Addressing Gifted Identification Equity through Alternatives: Assessing Creativity using an Authentic Performance Task

Charles Alvarez

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The Dissertation Advisory Committee and the student’s Department Chairperson, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

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ADDRESSING GIFTED IDENTIFICATION EQUITY THROUGH ALTERNATIVES: ASSESSING CREATIVITY USING AN AUTHENTIC PERFORMANCE TASK

by

Charles Alex Alvarez

Under the Direction of Janice B. Fournillier, Ph.D.

ABSTRACT

A great disparity exists between White and minority gifted student identification in states such as Georgia (McBee, 2010). To address equity issues in gifted creativity identification, Georgia teachers need a readily available, easy-to-use, and cost-effective creativity assessment alternative that conforms to the 2012 Georgia Department of Education (GADoE) gifted identification rule. The GADoE encouraged Georgia school districts in 2012 to include the use of products and/or performance tasks as part of the multiple criteria gifted screening process for creativity (Georgia Department of Education, 2014), but little guidance and no financial support was provided. The purpose of this participatory mixed methods action research study (PMARS) was to determine the effectiveness of a newly developed creativity performance task assessment in the gifted screening process compared to the traditional structured creativity assessment titled Profiles of Creative Abilities (PCA). The researcher used subjectivism as the research epistemology and a
critical inquiry theoretical perspective to frame the research study. The researcher used a criterion purposive sample of 20 elementary students who were recommended for gifted screening and reflected the school district demographics. The students from one small urban school district completed a new authentic creativity performance task, which the researcher and another gifted specialist developed. The researcher trained gifted teachers from five elementary schools to implement the A&W Buttons Creativity Performance Task with the 20 students. The data collected included student observation and performance Pearson r correlation coefficients for the comparison of student performance on the new A&W Buttons Creativity Performance Task, the Profile of Creative Abilities assessment, and teacher perception interview data on the A&W Buttons Creativity Performance Task. Sixty percent (60%) of the students met gifted creativity characteristics with the A&W Buttons Creativity Performance Task compared to 35% with the PCA. Insignificant zero to weak correlation coefficients were found for student performance on the A&W Buttons Creativity Performance Task and PCA. Males collectively performed higher on the A&W Buttons Creativity Performance Task and lower than females on the PCA; but neither result was significant. All the teachers who participated in the interview held a positive perception of the A&W Buttons Creativity Performance Task.

INDEX WORDS: Gifted identification, Creativity assessment, Performance task
ADDRESSING GIFTED IDENTIFICATION EQUITY THROUGH ALTERNATIVES:
ASSESSING CREATIVITY USING AN AUTHENTIC PERFORMANCE TASK

by

Charles Alex Alvarez

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in
Education Leadership
in
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DEDICATION

I dedicate this dissertation to my mother and wife for all of their support with my many years of education. The many teachers and advisors who helped me along my journey are much appreciated. Education leadership has become my life work thanks to you.
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AN EXAMINATION OF GIFTED IDENTIFICATION AND CREATIVITY ASSESSMENT

A great disparity exists between White and minority gifted student identification in states such as Georgia (McBee, 2010). Education leaders should ask whether gifted students are consistently and equitably identified in our schools. This is one of the most common questions in gifted education today. In the absence of a federal mandate for gifted services, the National Association of Gifted Children (NAGC) (Robinson, Shore & Enersen, 2007) and Gubbins (2002) questioned the lack of consensus exhibited by school districts on how to best identify and serve the needs of gifted and talented students. The disparity that exists between and among school district policies for gifted education can create barriers for equitable gifted identification, access to gifted services, and student program recruitment and retention (McBee, 2010). There is a paucity of research on the influence of district and state gifted policies and procedures on gifted identification, despite the recognition that these policies can be used to address underrepresentation in gifted and talented programs (McBee, Shaunessy, & Matthews, 2012). Identification, service, communication, and funding are all components of gifted education policies that can influence equity in gifted education.

Deficit thinking by teachers, a lack of gifted screening referrals for minority students, and the use of only traditional IQ and achievement tests are considered primary factors for underrepresentation of minority students in gifted education (Ford, Grantham, & Whiting, 2008). Experts in giftedness believe that the idea that high IQ alone signifies giftedness is linked to present underrepresentation (Pfeiffer, 2012). Olszewski-Kubilius and Clarenback (2012) stated that static and “one-shot” approaches to gifted identification have acted as gifted programming barri-
ers for low-income, culturally and linguistically diverse high-ability learners. To address gifted programming barriers the Georgia Department of Education (GADoE) introduced a multiple criteria rule in the 1990’s. The rule change aims specifically to address the limiting use of traditional IQ and achievement tests for gifted identification. The expanded gifted screening rule in Georgia reflects research conducted in the 1980’s (Sternberg & Davidson, 1986) and 1990’s (Wallace & Pierce, 1992) that described gifted students as varied and unique versus a homogeneous group with high Intelligent Quotient (IQ) and/or achievement scores.

The multiple criteria gifted screening rule in Georgia requires school districts to assess students who are referred for gifted screening in four areas: mental ability, achievement ability, creativity, and motivation. McBee, Peters, and Waterman (2014) stated, “Georgia’s multiple criteria gifted rule represents a true multiple criteria identification system because no student can qualify on the basis of a single assessment” (p.81). Georgia students may qualify with a mental ability score in the 96th (grades 3-12) or 99th (K-2nd grade) percentile or higher and a 90th percentile or higher score on an achievement test under the traditional option A. They may also qualify under option B with a qualifying mental ability or achievement score plus a 90th percentile score on a creativity and motivation screener/assessment. The addition of creativity and motivation in the gifted identification protocol has been debated as the process is outside the norm of many states (McClain & Pfeiffer, 2012). However, Georgia school systems have demonstrated progress in equitable gifted identification (Ford, 2010). Despite the progress, more can be done beyond the multiple criteria rule to ensure equitable student services.

