Authentic Assessment – Literature Review

Amanda Paul
University of Ontario Institute of Technology (UOIT)
July 2011

Background

Assessment is a critical concept in today’s schools. In an ideal world assessment is
designed to motivate, encourage and promote growth/development; however, in our
European and North American societies students have started selecting answers
instead of thinking and supplying the original thoughts (Madaus, 1999). Many
esteemed assessment experts feel that our current system of testing is the reverse of
what it should be. Grant Wiggins suggested that testing should be central experiences
in learning and that our problems come when scoring and competition become to
central in our thinking – in fact our current system is a complete reversal of the ideal
(Wiggins, 1989).

Additionally, it is felt that assessment needs to (as close as possible) mirror the
real world. Performance based tasks need to incorporate higher-order thinking skills
and have an authentic reality to real world tasks (Cumming, 1999). The purpose of
this study is to examine authentic assessment theory and look for strong correlations
and trends within the data. These trends will indicate where our strongest needs lie
and what teachers can do to bring authentic tasks into the classroom. Since the
invent of standardized testing the focus of testing has shifted on a paradigm from
being an authentic evaluation of a students’ knowledge, to becoming a way of
ranking schools according to performance (Darling-Hammond, 1994). This literature
review considers how we can better utilize assessment to help our students achieve
personal bests, and to create knowledge transference that will benefit a student in
real world situations.

Methodology

For this literature review all of the readings were included as part of our class reading list
(EDUC 5305G Authentic Assessment Course outline for July 2011). Articles were classified
according to main topics and ideas. Due to the fact that the articles were assigned as part of
class reading no further methodology was used to distill the articles.
Findings

Context/Real Life – Other terms for this concept include skill transference and contextualization. The over arching idea is that students are learning (and being assessed) in such a way that their skill set becomes more congruent with the demands of real life (McTighe, 1997). Throughout all the readings on assessment the one idea that stood out the most was the need to make ideas and learning real for the students. Knowledge that cannot be applied to real life is merely theoretical in nature. A doctor is an expert not just because of extensive knowledge it has ore to do with their ability to accurately apply that knowledge to real life situations and emergencies (Wiggins, 1990).

One crucial element that is not often seen in assessment is the uncertainty and complexity of real life. Most assessment tasks such as tests and exams require factual information to be absorbed and retransmitted and are devoid of real life relevance (Herrington, 1998). A common string throughout the readings was that as important is it is to have tasks mirror real life; there is no real substitute for true experience. Respondents do not behave the same way in a performance environment then they would in a real situation (Cumming, 1999). Even with this distension authentic tasks that mimic real life opposed to situations that encourage knowledge regurgitation are far more effective (Wiggins, 1990).

Authentic assessment requires students to think critically and be able to transfer knowledge from one context to another. Even if skills are not directly transferable to a work environment students should at least be able to build on the task and transfer the knowledge to other learning contexts (Linn, 1991). Regardless of what skills is being assessed and at what level knowledge must be obtained the goal of learning and of assessment is to prepare our students for the challenges that they will face when entering the real working world.

Technology and Multimedia – In our modern society technology is becoming a much more prevalent factor. Many classrooms contain computer systems, and teachers are looking for more and different ways to use technology for assessment. According to Herrington however; it is easy to fall into the trap of using computers to answer multiple choice questions instead of conducting true authentic assessment tasks (Herrington, 1998). Technology in testing is a good example of camouflaging described by Cumming and Maxwell (Cumming, 1999); a teacher feels they are creating a true and authentic task however; it becomes just another more intricate method of traditional testing. The advance of technology over the past two centuries has streamlined the testing process. Now testing can be conducted and graded on a much larger scale giving way to the creation of the standardized test (Madaus, 1999).

Technology is a powerful tool with amazing potential that by no means is limited to just marking multiple choice. Technology is used for a wide variety of tasks in the real world. In schools students can start to mirror these real authentic performance based
tasks opposed to completing multiple choice questions or even essay style responses (Herrington, 1999). There are a number of affordances that come as a result of technology; students in web-based courses can incorporate a wide variety of multimedia resources to their learning and participate in the online environment as an authentic context. Students are able to participate and collaborate on their word overcoming the obstacle of distance (Reeves, 2002). Technology brings our world closer together and allows for better communication we are able to share our thoughts and reach a wider audience as a result of the publishing capacity of the internet (Reeves, 2002).

