

Latest Advances in Perception

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New additions to Question Mark Perception are set to address many of the issues that educationalists have been raising as part of their 'wish list' with the company. This paper previews three of the new tools that are due to be released within the next six months.

Background

Question Mark Perception is already the world's leading software suite to enable users to create tests and assessments for online environments such as the Internet and intranets.

Now Question Mark Computing has announced three new important additions to the Perception software family, all aimed at making it the complete CAA solution.

The three new additions are

- Perception for Windows
- Perception Self-Registration system
- Perception Manual Grading (enabling human marking of essays)

Perception today - V2.2

In its current guise as Perception V2.2, users can easily create and deliver questions and multimedia tests on the web. There are four different applications that constitute the software.

- *Question Manager* enables users to create different question types with an easy-to-use Wizard. The questions can be constructed complete with distracters, scores and feedback.
- *Session Manager* enables you to organise your questions into tests or surveys collectively called 'sessions'. The sessions can feature randomly selected questions and conditional jumps.
- *Security Manager* enables you to control sessions and reporting rights. Based online, it creates a security database on your webserver which the is interrogated to establish a user's access rights.

- *Enterprise Reporter* enables you to conduct online reporting. It will analyse responses to your tests/surveys in an easily accessible fashion reviewing questions, answers, scores, and other statistics.

In education, Perception is used for a range of online testing applications, including diagnostic testing, formative and summative assessment and self paced learning.

Perception for Windows

In its first release (scheduled for this autumn), Perception for Windows will provide educationalists with a new tool to conduct self-paced learning or diagnostic testing over a network, via email, CD or even floppy disk. It will also offer a robust summative testing solution, ideal for invigilated environments where many students are simultaneously opening the same test.

Perception's existing authoring tools, Question Manager and Session Manager, are retained in Perception for Windows, although Session Manager has been slightly modified to accommodate the new tools. That means original Perception users will be able to deploy their existing questions with the new Windows tools. To these, Perception for Windows adds two new software applications:

- *Presenter* is a new 'self-contained' tool that enables you to deliver your tests and assessments.
- *Windows Reporter* provides a reporting tool that is both easy to install and use for most of your test analysis needs.

The tests and assessments delivered by Windows Presenter are created and exported to it using a new *Publishing Wizard* within Session Manager. The Publishing Wizard enables you to select the delivery method for your session – either onto a network drive, a CD or for delivery on standalone PCs or floppy disks. The Wizard lets you decide which sessions you wish to publish and where or if you wish to record the answers. The Wizard also provides a broad range of security functions. These include setting passwords for accessing the question, session and answer databases and to let a candidate or test participant take a session.

Perception Presenter

Perception Presenter will run on any 32-bit Windows PC with Microsoft Internet Explorer 4 or above installed. After the test participant has opened Presenter they are asked for a password (if one has been created). They are then asked for their name, before being presented with a list of sessions available. The session selected will then run and supply feedback according to the parameters assigned.

Windows Reporter

Perception for Windows provides the user with a new reporting tool that will offer many of the functions currently available in Enterprise Reporter. Indeed advanced users will have the option of using Enterprise Reporter with the Windows Presenter. However, most users will find that Windows Reporter covers most analytical needs, whilst not demanding the installation of a webserver.

The standard reports within Windows Reporter include:

- Session overview report, that show how many people have taken sessions, including average scores.
- Question statistics report that shows an analysis of the questions and their answers.
- Participant report showing information on single sessions.
- Survey report providing an analysis to questions.
- List report showing who has taken what session.

The introduction of Perception for Windows is a major step down the line towards making the Perception software suite the complete CAA solution.

Perception Self-Registration system

The existing Perception online solution is also receiving a number of major additions. For many users, one of the most exciting will be the Perception Self-Registration system.

Presently, administrators can chose between two ways of running their tests. There is a closed environment where test participants are assigned password-protected tests according to parameters such as time and number of times taken. Alternatively, tests can run in an open environment where any participant can take as many tests as they want. The closed environment offers an ideal solution for formative and high stakes testing. The open route provides an excellent self-paced learning solution.

But now Question Mark has introduced a new self-registration system that enables test participants to enrol themselves. The new system will provide an ideal platform for lecturers wishing to run diagnostic or formative tests without having to import registration data from another source, or get bogged down in creating a new participant database.

The new system enables participants to register online, by entering their email address and other demographic details. The system will provide open or closed access to tests. To register, a participant must enter the requested information on the registration form. The system checks if the participant is allowed to register against its registration criteria. The participant gets confirmation of the registration via email. They can then log-in to take a test.

Accounts

The self-registration system enables test administrators to set different 'accounts' to group test participants and enable them to enrol for tests. The accounts can also be used to govern the information received through the registration process. Administrators set up accounts according to their needs. An account may represent a different department, courses or even seminar group. Each account can:

- have different tests or surveys associated with it.
- use a different registration form, recording different details and sending different emails to the participant.
- use different eligibility material for entry onto the account (say by email address or password).

By adding a third way to allow participants to access online tests and assessments, Question Mark has made Perception an even more flexible tool for conducting tests and assessments, and increased the gap between itself and its competitors.

Essay Grading System

Question Mark Computing has often been asked to provide a way for users to create and mark essays within Perception. The launch of Perception V2.2 saw the first move towards that with the inclusion of an essay question. At the time, there was no formal method of marking these questions. But now, Question Mark has added an essay grading system to enable administrators to review the essays and set a score. The score is recorded in Enterprise Reporter's database. This will enable essays or text answers to be incorporated within tests, which can then contribute to the overall score.

The Essay Grading tool is to be found within Enterprise Reporter's Results Manager section. When opened, it displays a list of essays answered by a participant that need grading.

To have full control of the Essay Grading tool, you must be assigned as the administrator in Security Manager. As an administrator, the Essay Grader gives you the following options:

- Create and edit criteria to grade an essay question.
- Review scores assigned by other graders
- Re-grade an answer
- Grade essays yourself

Using the software, authors or administrative users can define criteria for other graders. Once defined, graders can also review and score essays. The system allows a single grader to view a question and assign scores. These can then be reviewed by someone else.

The new tool also gives the administrator the option to define up to 20 'rubrics' (categories or areas) in which to score the question in. Each rubric can have a different score. If an essay has a maximum score of 10, you might define a rubric of relevance with 5 points, another of spelling with 3 points and a rubric of grammar with 2 points. This would guide a grader's scores.

The new essay grading system is the first of a number of initiatives that Question Mark is currently taking in this area. In the future, Question Mark hopes that Perception users will be able to chose from a range of essay marking solutions.

Summary

Question Mark Perception is already the most comprehensive online computerised testing and assessment solution currently available. By adding a Windows presenting tool, Question Mark has now brought the benefits of its system to a wider audience. The addition of other new modules will further enhance its already high reputation.