The traditional creativity assessments utilized in the current study included the Torrance Test of Creative Thinking (TTCT) and the Profile of Creative Abilities (PCA). Both assessments are based on Guilford’s 1959 work with divergent thinking. Guilford’s 1959 divergent thinking
assessment battery was developed for a much less diverse population (Brady, 2001). The expansive time period between the foundational research on traditional creativity assessments and today creates the need for new creativity assessment research and additional screening tools that can help to ensure equity among today’s diverse student population. Shriki (2013) is of the view that the development of a new authentic creativity performance task for students is needed to provide an additional opportunity for the diverse student body of the 21st century to demonstrate giftedness beyond the traditional gifted assessments that require students to complete a drawing and possess an extensive vocabulary. Cramond and Wang (2012) and Johnsen (2005) stated that assessments can have short shelf lives and should be evaluated and updated periodically. Frasier and Passow (1994) and Van Tassel-Baska, Feng and Evans (2007) suggested that underrepresented students could be better identified through the use of varied and authentic assessments and performance tasks. An expansion of the traditional and decades-old creativity assessment battery required for use by the GADoE is the key problem focused on in this research study.

**Problem**

The GADoE encouraged Georgia school districts in 2012 to limit the use of behavioral checklists and increase the use of products and/or performance tasks as part of the gifted screening process for the areas of creativity and motivation. The GADoE claimed that products and/or performance tasks would serve as an alternative to traditional assessments such as the TTCT, PCA, and behavioral checklists. However, the GADoE provided little guidance and zero funding for the school districts to meet the requirements of the revised gifted identification protocol for creativity and motivation. As a gifted specialist, the lack of guidance was a concern in regard to equitable gifted identification. I believe that to ensure equity in gifted identification, Georgia school districts need a readily available and easy-to-use creativity product and/or performance
task alternative that conforms to the revised GADoE gifted identification rule. The development of a new authentic creativity performance task would provide an additional opportunity for a diverse student body to demonstrate giftedness beyond the traditional gifted assessments utilized in Georgia.

**Guiding Questions**

The purpose of this participatory mixed methods action research study (PMARS) was to determine the student effectiveness, validity, and perception of an easy-to-use and cost effective authentic creativity performance task assessment titled the A&W Buttons Creativity Performance Task, compared to a traditional structured creativity assessment. The researcher and another gifted specialist developed the A&W Buttons Creativity Performance Task to serve as a possible alternative to creativity assessments traditionally used in Georgia school districts. The researcher compared the A&W Buttons Creativity Performance Task to a traditional, structured creativity assessment titled the Profile of Creative Abilities (PCA). The researcher questioned whether the authentic A&W Buttons Creativity Performance Task assessment could serve as an additional tool for Georgia school districts to utilize to ensure an equitable gifted screening process for all students. The study was guided by the following research questions:

1. How does the use of an authentic performance task affect students’ abilities to demonstrate creativity compared to the Profile of Creative Abilities (PCA)?

2. How do the A&W Buttons Creativity Performance Task Assessment performance rubric scores correlate with student performance scores on the PCA?

3. How do teachers perceive the use of the A&W Buttons Creativity Performance Task Assessment compared to the PCA as an instrument for gifted identification?
Review of the Literature

Equitable gifted student identification has been a topic of concern in the United States (U.S.) for decades (Ford, Grantham, & Whiting, 2008). This concern influenced my research focus and analysis of many gifted education journal articles and publications. The topics reviewed in the literature included gifted student underrepresentation, gifted identification, and gifted assessments and screening tools. Literature commonalities and patterns related to each of the topics provided a rationale for the expansion of creativity assessment research and the development of an easy-to-use and cost-effective creativity performance task.

Gifted Underrepresentation

One of the major points raised in the literature is the lack of attention paid to the issue of diversity as it relates to gifted education programs and the underrepresentation of some groups in the society. This issue is of utmost importance because according to scholars like Nieto and Bode (2008), diversity in the U.S. has dramatically increased over the past 40 years and the gifted education programs have not adequately reflected this change. Ford (2010) reiterated in her work that gifted education programs in Georgia and the greater U.S. have not reflected this increased diversity. Unfortunately, the make-up of gifted and talented programs in the U.S. continues to largely represent the majority White culture (Reis & McCoach, 2000). The state of Georgia is an example of this feature. According to the GADoE (2010), across all grades in Georgia, 74.9% of students identified as gifted are White (67.6%) and Asian (7.3%) ethnicities (Eger, 2010). Only 44% of the general school population is White and 3.3% is Asian in Georgia; this represents an overrepresentation of both ethnicities within Georgia gifted education. In the general Georgia school population, 37.3% is Black and 11.4 % is Hispanic, but both ethnicities are severely underrepresented in Georgia gifted education, in which 16.4 % is Black and 5.1% is Hispanic. Fi-
nally, the 2.9% of the general population who are of two or more ethnicities make up the last 3.3% of the Georgia gifted population.

Researchers over the years have pointed to the disparity in terms of who participates in gifted education. Over 75 years ago, Jenkins’ (1936) socio-psychological study on Black children of superior intelligence pointed to the paucity of minority students who participate in gifted education. Subsequently, the work of Ford (1998) reported that Black, Hispanic, and American Indians have always been underrepresented based on two decades of research on underrepresentation reports. Karnes, Troxclair, and Marquardt (1997) stated that complaints and claims of discrimination in gifted education tend to fall under the categories: (a) program admission, (b) communication protocols, (c) service placements, and (d) identification criteria. Identification criteria and protocols should be a top priority for gifted education leaders to ensure equitable gifted identification.

