

Theme: Artificial Intelligence

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Artificial Intelligence: Changing the Face of International Language Testing

Abstract

This session describes how Pearson's fully automated PTE Academic tests work and how although they use Artificial Intelligence (AI) technologies, they rely on human judgement and marking in order to train the systems in the first instance and also to continually check that the tests are valid, reliable and fair for both academic and migration purposes.

Summary

Millions of English as a second language students are assessed each year on both receptive and productive language skills for entry into English speaking universities, professions or for migration purposes. These tests are high stakes and global. So how can these skills be tested with high validity, reliability and lack of bias and obtain almost immediate feedback, accurate scoring and diagnostic information? This talk will describe how research and advances in AI technologies have resulted in the development and wide scale use of PTE Academic tests, which assess and measures oral, aural, reading and written skills, on a global scale. AI as a concept is not new, however the enormous computing power now available effortlessly processes big data and it is applied to many areas of society, from banking to entertainment.

In an educational assessment context, these AI technologies can be used for formative or summative purposes. Public perception in this area has often focused on the lack of human interaction and judgement when automated marking technologies are used. This talk will demonstrate that in many ways, the opposite is true. The use of AI allows the judgement of hundreds of human assessors to work in unison, increasing validity in terms of broader content representation, and removing bias and low reliability issues, essential for student choice. These technologies also significantly reduce teacher workload in terms of marking student work, yet still benefiting from diagnostic feedback on their students, which releases valuable time to facilitate personalised teaching and learning.