All of these advantages brought about through the web are critical to authentic assessment. Students can connect with peers and experts, share their ideas and have access to information as a result of the internet making authentic tasks a more practical and sustainable reality.

Higher Order thinking Skills – Higher order thinking skills are based on Bloom’s Taxonomy. These skills include evaluating, synthesizing and applying knowledge learnt in order to solve problems. In authentic tasks students should be encouraged to make decisions and consider knowledge through the scope of these skills. When students are using higher order thinking skills they should be able to still effectively deal with the material even if they have never seen it before; teaching these higher order skill will vary depending on the nature of the problem (Madaus, 1999).

Many of the tests that we use in schools today fail to accurately test the higher order cognitive abilities of students; these are the types of skills that are used to conduct real world tasks. Performance tasks that utilize higher order thinking skills have been on the decline since the 1970s when standardized testing became a wide spread reality (Darling-Hammond, 1994). Students in our North American school system struggle when asked to interpret problems utilizing higher order thinking. Most of this struggle comes as a result of a lack of experience when utilizing these abilities (Montgomery, 2002).

If higher order skills are practiced often without challenge or differentiation understanding and transference can of these skills can be harmed as a result (Cumming, 1999). Students need to learn how to use the skills and how to conduct their thinking process more then they need to just answer questions and provide results. A major goal of authentic assessment is to cultivate higher order thinking skills. Students should be empowered to gain transferable skills that are useful and productive on both an individual and societal level (Cumming, 1999).

Mastery – A significant part of authentic performance based assessment is allowing the students an opportunity to demonstrate subject mastery. According to Dr. Rhoda Cummings at all levels (graduate work included) mastery is a key learning outcome that (along with growth and skill attainment) indicates that the learning goals have been met (Cummings, 2008). In 1993 paper Assessment: Authenticity, Context and Validity – author Grant Wiggins goes into much detail regarding what Mastery is and
how it can be accomplished. One essential detail regarding skill mastery is that mastery in one area such as hitting a baseball in one context does not equate to full skill mastery. Mastery is part of authentic learning that must be taken in context; skills must be taught in such a way that transference is later possible (Wiggins, 1993).

In order to achieve true mastery students must be able to thoughtfully understand and apply knowledge correctly even in complex situations (Wiggins, 1989). The idea of mastery ties in nicely to higher order thinking skills because it is the ability to learn a skill in one context and translate that knowledge into other potentially real world situations. When mastery is truly achieved the learning translates to life beyond school. Authentic achievement is not something that is readily forgotten when a skill is truly mastered it something that stays with the student and goes beyond the constructs of the classroom (Cumming, 1999).

**Recommendations for Further Research**

Throughout the readings on authentic assessment there has been much discussion regarding both the validity as well as the concerns regarding authentic assessment. An essential next step in assessment related research would be to create more detailed guides and suggestion for easily applied authentic assessment tasks.

A critical missing element of our assessment based reading thus far has been the Canadian context. It would be interesting to see if in our Canadian or Ontario specific educational system how we have done with the implementation of authentic assessment and what we can specifically do to better engage and prepare our students.

The majority of the literature provided for this review is written by professionals giving opinion or case study experiences on assessment. Nothing in our reading has looked long term or followed the students later into life to see if the feedback and assessment provided in their formative years of education has had any impact on the way they solve problems, accept feedback, or think critically about real world tasks once they have entered into the real world.

**Summary**

This particular literature review features a very narrow scope into the world of authentic assessment. Even though a lot of positive research has been done and many suggestions have been made there are still areas of investigation that can be conducted. In the articles none of the content covered was Canadian; yet still much the findings and suggestions were still meaningful within our Ontario public educational context.
Society is changing rapidly, and the role that assessment plays in motivating our students and providing critical feedback also needs to progress. More work is still required to help teachers in the school system value the role of authentic assessment. There are many factors to consider when attempting to assign meaningful assessment to accomplishment. Like what Grant Wiggins suggested; what is a true test? whose purpose does testing serve?, and what do we hope to accomplish as a result of the testing process? (Wiggins, 1989). By understanding these factors and guiding our students in assignments and assessment that bring context to real world situations it will only serve to better prepare our students for the future.

References