**Gifted Identification**

Dai, Swanson, and Cheng (2011) are among many scholars who noted gifted identification is one of the top research priorities in gifted education. Ford et al. (2008) stated that a practice of gifted assessment based only on mental ability and achievement test scores is almost one-dimensional across the United States, despite the consistent variance of definitions of giftedness and types of giftedness served. McClain and Pfeiffer (2012) reported that gifted definitions have changed substantially in the United States over the past decade and that definitions of giftedness are crucial in the identification process. At least 41 states had formal definitions of giftedness in 2009, but only 29 of the 41 states require local leaders to apply the definition for gifted identification (McBee, Peters, & Waterman, 2014). McClain and Pfeiffer stated that most gifted leaders support the list of points below in regard to concept of giftedness today:
• IQ matters and measures of intellectual ability are good predictors of later academic success and outstanding performance in one or more academic domains.

• IQ alone only partially explains a student’s ultimate long-term academic and real-world success; other factors such as domain-specific skills, high motivation, passion for a subject matter, commitment, persistence, self-confidence, and opportunity are important contributing factors if one hopes to attain adult excellence or eminence in a field.

• The promotion of talent among students identified as gifted is a long-term, developmental process.

• Assessment should be ongoing, given that talent development is an ongoing process and that not every child identified as gifted at an early age follows the same developmental trajectory (p.38).

Each of the above points reflects the progress that occurred in the past decade related to an expanded definition and concept of giftedness by a majority of states and research on giftedness.

Common definitions that have influenced gifted education in the U.S. include the 1978 Renzulli and the 1993 U.S. Department of Education definitions of giftedness. The 1978 Renzulli three component gifted behavior definition states:

Gifted behavior consists of behaviors that reflect an interaction among three basic clusters of human traits—above average ability, high levels of task commitment, and high levels of creativity. Individuals capable of developing gifted behavior are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance. Persons who manifest or are capable of developing
an interaction among the three clusters require a wide variety of educational opportunities and services that are not ordinarily provided through regular instructional programs (Renzulli & Reis, 1997, p. 8).

The 1993 U.S. Department of Education definition of gifted is based on the 1972 Marland Report to Congress that highlighted the needs of U.S. gifted and talented students. The U.S. Department of Education definition that influences many state definitions is:

Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor (U.S. Department of Education, 1993, p. 26).

The GADoE defines a gifted student as:

A student who demonstrates a high degree of intellectual and/or creative ability(ies), exhibits an exceptionally high degree of motivation, and/or excels in specific academic fields, and who needs special instruction and/or special ancillary services to achieve at levels commensurate with his or her ability(ies) (Georgia Department of Education, 2014, n.p.).

The Georgia multiple criteria gifted definition is reflective of both the Renzulli 1978 and 1993 U.S. Department of Education expanded and inclusive gifted definitions.
An emphasis on the collection of multiple sources of information for gifted identification has been a focus of many in the gifted field since the first half of the 20th century (Klein, 2000). Paul Torrance, a renowned gifted education expert, observed in the 1950’s and 1960’s that the narrow approach of using only intelligence and achievement tests resulted in the lack of identification of the majority of our most highly creative students (Van Tassel-Baska, 2008). Kim and Cramond (2007) stated that 80% of the top 20% of creative students might be missed with gifted identification practices that relied on intelligence and achievement tests alone. Overall, it seemed as though the limited practices perpetuated the underdevelopment of creative talent in students.

Research related to the underrepresented gifted learner such as minorities, economically disadvantaged, underachievers, and twice-exceptional students surged in the 1980’s (Reis & McCoach, 2000). Research from the 1980’s influenced the Javits Gifted and Talented Students Education Act of 1988 that distinctly stated, “Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor” (U.S. Department of Education, 1993, p. 26). Siegler and Kotovsky (1986) stated that motivation and creativity were key qualities of the expanded view of gifted in the late 1980’s. Sternberg and Davidson (1986) found that expanded multiple conceptions of giftedness are interrelated. The support by gifted education researchers for considering multiple characteristics and criteria for gifted identification provided further support for the need of the GADoE to continuously evaluate and revise gifted identification rules and protocols.

Georgia school districts now use a dual-option gifted identification approach in accordance with Georgia State Rule 160-4-2-38. In the early 1990’s, Mary Frasier of the University of Georgia piloted a multiple criteria option to include creativity and motivation as a part of the gifted identification protocol in Georgia in addition to mental ability and achievement assess-
ments. Mental ability and achievement assessments had been the traditional method of gifted identification in Georgia until the adoption of Frasier’s expanded model. Option A requires a mental ability test score in or above the 99th percentile for grades K-2, or 96th percentile for grades 3-12, and an achievement test score in or above the 90th percentile in total reading, total math, or composite. Option B, or the Multiple Criteria option, requires students to meet three of four assessment criteria, which may include qualifying scores for mental ability, achievement, creativity, and motivation.

Researchers have found that the use of multiple criteria reduces the chance that a gifted child with a history of underachievement will be ignored (Robinson et al., 2007). Lohman (2005) recommended the use of comprehensive data for gifted identification versus strict cut-scores on one or two norm-referenced assessments. Recommendations for alternatives include nonverbal measures, performance tasks, and local norms (Erwin & Worrell, 2012). McClain and Pfeiffer (2012) reported that 54% of states now consider multiple cutoffs, multiple scores, and averaging as part of the state decision-making model for gifted identification. The comprehensive focus of approximately 54% states in the U.S. was on the multitude of standardized assessments, observation scales, portfolios, and performance task protocols demonstrates the need for gifted identification alternatives in the areas of mental ability, achievement, motivation, and creativity. In addition, there has been a focus on assessment itself and the tools used in the process.

