Use portfolios -- the best tool for assessing 21st century skills*

Introduction: Is good art measured by multiple-choice tests?

"Art Portfolios are a powerful tool for artists to showcase and improve their work. It's hard to imagine what we would do without them."

Imagine if, in art school, students took multiple choice-short answer tests to assess their knowledge of art instead of having student artwork showcased through portfolios and critiquing the actual work of artists in order to improve their work. Would that make sense? Of course not. Artists would leave schools like that in droves, because traditional tests would not be helpful in assessing the quality of their artwork or in helping artists become better at their craft.

In the same way, much if not most of what we are trying to accomplish with students today cannot be assessed by traditional tests. Do traditional tests help us evaluate how well students are able to write coherent papers? Do research? Complete projects? Think creatively?

This commentary argues that, in today's world, there is a critical need to shift from a "traditional" test model of measuring student success to a portfolio model built primarily around real student work, designed to assess whether students have developed competence in learning and using critical 21st century skills.

Why we need an alternative assessment model

The most commonly used assessment tool in the United States today is the "traditional test" (TT), consisting primarily of multiple choice, short answer and short essay questions. TT type questions are still the core components of State and National standardized tests, which are often

*Copyright, 2012 by Elliott Seif. Original Version, 10-12. This resource may be reproduced for use in schools or other organizations interesting in sharing these ideas. All or part of this resource may not be published without the express permission of the author.

used as a high stakes requirement for high school graduation or admission into college. Results on these tests are the scores that get published in the newspaper, and are often the *only* measures used by the public to judge student proficiency and school success. Middle and high school teachers primarily use traditional tests as the main method for determining their students' classroom success.

Unfortunately, TT's have limited value in assessing important knowledge and skills necessary for 21st century living. They are good for determining whether students can recognize facts and identify information correctly, but not whether they can define and describe key concepts and explain them, organize their thoughts coherently, and build connections and relationships among diverse sets of information and ideas. They are good for measuring whether students can find information from a text and make low-level inferences, but not whether they can read a long story or informational text and synthesize information and ideas on their own. They can measure whether students are able to write short essays, but not whether they can put together persuasive arguments, write an analysis of historical events, write long and interesting narratives, or write long, coherent essays and "term" papers. They can measure a student's ability to apply learning to new situations, but with significant limitations. They are generally easy to grade, but the limitations of computerized grading systems prevent complex analyses of student work.

How and what we assess determines what is the primary focus of our teaching! An emphasis on TT's guarantees that our primary educational focus will be on remembering and recognizing key facts and information, on developing low-level inference skills, and on producing simple written products. But a major problem with the use of TT's is that many of the key, critical "learning to learn" skills and personal development characteristics necessary for living in a 21st century world often get short shrift. They just are not considered important enough to be measure by assessments that "count".

Assessing for lifelong learning

In this changing, confusing, complex world, with information overload and a rapidly changing job market, all students need the critical skills necessary for continuing their learning after high school. More students will be heading off to some form of a college education in order to take their place in the job market of the future. Most good jobs will require (and even today require) continuous learning and retraining. Citizenship in this politically charged, complex democratic society will more and more require a conceptual understanding of global as well as national issues, and the ability to continually find, evaluate, and thoughtfully analyze information about current events.

In other words, high school graduation should be thought of as the beginning of learning, not the end. When students graduate from high school, they should be prepared for lifelong learning by demonstrating their competence in using five lifelong learning skill sets:

Ask good questions, define problems and challenges (curiosity); Search for and process information (information literacy); Think logically and creatively (thoughtfulness), Draw conclusions and apply learning to new situations (application) Communicate effectively (communication)

In addition, given the complexity of the 21st century world and the bewildering array of options and choices confronting each individual, students need to begin to discover their individual talents, strengths, interests, and goals.

TT's don't adequately assess lifelong learning skills

Unfortunately, these five key skill goals, along with the self-development goal described above, can't be adequately measured by TT's. For example, the ability to ask good questions is best assessed by observing how well students can develop "driving" questions for projects¹, brainstorm and choose essential questions at the beginning of a unit, or ask good questions during a class discussion or recitation that help to clarify a concept or extend understanding.

Thorough assessment of information literacy skills is often determined by observing students as they search for information and data, asking students to compare and contrast multiple types of information in a venn diagram, having them explain why some resources are better than others, and by asking them to summarize and synthesize multiple sources of information. Extensive research projects are a good way to both teach and assess information literacy skills.

