” implemented with help of 360° Media.**

The conscious handling of food and healthy nutrition can be quite a challenge for children in today’s generation. This already starts with the selection in the supermarket. Fast food and sugary drinks often replace proteins and vitamins. In order to avoid this and to give students a better overview of their eating habits, the use of 360° Media could be the perfect solution. First, learners can choose their favourite meal from different grocery lists. These could be healthy burgers, casseroles or even pasta dishes. Once this has been selected, students find themselves in front of a supermarket.

Now they have to walk past the shelves and look in the different aisles for the appropriate ingredients. To make the learners more aware of the contents of each product, they can always choose between a healthy and unhealthy option. They have to click on different hotspots in order to see how much fat and sugar are hidden in their daily food. At the same time units of measurement such as kilograms and litres can be practised.

After everything is in the shopping cart, another Hotspots opens. At the checkout, the students will become aware that healthy cooking does not necessarily means spending a lot of money.

At home (kitchen) the preparation of the food begins. Cooking pots, pans and also kitchen equipment can be repeated. Examples are, chopping the onions on the chopping board, mash the tomatoes or peel the potatoes. In order to provide the students not only with a visual step-by- step guide, short audio clips can be included to practice the correct pronunciation. After all the ingredients have been processed, learners receive their finish dish and the task is solved.

To sum up, these individual steps do not only offer practice- oriented learning but also an active learning process can take place by linking all the individual steps. Because 360° Media presents real- life scenarios, the learning process can take place outside the classroom and every time a student finds himself/herself in a supermarket, he/she will actively pay more attention to the individual products.