

## Handheld-device Enhanced Learning with Nintendo's Applications Beyond Institution and Country (HANABI Project)

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### Abstract

Students on Japanese degree programmes in the UK spend a valuable year in Japan to immerse themselves in Japanese culture and improve their language skills. However, while in Japan students may suffer from social isolation and limited pedagogical support from their home institutions. The JISC-funded HANABI project used Nintendo DSi consoles to provide mobile language support for students during this year, and to link students with each other and with their tutors in the UK. A key reason for the choice of DSi is that users can handwrite directly onto its touch screen with the stylus, as handwriting practice is essential to master and maintain non-alphabetical languages such as Chinese, Arabic and Japanese. DSi's free software Flipnote Studio allows users to handwrite Japanese characters and record short spoken sentences, save them and share them with other students via Hatena's 'Flipnote Theatre' using the built-in WiFi connection. This facility for creating and sharing enabled the online tutor to set written and spoken language tasks, provide feedback to students in Japan and encourage students to collaborate on story-writing. However, in evaluating student use in the first year it was found that the use of the technology by students was hampered by difficulty in accessing WiFi, time constraints and contact with fellow students in Japan.

From the results of the language test on return and interviews with the students, we concluded that the project has contributed to the students' language learning within the context of their year abroad as a supplement to the learning achieved in formal classes at the host institutions and through cultural immersion. Finding solutions to the technical and social barriers and adapting learning materials following reflection on student feedback has provided a road-map of the way forward to make the learning experience more effective and inclusive.