**Gifted Assessment and Screening Tools**

The definitions of giftedness that were developed due to or influenced by the 1972 Maryland Report required educators to rethink how to equitably assess and serve gifted and talented students (Clark & Wilson, 1991). This shift has led states to implement more precise and expanded assessment protocols that consider equity in gifted identification and services. The Geor-
Georgia Board of Education Rule 160-4-2-.38 Education Program for Gifted Students includes the following requirements:

Mental ability tests shall be the most current editions, or editions approved by GADoE, of published tests that measure intelligence or cognitive ability, which have been reviewed for bias and are normed on a nationally representative sample with respect to race, religion, national origin, sex, disability, and economic background within a 10-year period prior to administration. Norm-referenced achievement tests shall be the most current editions of tests, or editions approved by GADoE, that measure reading skills, including comprehension, and shall yield a total reading score and/or a total mathematics score based upon a combination of scores in mathematics concepts and applications. These tests shall have been reviewed for bias and are normed on a nationally representative sample with respect to race, religion, national origin, sex, disabilities, and economic background within a 10-year period prior to administration (Georgia Department of Education, 2014, n.p.).

The GADoE also provides an approved list of gifted assessments for each of the four areas measured with the multiple criteria rule. Commonly used mental ability gifted assessments utilized in Georgia include: the Cognitive Abilities Test (CogAT) – Forms 6 and 7, the Naglieri Nonverbal Ability Test, and the Otis-Lennon School Ability Test. The TerraNova, the Iowa Test of Basic Skills (ITBS), PSAT, and the Kaufman Test of Educational Achievement II are commonly used gifted assessments for achievement in Georgia. Other mental ability assessments are available but require a licensed psychologist for administration. The shorter list of approved motivation assessments and scales commonly used in Georgia include: the GES, GRS, Scales for Rating the Behavioral Characteristics of Superior Students, CAIMI, and grade point average.
(GPA). The use of a product, performance, or structured observation has not been common in Georgia for either motivation or creativity gifted screening due to the common use of rating scales for these gifted characteristics.

The 2012 GADoE rule revision now only allows the use of one rating scale for either motivation or creativity. The PCA creativity assessment, the Torrance Test of Creative Thinking (TTCT), and the use of a product, performance, or structured observation became the only creativity gifted screening/assessment options for school districts if a rating scale is used for motivation after the one year phase-out of the Williams Creativity Assessment Packet (WCAP). The WCAP was phased out by the GADoE because the assessment had surpassed the recommended 10 year re-norm procedure (Cramond & Wang, 2012). Baer (2008) stated that evidence for measuring general creativity should be more expansive compared to the 50 years of research that has occurred since Guilford’s initial work with divergent thinking. Guidance for the use of a product, performance, or structured observation was and has been minimal for Georgia school districts compared to the TTCT, WCAP, PCA, and rating scales.

The 1960’s TTCT figural test, WCAP, and newer PCA assessment are similar in that each require students to draw and are based on the 1950’s divergent thinking research of Guilford. Guilford included fluency, flexibility, originality, and elaboration as major characteristics of divergent thinking (Guilford, 1977). The WCAP also includes fluency, flexibility, originality, and elaboration, but added “abstractness of title” as an additional divergent thinking component. The TTCT figural test may be used for ages five through adults. The TTCT figural test includes two timed 30 minute forms to measure fluency, originality, abstractness of titles, elaboration, and resistance to premature closure. Flexibility was the initially part of the TTCT, but was later removed and replaced with “resistance to premature closure” due to the high correlation between
fluency and flexibility (Wang, 2006). Individuals complete three picture-based drawing exercises in which titles are created for each drawing. Gail Ryser (2007), the author of PCA provided that a moderate to strong correlation of .43-.60 exists between the TTCT and PCA. The PCA may be utilized for students between the ages of five years and 14 years and 11 months. The PCA includes an untimed drawing subtest with eight stimuli assessed for new elements, orientation, perspective, and originality, a second subtest of timed categories of two matrices of 20 animal pictures and 20 shapes, and a 36-item home and school rating scale with a 4-point Likert scale based on student behavior in the areas of fluency, flexibility, originality, sensitivity of problems, and redefinition. Many Georgia school districts purchased the PCA after the 2012 update of the GA-DoE gifted rule due to the straightforward nature of the PCA.

The purchase of a new creativity assessment such as the PCA or TTCT may not be an option for school districts with heavily reduced budgets. The 2014 price for a 25 student PCA kit was $174 and the cost to score a TTCT figural test was $7.10 per booklet. The extra expense could be not be supported by many Georgia school districts with severe budget deficits. The lack of a second measure for creativity or a well-developed product, performance, or structured observation protocol and instrument creates an equity issue for students in Georgia. A well-developed, open-ended instrument to assess products and performances of student creativity could be a cost-effective solution to allow teachers to gain greater insights into student capabilities for Georgia school districts (VanTassel-Baska, 2014). Shriki (2013) stated “teachers’ difficulties in assessing their students’ creativity and its development are due to a lack of an available simple tool” (p. 430). A focus on authentic creativity product development and performance can be cost effective and supports the Renzulli (1986) notion that creative individuals tend to be producers of knowledge, materials, or products.
The comprehensive literature review supports the need for the development and implementation of a cost-effective research-based creativity performance task assessment different from the traditional TTCT and PCA. A new cost-effective research-based creativity performance task assessment could provide a more equitable approach to address the underrepresentation of minority students in Georgia. Multiple criteria gifted identification in Georgia has been an important initial step to address underrepresentation in gifted identification, but the problem still remains prevalent in Georgia school districts (McBee, 2010). Recognition of the need for creative students to have access to multiple creativity assessment designs for the demonstration of creative knowledge, materials, and products is an important next step for Georgia school districts to consider.
References

