

Development of interactive multifunctional learner using IoT technology

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IoT 기술을 이용한 상호작용 다기능 학습기 개발

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Abstract

Interactive content differs from audio and video content. The reason is that content compatibility is difficult. In this study, interactive content patterns are classified. The categorized patterns are generalized and developed as a tool for creating interactive content.

1. Introduction

Interactive content differs from audio and video content. The reason is that content compatibility is difficult. In this study, interactive content patterns are classified.

2. Content Creation Tool

The content creation tool is a method of selecting a sound source and an option according to a predetermined content scenario.

It can easily create interactive content. Produce interactive content such as random response scenarios, selective response scenarios, and sequential response scenarios. The learner has a built-in battery. It is possible to move. It has a built-in sensor for motion recognition necessary for interaction between the elderly and infants. Sound sources and interactive contents are built into the built-in SD card. The communication module is used to interlock with external interlocking devices and video output devices. LEDs are used for learning status and for inducing interest in infants. IR receivers are used by parents or learning leaders to induce interest in learning for the elderly and young children. Optical pattern recognizers recognize fine patterns printed on publications. The learner hardware to be developed uses SoC, and most functions can be implemented. The production cost is produced at a low cost compared to

the existing product. The communication part and the sensor part, which have a high manufacturing cost, can be added or removed depending on the content.



[Fig 1] Contents trainer

Reference

- [1] Devries, Y., E. The interactivity component of distance learning implemented in an art studio class Education, 180-184.