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Assessing Creative Growth in the Frostic School of Art

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Assessing Creative Growth Among Visual Art Majors

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Introduction

- It is widely recognized that today's skills are quickly made obsolete by tomorrow's unanticipated innovations (World Economic Forum, 2016).
- Increasingly, emerging generations of college graduates create jobs by identifying problems and applying creative solutions (Samson, 2005).
- Workers with degrees in the arts report that creativity is an important asset in both arts-related, and non-art-related, fields (Lena, 2014).
- Creativity is a quality possessed by all individuals (Kurtzberg & Amabile, 2001; Kirton, 2003), and can be exercised and developed (Anderson, 1992; Sternberg, 2000).
- Students who study fine and applied visual arts are expected to demonstrate area-specific knowledge, skills, and techniques, as well as high levels of creativity.
- The expectation that, through instruction, students will develop and increase their creativity is assumed, but not directly measured.
- The ways in which creativity is recognized and assessed in the Frostic School of Art (FSoA) are diverse across areas of concentration, and subjective among faculty reviewers.

Instrument

The Torrance Test for Creativity

Developed and refined over the second half of the twentieth century, the Torrance Test for Creative Thinking (TTCT) is the most widely used test of divergent thinking, has been researched and analyzed more than any similar instrument, and has been cited in scholarship more than any other test of creativity (Kim, 2006).

Shown to be applicable across gender, race, socioeconomic status, language background, and culture (Cramond, 1993; Torrance, 1977), the test has been translated into 35 languages (Millar, 2002), and used as a direct measure of creativity in education and business settings around the world.

The Torrance test "has one of the largest norming samples, with valuable longitudinal validations and high predictive validity over a very wide age range" (Kim, 2006, p.8). It can serve as both a pre- and a post-test, and has been shown to predict creative achievement better than IQ scores or scales of high school achievement (Kim, 2006).

The Abbreviated Torrance Test for Adults (ATTA), a condensed version of the TTC, is used in this project.

Methodology

Fall 2018: The ATTA was administered during the first week of classes to twenty first-year students enrolled in a section of the required foundation-level course, ART 1070 Form and Surface. This course provided an opportunity sample representative of the general population of first-year students in the FSoA -- a cross-section of backgrounds, talents, areas of interest, and degree aspirations. Test-takers remain anonymous, although their intended degree and area of concentration are recorded.

The test consists of 3 sections, each section to be completed in three-minutes. Completed test booklets are sent to Scholastic Testing Service (STS) for scoring.

Spring 2019: During the 8th week of the semester, the ATTA was administered to an opportunity sample of twenty seniors from across areas who are completing their BFA or BA degree. As in the fall semester, the resultant set of student responses were sent to STS for scoring.

Scoring

STS provides instructions for administration and scoring of the test, and serves as a standardized reference to help assure interrater reliability. Student test scores yield a **creativity index** that is the sum of each student's norm-referenced score and criterion-referenced score. The creativity index determines a **composite score** of creativity.

ATTA responses are scored along four norm-referenced abilities:

1. Fluency – The quantity of pertinent responses.
2. Originality – Responses that are beyond the norm.
3. Elaboration – Embellishing ideas with details.
4. Flexibility – Processing information or objects in different ways.

And ten criterion-referenced measures:

1. Openness – Resistance to premature closure.
2. Unusual visualization – Using different visual perspectives.
3. Movement or sound – Projecting these into a 2-D drawing.
4. Richness of imagery – Variety, vividness, liveliness, and/or intensity of sensory information.
5. Abstractness of titles – Titles go beyond pure description.
6. Context – Response indicates an environment or system within which an object exists.
7. Synthesis of figures – Combining multiple stimuli in a single design.
8. Internal perspective – What is going on inside an object.
9. Feelings – Expressions of emotion.
10. Fantasy – Fabricated or borrowed stories beyond reality.

Results to-date

As of March 1, 2019, tests have been administered to first-year students and seniors poised for graduation. Test scores for first-year students have been calculated:
First-year Students Creativity Index:
Mean 76.65; Mode 77; Range of scores low 54 – high 94.
First-year students Composite Score:
Mean 5.1; Mode 5; Range of scores low 2 – high 7.
A score of 5 is considered above average for adult test-takers. Twenty-percent of adults score at level 5. A score of 7 is in the top 4% of adults. A score of 2 is below the average score for adults.

At the time of printing, tests administered to seniors were in the process of being scored. Once completed, the senior scores will be compared with the first-year scores to determine if the test indicates an increase in creativity between the first and senior years of art study.

Dissemination

Results of this pilot project will be presented to FSoA faculty and staff, and to other units in the College of Fine Arts for which creativity is a common objective.

Research results will be of interest to appropriate professional organizations, including the National Art Education Association and the College Art Association, and can be shared through conference presentations and/or publication in the scholarly journals of each association.

Analysis of data will be used to inform the FSoA's Annual Program Review and Planning process as a snapshot of recent learning. This data set can also contribute to longitudinal analysis through comparisons over time.

References

Anderson, J. V. (1992). Weirder than fiction: The reality and myths of creativity. *The Executive, 6*(4), 40–47.
Cramond, B. (1993). The Torrance tests of creative thinking: From design through establishment of predictive validity. In R. F. Subotnik & K. D. Arnold (Eds.), *Beyond Terman: Contemporary Longitudinal Studies of Giftedness and Talent.* 229–254. Norwood, NJ: Ablex.
Kim, K. H. (2006). Can we trust creativity tests? A review of the Torrance Tests of Creative Thinking. *Creativity Research Journal, 18*(1), 3–14.
Kirton, M. J. (2003). *Adaption-Innovation: In the Context of Diversity and Change.* New York: Routledge.
Kurtzberg, T. R., & Amabile, T. M. (2001). From Guilford to creative synergy: Opening the black box of team-level creativity. *Creativity Research Journal, 13*(3-4), 285–294.
Lena, J.C. (2014). Making It Work: The education and employment of recent arts graduates. Strategic National Arts Alumni Project. Indiana University Center for Postsecondary Research, Bloomington, IN.
Millar, G. W. (2002). *The Torrance kids at mid-life*. Westport, CT: Ablex.
Samson, R. W. (2005). Hyperjobs: the new higher-level work and how to grow into it. *The Futurist, 39*(6), 41-46.
Sternberg, R. J. (2000). Identifying and developing creative giftedness. *Roeper Review, 23*(2), 60–64.
Torrance, E. P. (1977). *Discovery and nurturance of giftedness in the culturally different.* Reston, VA: Council on Exceptional Children.
World Economic Forum. (2016). The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution. Downloaded from: http://reports.weforum.org/future-of-jobs-2016/.