Baer, J. (2008). Commentary: Divergent thinking tests have problems, but this is not the solution. *Psychology of Aesthetics, Creativity, and The Arts, 2*(2), 89-92. doi:10.1037/1931-3896.2.2.89


ADDRESSING GIFTED IDENTIFICATION EQUITY THROUGH ALTERNATIVES: ASSESSING CREATIVITY USING AN AUTHENTIC PERFORMANCE TASK

Methodology

The underrepresentation of minority students identified for gifted education in Georgia has remained a concern, despite the addition of the 20-year-old multiple criteria rule for gifted identification (McBee, 2010). McBee (2006) stated the addition of creativity and motivation to previous mental ability and achievement gifted assessment criteria areas has been linked to increased identification of gifted minority students, but I provide the assumption that improvement is needed in the area of creativity assessment in Georgia. In designing the research study methodology for inquiry with the creativity assumption, the researcher considered Schwandt’s (2001) methodology definition: “An analysis of the assumptions, principles, and procedures in a particular approach to inquiry” (p. 61). The methodology and research paradigm were used to later justify the methods for gathering data with the researcher and colleague developed A&W Buttons Creativity Performance Task.

Research Paradigm

The researcher used subjectivism as the research epistemology to frame the research study. The subjectivist approach was chosen to allow meaning of the creativity assessment to be imposed by the subjects of the study (Crotty, 1998). Subjectivism also was an appropriate epistemology because the knowledge and perceptions gained from the study are not necessarily transferable. Personal discourse with the underrepresentation of minority students in gifted education and the desire to challenge the status quo of gifted screening in the area of creativity in Georgia led me to a critical inquiry theoretical perspective. The underlying factor for the critical inquiry approach related to the question of whether one traditional creativity assessment is
enough to determine whether a student may or may not receive gifted services. The critical inquiry question led to the development of the A&W Buttons Creativity Performance Task.

**A&W Creativity Performance Task.** The A&W Buttons Creativity Performance Task developed by the researcher and another gifted specialist requires students to develop themes, stories, or displays using a collection of clothing buttons of various colors and sizes in 20-25 minutes. A creativity scoring rubric and administration guide based on the gifted student product and portfolio assessment work of Kingore (1993), Guilford, the TTCT, the WCAP, and PCA were developed to limit heavy training needs that are common with qualitative assessments (Johnsen, 2005) and to evaluate creativity performance with the newly developed assessment (Appendix A). The A&W Buttons Creativity Performance Task rubric includes divergent thinking measures in the areas of fluency, preparation/organization, abstractness of title, originality, and elaboration as do many other traditional creativity assessments. The preparation/organization characteristic is less common, but is supported by the gifted education performance task rubric work of Kingore (1993). The researcher defines fluency as in-depth knowledge/understanding of subject and quickly generates ideas; preparation/organization as insightful planning, organization, resourceful use of materials; abstractness of title as ability to capture the essence of the information involved, imaginative, symbolic; originality as unique, novel, imaginative, atypical for student’s age group; and elaboration as extensive details that add clarity or effect to topic of product.

The A&W Buttons Creativity Performance Task uses a four point scale rubric with a high-level to a low-level score for each of the five characteristics measured as recommended by Van-Tassel-Baska (2014) for performance-based assessments. A total score of 75 represents a 90th percentile gifted qualification score as the mean of 75 represents a mean average of “consistent
with gifted expectations” rankings with the A&W Creativity Performance Task rubric. The compensatory mean combination rule accommodates for high/low variation in student performance with the five distinct and not perfectly correlated divergent thinking characteristics assessed with the A&W Creativity Performance Task (McBee, Shaunessy, & Matthews, 2012). To address construct validity, the A&W Buttons Creativity Performance Task, administration guide, and rubric are based on an extensive review of 55 years of creativity research and assessments review of gifted literature (Jarosewich, Pfeiffer, & Morris, 2002). Input data from gifted specialists and feedback data from gifted teachers were collected for over a year during the development and pilot of the A&W Buttons Creativity Performance Task, administration guide, and rubric. The development of the creativity assessment, administration guide, and scoring rubric involved the iterative and cyclical process of recognizing an issue, developing and implementing an action plan, and making recommendations based on data (James, Milenkiewicz & Bucknam, 2008). The review of A&W Buttons Creativity Performance Task instrument validity was also iterative.

In a preliminary review process to address instrument validity, a group of 65 gifted educators at the 2013 statewide Georgia Association for Gifted Children conference, performed and scored the assessment after a brief training and provided feedback to address content validity (Jarosewich, Pfeiffer, & Morris, 2002). The assessment was then piloted with two purposively chosen second grade students previously referred for gifted screening. Results were mixed and indicated that one student (2nd grade White male) who had not demonstrated high levels of creativity with the WCAP could do so through the use of the newly developed assessment task, while the second student (2nd grade Black female) who demonstrated high levels of creativity on the traditional WCAP creativity assessment, did not demonstrate higher levels of creativity on the newly developed assessment. Following collection of these pilot data, a group of 10 gifted spe-
cialists at the 2013 National Association for Gifted Children conference repeated the instrument training performance, scoring, and review process. The 10 gifted specialists provided positive comments such as “promising tool for assessment for creativity.” A majority of the participants also stated they would consider use of the A&W Buttons Creativity Performance Task and rubric for gifted identification with the current state of the instrument; which again supported content validity. A concern with reliability and validity data was provided with regard to the new instrument. All pilot data were considered prior to conducting the A&W Buttons Creativity Performance Task training with teachers who participated in the participatory mixed methods action research study.

