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Q-interactive and the Undiscovered Country: A conversation on the new digital platform for assessment Carson McEvoy, M.S.E. &

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In The Undiscovered Country, the crew of the starship Enterprise must grapple with new changes to their reality as former enemies and foes, the Klingons, negotiate for peace. Just as Captain Kirk struggled with changes in the future, school psychologists now face a period of adjustment in their future with the introduction of the Q-interactive® and the dawn of digital assessment. While there will be a period of adjustment, this change need not be uncomfortable nor intimidating. Instead, the Q-interactive could potentially create easier assessments and free up valuable time for school psychologists. At the same time, this technology is relatively new and caution should be employed before embracing it. School psychologists should always be thinking critically, even skeptically, as the field in which they practice changes. The authors were fortunate to be able to participate in a seminar in December 2013 on the Q-interactive led by a Pearson consultant, Dr. John Hanson, and given a chance to test out the Q-interactive. We hope to share our impressions from this seminar and from other sources of information. The following discussion focuses on the pros and cons of the Q-interactive and some considerations for our field's undiscovered country.

Q-interactive: The basics

This discussion focuses primarily on the potential benefits and challenges to the field of school psychology raised by the Q-interactive and future digital assessments. However, a brief overview of the Q-interactive is included first. The Q-interactive is a program that currently hosts a variety of Pearson's standardized tests on iPads, including the WISC®-IV and WAIS®-IV (Cayton, Wahlstrom, & Daniel, 2012). Other assessment tools are constantly being added: in the future the WPPSI[™]-IV and WISC-V will be available via the Q-interactive (Hanson, 2013). School psychologists can select their subtest battery online for a student and then administer the test on an iPad that communicates with a second iPad viewed by the student. There are many goals behind the creation of the Q-interactive, including increasing standardization, creating an easier and more streamlined assessment process, maintaining clinical judgment and control of the process, and allowing for school psychologists to focus more carefully on observation. Another goal of Q-interactive is to minimize materials, creating a more user friendly package.

As stated, we had an opportunity to experiment briefly with Q-interactive. Based purely on initial impressions, we noted a host of possibilities presented by this technology that could make assessment more streamlined and easier. Many of the more irksome aspects of assessment, such as excessive writing, are eliminated and performed by the digital platform. However, digital assessment still has some challenges to be worked out. It appears likely that it will take significant time to get used to. Recent literature has indicated that most practitioners find Q-interactive easy to use but that it requires several practice sessions to truly master the new technology (Daniel, 2012; Daniel, 2012; Wagner, 2013).

Benefits

There are a multitude of positive elements Q-interactive can bring to the field of school psychology. Perhaps the most appealing is the ways in which Q-interactive will bring about easier, faster assessments. Q-interactive automatically accomplishes many aspects of assessment, including tracking reverse rules, basals, and ceilings. Numerous other user friendly elements are featured in Q-interactive assessments, including audio recording of verbal responses, a built in timer, the ability to see the student's selected response, and automatically recorded scores at the conclusion of each subtest for instant feedback on a student's progress (Hanson, 2013; Wagner, 2013). Essentially, Q-interactive eliminates the need for school psychologists to record answers by hand and use tables to calculate scores. Simultaneously, many of the automatic features of Q-interactive allow for standardization errors to be minimized.

While much of Q-interactive is automatic, the digital platform does not complete the assessment for the school psychologist. The final awarding of points for a test item is left to the judgment of the examiner. Just like in a traditional paper and pencil assessment, a school psychologist is able to return to previously completed items and go beyond the ceiling to test the limits. A word of caution: testing the limits and returning to previous items must be done before continuing on to a new subtest. Once a subtest is fully completed it cannot be accessed again for testing purposes without purchasing a new subtest.

Some professionals may worry that Q-interactive will eliminate the need for school psychologists in the assessment process. Q-interactive only simplifies the assessment process. It does not replace the expertise of school psychologists. With a moderate amount of training, nearly anyone can administer a standardized test, but school psychologists have specialized training to make use of their clinical judgment and synthesis skills to come to conclusions about a student's abilities and needs. The interpretation of data collected through the assessment process still requires the expertise of school psychologists or related professionals.

