Original Research Article

Application Research of Multimodal Sensing Technology in Online Classroom

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Abstract: Online classroom can be said to be the result of the combination of Internet technology, multimedia technology and classroom teaching.In particular, since the 2020 new crown, many schools have implemented online courses, as an alternative to suspension during the epidemic.Multi-mode perception technology is a very practical technology to carry out online classrooms. It can make classroom teaching diversification, making classroom teaching more lively and relaxed, further promoting the improvement of students' interest in learning.Therefore, we should actively promote the use of multi-modal perceptual technology online class. Below, we will carry out some analysis according to this topic.
Keywords: Multimedia technology; Multimode perception technology; Online classroom; Application; Research

1.Introduction

In recent years, with the continuous development of multimedia technology and multi-level application in various fields of society, it also promotes the continuous application of multimodal perception technology in online classroom.In online classes, multimodal perception technology belongs to the mode of communication by mobilizing people's senses of hearing, seeing and touch, and combining various languages, pictures, sounds and actions with some symbolic resources.Its value is already preliminary. Especially in foreign language teaching is unique.

This article specializes in analyzing multi-modal perceived technology online classroom applications, combining this project proposes some programs that can play effective recommendations.

2. What is multimode perception technology

Modal, people themselves interaction between the external environment.Multimodal perception technology was first proposed by Kress and vanLeeuwen in 1996.It can be said that multimedia technology has developed to a certain extent.Specifically, it refers to collecting a series of data samples -- multimodal data -- by using a variety of methods and perspectives for a specific target scene to be described.Any method and viewing angle in this link is a modal.In a narrow sense, multimodal information covers modal images and text, video and voice, vision and touch with different characteristics.In general, there is also a combination of different feature fuses from the same modality information, plus data fusion from different types of sensors.

Based on multi-mode mode, teaching mode and teaching effects can be further optimized, improve the vitality of the classroom, improve the teaching effect of teachers and students' learning effects.[1]

3. Multi-mode perception technology online classroom basic application advantages

The use of multi-mode perception technology in classroom teaching is mainly for English teaching.Below we use primary school English teaching as an example to analyze the basic use of multi-modal perceptual technology online classroom.Under the guidance of core literacy concept, cultivate students' thinking quality has become an important objective of primary school English teaching.[2] The teaching model we have taken in the past is too single, just through blackboard and teaching materials to explain the classroom content.Teaching models and means relatively single, it is difficult to mobilize students 'interest in learning, and it is difficult to cultivate students' thinking from a multi-angle.Therefore, students can only be in a state of passive learning. In particular, students have difficult foreign language communication skills.Therefore, it is difficult to meet the requirements of English teaching in the new era.

In recent years, the promotion of online classrooms in China is increasingly popular.Since the COVID-19 pandemic in 2020, many schools have widely introduced online courses as an alternative to being forced to close classes during the pandemic.This also further promotes the scope of application of online classrooms.On-line class itself is a combination of Internet technology and classroom teaching, and further provides a broad world to multi-modal perception technology.

The basic advantages of the application of multimodal perception technology in online classroom are as follows: the boring situation of classroom teaching can be changed immediately, the teaching mode is more lively and diversified, and students can be immediately aroused to learn interest and improve classroom participation.According to some foreign teaching experience, multi-

mode perception technology has been promoted online, and it is possible to make students' language memory capabilities and language understanding.

4. Application measures of multi-modal technology in primary school English

At present, multimodal technology has been used in primary school English teaching in China, which has achieved some achievements, but also has some shortcomings[3].Below we analyze the use of multi-modal technology in primary school English.

4.1 Main use ideas

The multimode belongs to the interaction between two senses.Multi-mode technology is used in primary school English, mainly use points in: language and contextual language environment, basic vocabulary and grammar, basic meaning and media levels. The main idea lies in the effective integration of pictures and texts. Compared with the traditional teaching mode of blackboard and chalk, multi-modal technology is more multimedia means such as PPT.Integrate video and audio.This requires us to first create a beautiful multimode English paint to primary school students.Picture Book should pay attention to include a concise and beautiful picture, concise text plot and rhyming English language, plus the meaning of diversity.In short, you must meet the psychological cognitive characteristics of primary school students, you can inspire primary school students' interest in English.The most basic point of teaching is to maximize the "combination" of multi-senses and different methods in teaching, to regard students as the main body of teaching, teaching should be more integrated with the situation in life. Teachers should be more of a guide than an arbiter.

4.2 Combine teaching needs to select teaching resources

We should combine the teaching needs of this class to select the appropriate painted resources.If you can't find the resources you need to meet the needs of teaching in a time, the teacher can write a picture book.In the process of selecting teaching resources, teachers need to first selection according to the teaching theme, and then select the teaching resource for the teaching resources.

For example, in the first volume of My Schoolbag for grade four, some picture books related to "My schoolbag" can be selected or created during online teaching, and some vivid and interesting stories can be added to the picture books.It should be noted that the difficulty of picture books must be moderate, too simple and too difficult are not desirable.It is easy to cause lack of challenge and freshness.It's too difficult to make students "hope", thereby losing interest.In addition, teachers should also actively be actively developed to the development of the repository, select the drainage library that is more in line with the current era.

4.3 Do a good job in teaching design to enhance teaching effects

As a unique teaching form of primary School English, English picture books can not only extend from classroom to extracurricular, but also change from instilling knowledge to guiding students to acquire knowledge actively.Cultivate students' good English learning skills by integrating various teaching activities.Therefore, teachers can combine English in classroom activities to improve students' classroom participation, so that every student can master English basic knowledge with English drawn.

For example, in the course content teaching of "Letusspell", teachers can choose high-quality picture books named "LoveandCooperation".In this picture book story, many words contain the vowel O. Teacher can teach students the pronunciation rules of O vowel.In teaching, teachers can use online teaching to interact with students for many times. In English teaching, the school has established an oral easy platform. Teachers can make full use of this platform to communicate with students and help students correct inaccurate pronunciation.

4.4 Help students build and improve English integrated

English teaching materials for primary schools are formulated according to the level of primary school students. Their contents are relatively simple and their knowledge is not comprehensive enough, which limits the English level of primary school students. Primary school English paint this, vocabulary, description, expression, storyline is very rich.Therefore, teachers can use primary school English to read this reading, enrich the English vocabulary of primary school students, exercise the English reading ability of primary school students, and improve the English speaking level of primary school students.Through the plots in the English picture books of primary schools, the students are brought into a certain situation mode to exercise their emotional experience and expression, constantly improve their English ability and level, and improve the core quality of English.

For example, in the reading of SnowWhite, a primary school English picture book, teachers can ask students to act out the whole story in the form of role-reading, so that students can figure out the characters' characteristics.Let the students experience the emotions and emotions that each character wants to express.

5. Conclusion

In recent years, with multimedia technology in various fields in society, multi-mode perception technology has also been urged to operate online.It can make classroom teaching diversification, making classroom teaching more lively and relaxed, further promoting the improvement of students' interest in learning.Especially in the online teaching in English teaching is more obvious.Therefore, we should actively promote the use of multi-modal perceptual technology online class.

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