The researcher chose a participatory mixed methods action research methodology to allow an iterative and collaborative research process that included the recognition of a problem, development of an action plan with a group, data collection, and the group analysis of implications for school improvement prior to additional action (James et al., 2008). The mixed methods approach included the use of interview, photo, and observation qualitative data collected from the implementation of the A&W Buttons Creativity Performance Task. Quantitative data included assessment data and correlation coefficients calculated with the Pearson correlation statistical test. Student performance creativity index standard scores from the PCA creativity assessment were compared with the A&W Buttons Creativity Performance Task total score to assess criterion validity (James et al., 2008) and analyze student performance comparisons with the PCA creativity assessment through Pearson correlation coefficient values. Student and teacher data were collected from five elementary sites in one Georgia school district.
**Context**

**Research site.** The research study was conducted in a small urban district with 8089 students. The district has five elementary schools, two middle schools, and one high school. The data collection occurred at the five elementary schools with the assistance of the lead gifted teachers from each elementary school. The district’s student body of 8089 was 50% male, 50% female, 80% Black, 16.2% White, and 3.8% other. The 4053 elementary student body was 76.3% Black, 15.2% White, and 7.5% other. The district gifted student population was 50% male, 50% female, 45% Black, 49% White, and 6% other. The 584 elementary gifted student population was 45% Black, 51% White, and 4% other. Over 75% of the study body was eligible for free/reduced lunch.

**Students.** As a central office gifted and talented coordinator in the school district research site, I had access to student records and students who met the sample criterion. Student participants were chosen via criterion purposive sampling. The criterion purposive sample for the study was limited to a total of 20 elementary students who demonstrated gifted characteristics from the five district elementary schools. The 20 students had been referred for gifted identification due to the demonstration of gifted characteristics on a district checklist for gifted screening. The 20 students included 10 males and 10 females ages five to 10 years old. The grade range for the students was kindergarten through fifth grade, which is the full district grade range for elementary school. The ethnicity breakdown included 10 Black students, eight White students, and two Latino/a students. The percentage of each gender and ethnicity was reflective of the student gifted population of the school district. Each of the students had already been assessed with the PCA creativity assessment. Seven of the students had obtained a qualifying score in the 90th percentile.
or greater and 13 students had scored below the 90th percentile with the PCA according to the
gifted teacher specialists who participated in the research study.

**Teachers.** Gifted teachers from the five district elementary schools who already implement
the PCA were chosen to participate in the research study. The five teachers were White females
with advanced degrees and the gifted endorsement. The teachers administered the A&W Buttons
Creativity Performance Task after being trained by the researcher. The researcher reviewed stu-
dent gifted referrals and PCA scores for students who were eligible for gifted services based on
the PCA (90th percentile or greater) and those who scored below the 90th percentile. The teachers
selected students who represented the district demographics for the research study after the re-
view of data and consent and assent was obtained.

**Consent and Assent**

Parents or guardians and gifted teachers were provided an informed consent form that in-
cluded an explanation of the study benefits and possible risks, a permission request to allow par-
ticipation, data collection strategies, and an explanation of the parties involved (Appendix F &
H). Student participants were asked for verbal assent by the gifted teacher prior to administration
of the A&W Buttons Creativity Performance Task (Appendix G). Participants and parents were
informed that collected data would be kept in a locked cabinet and office during the study and
following publication. Student and gifted teacher data were kept anonymous with numerical and
letter codes throughout data collection and publication. Strategic planning occurred in regard to
the schedule of creativity assessment implementation to limit the loss of classroom instruction.
Parents and students were notified of the scheduled assessment session by the gifted teacher and
were informed that the student may withdraw from the study anytime without consequences. The
researcher reviewed the parent information protocol as part of the teacher A&W Buttons Creativity Performance Task training.

**A&W Buttons Creativity Performance Task Training**

A two-hour training agenda was developed and scheduled for the five gifted teachers who participated in the research study. The researcher scheduled the teacher training two weeks prior to student administration to allow time for questions and for students to return parent consent forms. (Appendix B). During the training, the researcher provided an overview of the development of the A&W Creativity Performance Task and a history of instrument validity efforts. Each of the gifted teachers scored the TTCT and PCA prior to the start of the research study and the relationships between the two creativity assessments and the A&W Creativity Performance Task were discussed during the training. Teachers were provided time to review the A&W Creativity Performance Task administration guide, observation notes, and scoring rubric.

The researcher collected teacher feedback after the review and use of the A&W Creativity Performance Task. Feedback indicated the need for an additional administration notes section for observation data and for definitions of the creativity characteristics to be added to post observation notes form. The researcher accepted the feedback recommendations and adjusted the A&W Creativity Performance Task administration guide prior to the administration with students (Appendix A). In order to gain experience, the teachers were asked to practice administration, completion, and scoring of the A&W Creativity Performance Task with partners. The researcher worked with the fifth teacher to alleviate the odd number of participants. Two student samples from the A&W Creativity Performance Task pilot were later provided for the whole group to score independently to measure inter-rater reliability and build credibility (Appendix C&D). Each teacher scored the samples the same as the researcher, or was one point off in one of the
five characteristics with each of the two samples (Stanford Center for Assessment, Learning, and Equity, 2013). Inter-rater reliability was 93% across the two practice samples.

