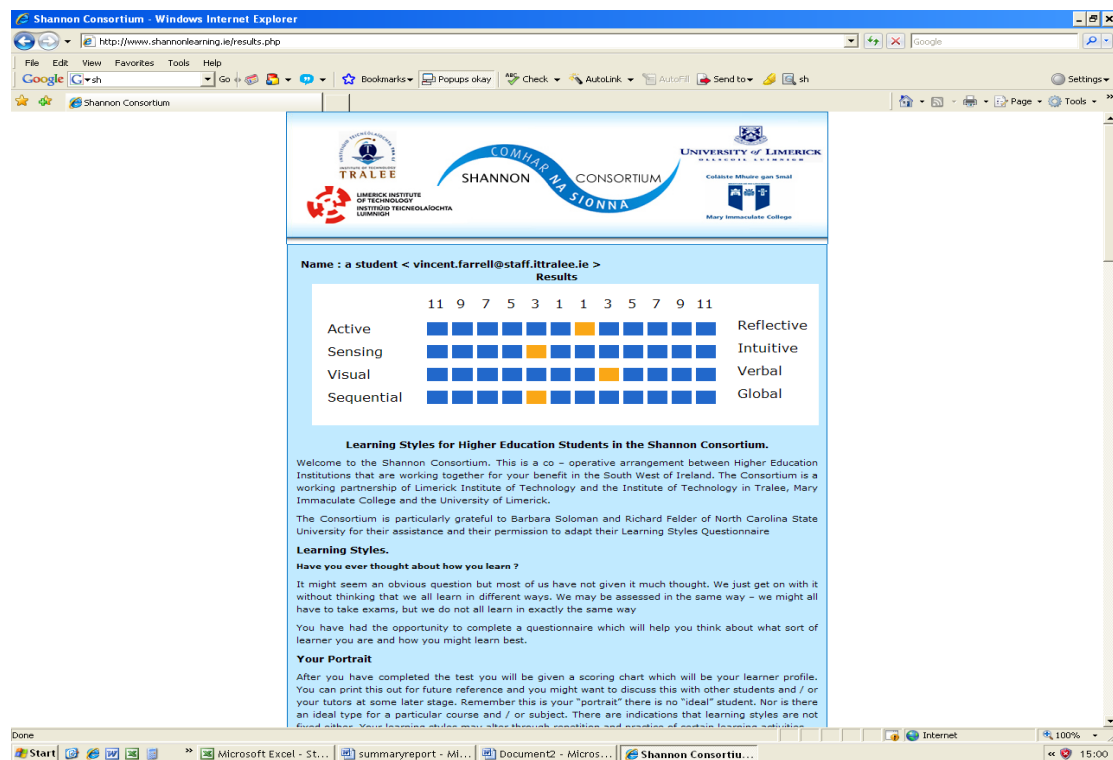


## Educational software that supports the majority learning style

Vincent Farrell, Institute of Technology Tralee  
Liam Boyle, Limerick Institute of Technology  
Michael O'Brien, Limerick Institute of Technology

In September 2007 a major research project was undertaken in the Shannon Consortium of first year Undergraduates surveying students in the following HEIs – Institute of Technology in Tralee, Limerick Institute of Technology and the University of Limerick . Students were invited to undertake an on line assessment of their learning styles. They completed a 44 question self analysis of their learning preferences and this analysis was undertaken on line and the respondents were e mailed a graphical analysis based on their responses to this questionnaire. Their e mailed scores assessed them according to eight different categories see the screen shot below as an example of a student response.



This survey of over 1500 students in the Shannon region identified that there was a strong presence of learners who learn best by using visual methods. The challenge for the Shannon team was to help these learner's learn effectively using visual methods but also using constructivist learning strategies. The team wanted to avoid "giving" the learners visual formats rather than having them create it for themselves.

The team took the view that this was to be most effective when the learner's construct their "own" visual representations of ideas and concepts across a range of disciplines. Software that would enable learner's who lack confidence in their own capacities for creating visual representations of ideas and concepts to produce "professional" graphics would seem to be a very useful learning solution.

The authors of the paper have used mind mapping software as a learning device which will help visual learners very quickly structure their ideas in a visual format. It is a fun and creative way of allowing all students and lecturers to structure their learning using constructivist principles regardless of the learner's "artistic" abilities. Mind mapping software can enable learners to "see" educational technology as a useful solution to enable visual learners to express their ideas in a way that is both useful and memorable. Mind maps can be used for many different purposes, such as brainstorming, structured note-taking, planning, and as advance organisers and revision tools.

The authors will give a brief analysis of the Shannon research but the main focus of the session will be on the application of this research by a review of mind mapping software that is currently available. The authors will review the most popular software packages available and report their findings to the participants based on their experience of using the software as aids to learning. This presentation focuses on the relative merits of various tools, and discusses their strengths and limitations when used to support undergraduate learning in higher education. The authors aim to show how the best software can be used successfully by all learners but particularly learners who have a strong preference for Information Processing (IP) through visual rather than verbal methods.