



# Using an intelligent tutoring system to teach university students about augmentative and alternative communication

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## What is an intelligent tutoring system?

An intelligent tutoring system (ITS) is an online programme that allows students to learn interactively in their own time.

An ITS uses artificial intelligence to check the students' work and to provide feedback and hints to help the students work through the course.

## Why did we do this study?

Training of team members who work with augmentative and alternative communication (AAC) is extremely limited. In Africa, there is only 1 university that provides a postgraduate degree in AAC and other institutions only provide short modules at an undergraduate level. A need for an introductory course on AAC that could be accessed by students continent-wide was identified.

This study wanted to find out if an ITS could be used to teach university students in Africa about AAC.



## How did we do this study?

This study included 2 components:

1. A team of 21 professionals with specialist knowledge in AAC developed the AAC course.
2. The AAC course was presented to 98 speech-language therapy and special education students from 5 universities in Africa. Their knowledge was tested before and after completing the ITS-based AAC course.

## What did we find?

The students showed improvement in their knowledge about AAC after completing the ITS-based AAC course.

The students thought that the course was practical and had valuable and useful content.

The students could use the ITS to complete the course, using technology available to them, despite some challenges.

## What does this mean?

The ITS-based AAC course was well received by the students.

The course offered a good way of teaching students in Africa about AAC.

