

Research and Development Projects 2021-22

Article/Note on Video

Importance of English reading comprehension

Underdeveloped reading comprehension proficiency may lead to academic failure. In Hong Kong, failure to develop proficiency in English reading comprehension probably would associate with a risk of future school failure. Parents in Hong Kong are reported to have high expectations for English language learning given that admission to post-secondary education requires English language proficiency which is regarded as a key attribute in determining employability of graduates.

Students with reading comprehension difficulties

There has been research evidence that Chinese students with English reading comprehension difficulties are weaker than typical Chinese readers in a wide range of cognitive-linguistic skills. In particular, they have lower performance in a wide range of morphological awareness measures.

What is morphological awareness (MA)?

Morphological awareness (MA) is defined as awareness and ability to access, analyse and manipulate the smallest meaning unit in a word or morphemes (bases and affixes). MA has been established as a crucial skill in word reading, vocabulary and reading comprehension. L1 research has shown that MA intervention helped improve the reading comprehension performance of students with reading comprehension difficulties.

Reading Step By Step: Affix

Recognizing the challenge faced by students with reading comprehension difficulties, a team led by Professor Yeung Siu-sze Susanna from The Education University of Hong Kong developed an online English learning platform called *Reading Step by Step: Affix*. Aimed at students from P4–6, the SCOLAR-funded platform focuses on improving their MA and reading comprehension. The platform consists of 13 modules with a total of 25 English affixes. Affix knowledge helps us analyse the meaning of unknown words. For example, we already know that the affix *un* has the meaning of not. When we encounter a word that starts with *un*, even if we never saw the word before, we can still analyse the meaning of it. *Unhappy* means not happy. We believe, affix knowledge helps strengthen students' MA and enrich their vocabulary, hence improves their reading comprehension.

In each module, the basic knowledge of the affixes is taught through interactive teaching videos and short exercises and games. The package also teaches students the strategy of analysing the meanings of unfamiliar words through mapping the meanings of affixes and root words. Each module begins at the word level and gradually increases its difficulty to sentence level and text level. After consolidating student's knowledge of the affixes and strategy, the platform demands students to apply their knowledge in sentence-level. Followed by it, a reading comprehension task allows students to further utilise their learned knowledge and strategy. At the end of each module, an engaging mastery game which is relevant to the taught content concludes the learning of the module.

The platform also includes assessments to track students' progress. Students take an assessment when they first log in and again after they complete all modules. Performance of the pre- and post-assessments is displayed after the post-assessment so that students can be informed on their improvements.

The project

Despite the challenges brought on by the COVID-19 pandemic, the *Reading Step by Step: Affix* platform has shown promising results. It has improved students' English word reading and reading comprehension skills. This is a significant achievement considering the difficulties faced during school closures and the increased burdens on teachers and parents. But the benefits go beyond just the students. Teachers and parents also appreciated the platform. While traditional face-to-face instruction remains important, well-designed digital learning platforms like this can provide effective self-learning materials. They offer flexibility and can complement classroom teaching, creating a blended learning environment.

Dissemination

Reading Step By Step: Affix has been introduced and promoted in local primary schools. Apart from access to the platform, a 2-hour teacher workshop and 1-hour parent workshop were given to each participating school for teachers' professional development and support to parents with the aim to support students with reading comprehension difficulties. By the end of the project, 12 teacher workshops and 6 parent workshops/sharing were held for 96 teachers and 184 parents. 3634 student accounts were created for students from 12 schools.

The research team also held four online public seminars for teachers and four face-to-face public seminars for parents and children to share the project findings and the platform to the public. Fifty teachers attended the seminars and gave 4.04 out of 5 for the usefulness of the event. There were 67 parents registered for the public events. According to the event evaluation result, participants rated 4.29 (likely) out of 5 when being asked if they would let their children use the introduced English learning materials. To further disseminate the findings and experience of the project, the content of the teacher workshop has been developed to create an online professional development package for frontline practitioners.

Based on the findings from the project, the team has three recommendations:

- (1) Providing MA instruction to Chinese students with English reading comprehension difficulties is helpful for their English word reading and reading comprehension development. Specifically, teaching affixes systematically can help these students in terms of English word reading and reading comprehension.
- (2) Using digital platform to deliver the MA instruction is welcomed by students and parents. In designing the digital platform, gamification should be adopted to enhance the learning motivation of students with reading comprehension difficulties.
- (3) Both parents and students need support in using self-directed language learning materials at home. Such materials can be better utilised if they are linked to the school learning and teachers are involved in the process of using the materials.

Reading Step By Step: Affix:

<https://cemtp.eduhk.hk/>