After the common sample scoring opportunities, the researcher reviewed the student assent, parent consent, and teacher consent forms and procedures (Appendix F-G). A research timeline was presented to the group for feedback. Student purposive sample criteria were compared to current district elementary gifted student population demographics. The district elementary gifted student population demographics included 50% males, 50% females, 45% Black, 51% White, and 4% other. Teachers were asked to review the current fall gifted referrals for possible student participants. The training closed with a review of the fidelity checklist the researcher would use during the A&W Creativity Performance Task administration with a non-participant observation approach (Appendix E).

**Non-Participant Observation**

The researcher observed each gifted teacher with a non-participant observation approach while implementing and completing the A&W Creativity Performance Task to ensure assessment implementation fidelity and to support credibility and transferability (Shenton, 2004). A fidelity checklist was used for each student administration of the A&W Creativity Performance Task (Appendix E). A photo of the creativity product was collected for analysis by the gifted teacher and to support field notes collected during product completion (Richards & Morse, 2013). Each of the 20 students used the same collection of buttons for the research study to reduce possible variables for performance. Notes from the student explanation of his or her product were collected by the researcher and teacher along with the photo to better capture the student performance data (Dana, 2009). Fields notes and photos were used to address data analysis validity by the gifted teachers (Richards & Morse, 2013). The researcher and gifted teachers scored
and discussed the evaluation of student products as part of inter-rater reliability. The researcher informed the teachers that semi-structured interviews would be conducted with them after the administration and scoring session.

**Semi-structured Interviews**

The action research interview questions were constructed based on the semi-structured action research interview design to build rapport and solicit spontaneous responses (Rubin, 2005; Teddlie & Tashakkori, 2009). The researcher developed a gifted teacher interview question set that included five questions (Appendix I). The interview also served the purpose of allowing the teacher participant continuous input as the action research study progressed (Fraenkel, Wallen, & Hyun, 2012). The five question interview sets began with a broad open-ended question to build rapport (Teddlie & Tashakkori, 2009) and became narrower with each question to focus on the teacher perception of the A&W Creativity Performance Task assessment.

A 10-15 minute timeframe was allotted for each gifted teacher interview. A photo elicitation interview approach was used to begin the interview. A photo of the student’s creativity products was included to initiate a rich personal discussion with the gifted teachers (Fournillier, 2013). The researcher conducted each gifted teacher interview immediately after the completion of the student administrations of the A&W Creativity Performance Task at each school site.

Subsequent questions of “why” and “how” were used to probe for additional clarification and gain a wider perspective for interpretive analysis (Teddlie & Tashakkori, 2009). Participant responses were analyzed for positive and negative themes related to the comparison of the traditional and new creativity assessment. A T-chart data display that included positive and negative feedback headers was used to recognize themes based on participant feedback and to address the
third research question related to student and gifted teacher perception. (Teddlie & Tashakkori, 2009). Student performance scores were also analyzed statistically.

**Statistical analysis**

Student performance scores on the A&W Creativity Performance Task and the PCA were analyzed in SPSS to determine Pearson r correlations. The correlation coefficients were utilized to address the second research question and to discuss criterion validity. PCA age standard creativity index scores were compared with A&W Creativity Performance Task total and raw scores. Finally, gender and ethnicity performance mean scores were compared and discussed for possible claims and themes.

**Ethical considerations**

The researcher received permission and feedback from the school system’s Internal Review Boards (IRB) prior to the study. The researcher provided a piloted and scripted training session on the A &W Buttons Creativity Performance Task for the involved gifted specialist teachers. The training session included an overview of the creativity assessment developed by the researcher and a practice session on the evaluation component of the assessment to limit biases and subjectivity. Fidelity checklists were maintained for each student administration. Inter-rater reliability was assessed to support credibility and trustworthiness of student performance among the participants.

The researcher served as a district coordinator for the research sites during the study. The researcher’s supervisor approved the PMARS approach to be utilized with district gifted teachers prior to the study. The familiarity with the researcher supported rapport with the gifted teachers at each site. Rapport, trust, and credibility could support the elicitation of interview information as compared to an outside researcher (Spradley, 1979).
Results

The researcher and each gifted teacher collected observation notes using the A&W Creativity Performance Task observation notes form in the A&W Creativity Performance Task administration guide (Appendix A). Student explanations to each of the 10 question stems provided with the A&W Creativity Performance Task post-performance student feedback questions were recorded on the A&W Creativity Performance Task administration guide (Appendix A). A photo of the student product and the A&W Creativity Performance Task observation and student feedback notes were used to complete the post-performance notes (Appendix A). The researcher and gifted teacher scored each student product with the A&W Creativity Performance Task rubric (Appendix A). Scores were discussed and compared to the rubric definitions and student evidence for inter-rater reliability.

Inter-rater reliability

Across 20 of the 5-item A&W Buttons Creativity Assessment rubrics, inter-rater reliability was 83%. Reliability was 100% for adjacent agreement, which refers to a difference of 1-point for indicators (Stanford Center for Assessment, Learning, and Equity, 2013). Adjacent agreement is commonly used in performance assessments. The reliability across the five creativity characteristic indicators was 90% for originality, 85% for preparation/organization, and 80% for fluency, abstractness of titles, and elaboration. Inter-rater reliability was not available for the comparison PCA scores. The same teacher did score both the PCA and A&W Creativity Assessment for each student. Fidelity of administration was also discussed with teachers during the student administration sessions.
**Fidelity**

Fidelity results were 297 agreements out of a total of 300 opportunities (20 administrations of a 15-item yes/no checklist) for a total of 99%. Two teachers misquoted 25 minutes time versus 20 minutes time for three students who were in grades higher than K-2. The three students were only provided the appropriate time allotment after the misquoted administration time instruction. Each gifted teacher collected the required student performance data for each student participant in the research study.

