Report on workshop: e-Assessment In Practice

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Around 70 attendees were drawn from a balanced mix of academic, industrial and defence backgrounds meeting to examine applications of e-assessment. Adherence to the Chatham House rule [1] makes this report a little more abstract than it might be otherwise.

Purpose of symposia

The purpose of the symposia is given as:

“Symposia at Shrivenham provides a forum to Government agencies, military and civilian, industry and research establishments for the exploration and exchange of experience and knowledge, leading to constructive questioning and a synthesising of ideas in a relaxed but professional environment”. [2]

Overview of e-assessment at the symposium

The symposium split into parallel sessions on the first afternoon and a couple of hours of the second morning. It concerned e-assessment from the perspective of industrial suppliers and universities in a fairly even measure - about a dozen representations of each. In-session switching was possible with a little nimble footwork.

There was a dominant move to push e-assessment to a richer interaction beyond multiple choice questions with approaches such as natural language processing of freeform responses, customised virtual worlds and the computer algebra system (CAS)-based approach of STACK.

These ranged from visually compelling virtual reality training software through the specific issues of handling freeform textual input with NLP technologies approach to checking programming assignments. Companies offering regulatory compliance solutions engaged with regulating bodies.

One presentation was given as a live person engaged in a dialog with a pre-recorded colleague. It was an approach I had not seen done successfully but was an illuminating demonstration of the pros and cons of video presentation.
Another interesting presentation concerned the formation of applicable design patterns. These were arrived at by a series of workshops. The first facilitated sharing stories of successful practice, mining them for transferable design knowledge and then identifying where these lessons can be applied. A case study for this involved placing patient medical images on the photo sharing website Flickr. This prompted a concern about patient confidentiality which was easily settled by pointing out the patients were actually animals!

A few talks specifically concerned the e-assessment of mathematics. From the students’ point of view, there was a very positive response for the formative use of the tools regarding the immediate feedback from multiple attempts. The caveat was mainly in the interface where students may have had to adjust.

From the perspective of the teacher, the initial effort was somewhat more though with a potentially rich payoff. The process of authoring and then revising questions in light of student attempts was an area earmarked as one that was unnecessarily costly. Happily, this is an area where STACK is actively being extended.

STACK presentation

Our presentation combined an introduction to the STACK model with a report on latest developments and current work, which I was pleased to find nicely addressed points raised in earlier talks. Particular interest was expressed applying the technology to mechanical training.

Conclusion

Overall, it was a useful, pleasant and well-organised event that benefited from the broad grounding of its attendees and it proved an excellent environment conducive to productive networking and discussion.