One goal of Q-interactive is to allow examiners greater opportunities for careful observation during the assessment (Hanson, 2013; Wagner, 2013). Observations allow for school psychologists to better understand a student's behavior and to assist in interpreting how a student learns and what factors may limit their learning (Hanson, 2013). The observations gained during a standardized test can often supplement the scores obtained and may even be as important as those scores. Q-interactive allows the school psychologist to record general observations as well as observations to a specific item or subtest. However, using the stylist quickly and clearly on the iPad might be challenging without practice, especially to those less familiar with iPad technology in general. While recording observations is an option on Q-interactive, it may be simpler for some school psychologists to manually record observations with traditional pencil and paper. As with any new tool, practice with digital assessment is essential for valid testing.

Cautions

Many elements of Q-interactive may benefit school psychologists and allow them time to focus on other roles. However, this technology is so new it can be difficult to predict what unknown challenges or concerns might occur when using Q-interactive and other digital assessment platforms. The subsequent discussion will focus on some potentially problematic components of Q-interactive as it exists now.

Q-interactive was designed to be flexible and to maintain examiner control of the assessment procedure (Hanson, 2013). However, it is also a computer program and tends to be locked into certain preset conditions. Our first concern centered on the ability of a school psychologist to individualize assessment experiences for students. While the importance of standardization cannot be understated, some students with special needs or disabilities require a more individualized assessment experience. Will school psychologists be able to manipulate Q-interactive as easily as traditional assessments kits to get accurate gages of a student's intelligence? With limited information available, it is difficult to answer this question.

Our second concern focused on what new factors Q-interactive will introduce to the assessment process. Potentially, the use of technology will make standardized tests more enjoyable or engaging to some students, but what about students who are unfamiliar or less comfortable with technology? Will this limit their abilities? Will the results of digital assessments be biased by this assessment process? According to Pearson, the answer is "probably no." Pearson conducted a variety of equivalency studies to determine if the traditional test kit norms could be used for Q-interactive. In these studies, they reported no differences in examinee behaviors or the accuracy of scoring (Daniel, 2012; Daniel, 2012). Even if the overall groups tested between traditional and digital assessment are similar, what about specific individuals with unique circumstances or needs who are tested in schools? Again, it is difficult to make accurate predictions on such a new tool. As with any assessment, regardless of test platform or process, it will remain important to choose the procedures that will insure the most accurate and fair measurements of an individual. Our third and final concern centered on the use of original norms with Q-interactive assessment

(e.g., with the WISC-IV). The Pearson equivalency studies compared results on the traditional paper and pencil tests with Q-interactive and found that the differences between the two met their effect size goal of less than .20 or about 1/2 of a point on a subtest (Daniel, 2012; Daniel, 2012). The conclusion was that the norms for the traditional assessment were valid for Q-interactive. While the studies show little difference between the two types of assessment, it seems difficult to be able to account for the numerous differences between the two methods of assessment. Fortunately, this will become a non-issue when the WISC-V and other new tests are published, as they will be based on digital norms.

The Undiscovered Country and Concluding Thoughts

As always, school psychologists must be aware of the future to successfully meet the needs of their students and operate in their field. It is important to be aware that the student evaluation process is moving towards digital assessment as a general rule (Wagner, 2013; Hanson, 2013). Be aware that standardized assessments may change significantly as digital platforms expand. Traditional procedures for the Wechsler Block Design and the processing speed tasks materials are still used on the digital assessment but the format of these subtests may change extensively as they become entirely digital. Other subtests may also change or be updated as digital assessment allows for new ways of estimating a child's intelligence.

Q-interactive allows for numerous possibilities, some potentially positive and some potentially challenging for the field of school psychology. Digital assessment may allow for improved standardization during assessments, faster and easier assessments, and more opportunities for observation and clinical judgment; however, it is difficult to predict all the potential impacts digital assessment will have on assessments and the student evaluation process. Limited information is available on this topic and much of the information in the current research, including the information presented in this discussion, originates from the Pearson Corporation. There is a 30 day trial period to test Q-interactive. This can be an opportunity to try out Q-interactive and get familiar with the new digital platform. Resources included at the end of this discussion are also good places to start learning more. School psychologists are highly encouraged to research information about Q-interactive and to maintain their clinical judgment, caution, and skepticism when trying out this new technology, as with all new changes.

References

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Additional Resources

Webinars:

http://www.pearsonassessments.com/pai/ca/trai ning/webinars/QinteractiveWebinarSeries.htm Q-interactive Home Page: http://www.helloq.com/home.html