"Thoughtfulness" is often measured by how well students can perform in pro and con discussions and debates, participate in interpretative discussions, write persuasive arguments in favor of a point of view, develop "academic" papers on a topic, and demonstrate their ability to use creative thinking strategies to solve problems.

Performance and complex problem solving tasks, project products and presentations, self-reflections that provide students with the opportunity to summarize learning in their own words, and written essays are the best assessments of a student's ability to draw conclusions and apply learning.

Assessing writing and more writing, speaking and more speaking, and non-verbal communication opportunities are the best ways to measure effective communication. Discussion, oral presentation, and writing rubrics are the most common methods used to assess communication skills.

And, finally, assessing whether students are developing their own interests, talents, strengths, and goals requires continual self-reflection on the part of the student, observations of individual progress, and the creation of individualized goals and plans for the future. Projects and activities that demonstrate the development of student talents and strengths are a critical part of this learning, and some schools enable students to develop interests through the use of "passion projects" and/or senior projects in which students develop research projects, field experiences, and presentations around major topics of interest.

Building a portfolio assessment system

In order to demonstrate progress and success in achieving the lifelong learning skills cited above, every teacher, every school, should create student portfolios that include multiple types of assessments – discussion observations, many types of written work, performance tasks, oral presentations, self-reflections, and even TT's. Self-reflections also help to determine whether each student is learning about his or her passions, interests, talents, and goals.

Students also need periodic opportunities to share portfolios with adults from outside the school who listen to their explanations and analyses, ask clarifying questions, and help them to better understand their progress, goals and future directions.

Beginning the process

Some of you may already be using portfolios extensively. But odds are that most of you are using portfolios only occasionally or not at all.

If you're not using multiple assessment portfolios, it's easier to get started than you think. If you are, consider how you can enhance and expand their use. What student writing are you already collecting from students that might be placed in portfolios? What other forms of student work? Are there results of projects that might be included? Written reports? How might you better observe your students during discussions and write a quick summary of student participation? Do your students place frequent self-reflections on both learning and personal reflections Do you already have folders of student work that might become collections that illustrate growth over time? That showcase the best of every student's work? How can you use the five skill sets and self-development framework as a way of building significant portfolio assessment collections?

Much of the work of both collecting and sorting portfolio work can be placed into the hands of students. Students can form the habit of placing their work into portfolios. At designated times, students can be asked to purge their portfolios and showcase only their best work. Periodic self-reflections can also be placed into the portfolios that indicate how

students feel about the progress they have made and goals for the future. This way of handling portfolios also supports the development of self-management and self-reflection skills.

In today's digital age, it also becomes easier and easier to find and create the appropriate tools that enable students to build customized portfolios K-12. A good multiple page scanner that costs about \$400 is a beginning. Many websites are available to get you started².

What's critical is that, as an individual teacher or educational leader at a school or district, you organize your classroom, school or district to start or extend the use of portfolios as a way of assessing critical 21st century skills and personal development goals. It requires the will to do it, rather than any special skills.

If portfolios of student work can be collected by many teachers at the same grade level or teaching the same subjects, then teams of teachers together might spend some time together reviewing the work and agreeing on sample models of excellent, good and poor work. These models can be shared with students and also analyzed to determine the characteristics of work at each level. Such time is well spent and adds rigor to the process of collecting and improving student work!

Also, if you are a principal or superintendent, consider how you might collect and share portfolio assessment data and examples of student work at Board meetings and with the general public, to begin to wean the community away from solely using test scores as the instruments to best measure school and district success!

You may also be surprised at the results – many of your students might actually improve their standardized test scores because of their higher level of academic work, rigorous training, self-management, and critical skill development!

In conclusion...

Portfolio collections of multiple types of assessments and selfreflections, not standardized, traditional measures of achievement, are the true determinants as to whether our students are ready for future challenges in a 21st century world. Once in place, they can be used to assure that our students are prepared with the critical knowledge, skills, attitudes and behaviors necessary for living and learning in today's and tomorrow's world.

ENDNOTES

¹ For further information about driving questions, examine the resources and materials found at the Buck Institute on project based learning: http://www.bie.org/

² See for example: http://www.pgcps.org/~elc/portfolio.html