An online resource for Indigenous health professionals undertaking a graduate diploma

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This poster will outline the pedagogical and design issues encountered in the development of a computer-based resource to support Indigenous health professionals undertaking a postgraduate course by Block mode. The resource aims to guide students in their self-directed studies between blocks. It directs students through scaffolded activities that provide practice for Block mode class work and assessment tasks.

Keywords: independent learning, instructional design, block mode, indigenous students, professional literacy and numeracy, digital divide.

Context

Recent research has highlighted several key issues that need to be addressed in order to increase the rate of successful completion of higher degrees and diplomas amongst Indigenous Australian students. These include the need for student understanding of the requirements of university study and the effect of the digital divide experienced by students from rural and remote regions of Australia. For these students, the digital divide (both from poor internet access and lack of previous exposure to the online environment) can be a hindrance to online learning and presents a design challenge (Johnson et al. 2007) for the development of computer-based resources.

The project

A computer-based resource has been developed to support Indigenous health professionals undertaking a one-year graduate diploma program in Indigenous Health. The course runs in block attendance mode, with six blocks of 5 to 10 days throughout the academic year as well as 50 hours of self-directed learning between each block. The resource provides presentation material and practice activities to develop academic and professional literacy and numeracy through self-directed study between blocks. The activities address each of the text types encountered in the course materials and assessment tasks e.g. clinical assessments and letters of advocacy. Models of each text type are deconstructed and provide a scaffolded approach to the achievement of learning outcomes (McLoughlin 1999). A progression from less to more complex sample texts and practice exercises accommodates the varying levels of experience within the student group.

Design approaches

Instructional design

- Contextualised activities directly support Block content, with activities aligned to assessment and learning outcomes.
- Scaffolded learning, with deconstruction of model texts, gradually guides students to the independent production of texts.
- Model texts aid the development of an understanding of the skill level required for reading, writing and research for both academic and clinical contexts.
- Instant feedback for all activities supports self-directed learning.

Computer-based resource design

- The resource is offered both online and via CDROM to address the issue of poor internet access in remote areas and thus overcome the digital divide.
- A comprehensive paper-based Study Guide aligns course content and assessment with inter-block computer-based activities.
- Navigation in the computer-based resource is mirrored in the paper-based Study Guide.
- Emphasis on the visual e.g. numeracy tasks developed in Flash, potentially address indigenous learning preferences.

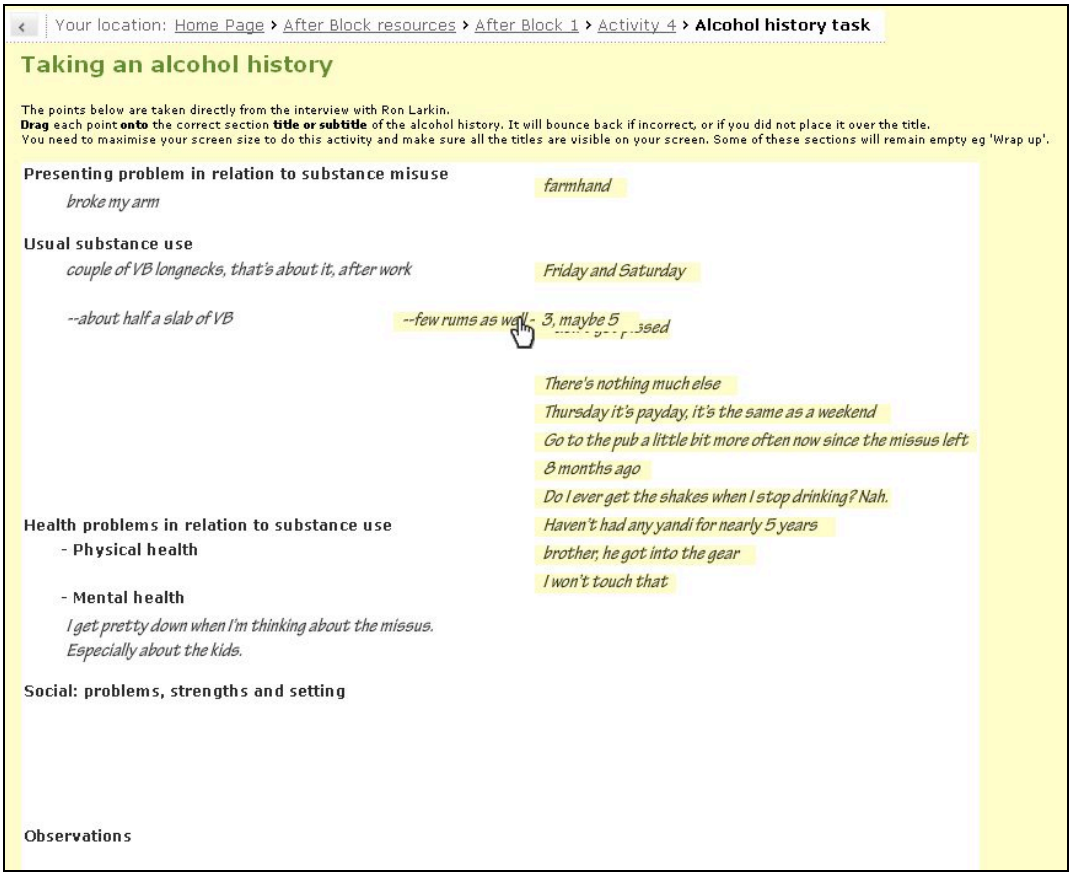

Figure 1: Clinical writing drag and drop activity

Project outcomes

Informal evaluation of the resource has shown that patterns of use vary, with the CDROM being more widely used than the online resource early in course. Students reported difficulty in navigating the resource so a second iteration improved navigation, with top-level links to all activities. In relation to content, the support for assignment writing has been valued most, in particular the model texts. Less use has been made of support for skills not directly related to assessment tasks, such as numeracy support. The initial plan for social and collaborative interaction online was undermined by the lack of reliable internet access.

There is a need to consider indigenous learning styles in the development of online resources to supplement classroom learning. The design principles recommended for indigenous learners (McLoughlin and Oliver 1999; Nichol 2002) will also apply to a variety of other learner groups. In addition, further research needs to be done on the design approaches that best address the digital divide affecting many indigenous students.

References

Johnson, R., Kemp, E., Kemp, R. & Blakey, P. (2007). The learning computer: Low bandwidth tool that bridges digital divide. *Educational Technology & Society*, *10*(4), 143-155. http://www.ifets.info/journals/10_4/14.pdf

McLoughlin, C. (1999). Culturally responsive technology use: developing an on-line community of learners. *British Journal of Educational Technology, 30*(3), 231-243.
McLoughlin, C. & Oliver, R. (1999). Instructional design for cultural difference: A case study of the indigenous online learning in a tertiary context. In *Responding to diversity. Proceedings ASCILITE Brisbane 1999.* http://ascilite.org.au/conferences/brisbane99/papers/mcloughlinoliver.pdf
Nichol, R. (2004). To grow up in the ashes: Responses of Indigenous teachers to a pedagogy for social education. *The Social Educator, 22*(1), 6-18.
Sharrock. P. & Lockyer, H. (2008). One to one and face to face: A community based higher education support strategy retaining Indigenous Australian university students. *Australian Journal of Indigenous Education, 37*, 28-39. https://doi.org/10.1017/S1326011100016069

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