**Student performance data**

Individual teacher scores for the five creativity characteristics assessed with the A&W Creativity Performance Task are provided in Table 1. The group mean scores for each A&W Creativity Performance Task creativity characteristic and total raw score were as follows: preparation/organization ($M=3.3$), elaboration ($M=3.05$), originality ($M=2.75$), fluency ($M=3.25$), Abstractness of title ($M=3.4$), and total raw score ($M=14.85$). Detailed student performance and observation data are provided for each student after Table 1.
Table 1

Teacher Scores for Student Performance on the A&W Buttons Creativity Performance Task

<table>
<thead>
<tr>
<th>Student</th>
<th>Prep/Organization</th>
<th>Elaboration</th>
<th>Originality</th>
<th>Fluency</th>
<th>Title</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>1B</td>
<td>2</td>
<td>2</td>
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<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>1C</td>
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<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>1D</td>
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<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>2A</td>
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<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>19</td>
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<tr>
<td>2B</td>
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<td>2</td>
<td>2</td>
<td>10</td>
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<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
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<td>4</td>
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<td>19</td>
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<td>2</td>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
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<td>Mean</td>
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<td>3.05</td>
<td>2.75</td>
<td>3.25</td>
<td>3.4</td>
<td>14.85</td>
</tr>
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</table>

Note. Possible score ranges were 1 - 4 for each creativity characteristic and 0 - 20 for the total raw score.
Each student completed the A&W Creativity Performance Task administration in a unique way that either closely aligned with expectations based on the previous PCA performance or did not. The PCA and the A&W Creativity Performance Task were both administered to each student by the gifted teacher at his or her school. A collection of student performance data that included A&W Creativity Performance Task administration observation notes, student feedback notes, post observation notes, a rubric score, a photo, and PCA performance scores were collected by the gifted teacher and researcher for each student participant. Student gender, ethnicity, age, and grade were collected for analysis of trends with PCA subtest performance, PCA total assessment percentile ranks, and A&W Creativity Performance Task total scores (Table 2).
Table 2

Student Performance on PCA Subtests and A&W Buttons Creativity Performance Task

<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Age</th>
<th>Grade</th>
<th>PCA 1</th>
<th>PCA 2</th>
<th>PCA total</th>
<th>A&amp;W 1</th>
<th>A&amp;W 2</th>
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<td>W</td>
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<td>90</td>
<td>90</td>
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<td>B</td>
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<td>4</td>
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<td>95</td>
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Note. *number (i.e., 1-5) = school site code, letter (i.e., A-E) = individual student code; **W** = White, **B** = Black, **L** = Latino/a; **PCA** = Profile of Creative Abilities; **1** = subtest 1 percentile; **2** = subtest 2 percentile; **total** = total percentile rank; **A&W** = A&W Buttons Creativity Performance Task; **1** = gifted teacher total score (score utilized); **2** = researcher total score.
**Gender and ethnicity analysis.** Seven (two males/ five females) or 35% of the 20 students (10 male/ 10 female) met the 90th percentile gifted qualification on the PCA and 12 (seven males/ five females) or 60% (71% increase in qualification) of the same 20 students met the A&W Creativity Performance Task minimum total score of 75 for qualification. Five of the seven students who qualified on the PCA also qualified on the A&W Creativity Performance Task. The male and female Latino/a student qualified on both the PCA and A&W Creativity Performance Task. Black student qualification remained at 3 of 10 students or 30%, but Black male qualification increased from 0 to 2 of 4 or 50% with the A&W Creativity Performance Task and Black female qualification decreased from 3 of 6 or 50% to 1 of 6 or 17% with the A&W Creativity Performance Task. White student qualification increased from 2 of 8 or 25% to 7 of 8 or 88% with the A&W Creativity Performance Task; White male qualification increased from 1 to 4 of 5 or 80% with the A&W Creativity Performance Task and White female qualification increased from 1 of 3 or 33% to 3 of 3 or 100% with the A&W Creativity Performance Task. The most dramatic change in performance from the PCA to A&W Buttons Performance Task was the increase of total male qualification from 20% to 70%; while female qualification remained at 50% of the 10 students.

**Male student performance.** Male students who scored 75 or above on the A&W Creativity Performance Task included students 1A, 1D, 3C, 3E, 4A, 4B, and 4D. The most dramatic increase in performance was student 3C who was complementary of the A&W Creativity Performance Task. Students 1B, 3D, and 4C did not score 75 or above on the A&W Creativity Performance Task and did not meet the 90th percentile for performance on the PCA either. Each of the male students developed a unique product and explanation as provided in the subsequent examples.
**Student participant 1A.** Student 1A developed a car and house display product titled “Me and my mom going to Florida to see grandpa” (Figure 1). The student was eager to begin after the administration directions were provided. He pulled out a handful of buttons and started separating out white buttons and dark buttons. The student continued to search for dark buttons and would stop for a moment to observe repeatedly during the 7 minute 56 second timeframe for development. A car was developed with components inside of the car aimed towards a house.

Student 1A explained the car was his mother’s Honda Civic and pointed out the buttons that represented the frame, wheels, suspension, windows, engine, and sunroof. Details about how the engine and suspension works were provided. The house was described as “grandpa’s house” and it had a heart in the middle that represented “grandpa” and a sign on it with the word “lodge” written on it. Other details included directions to Waycross, Georgia and items in the car to take to “grandpa’s house” such as Halloween toys and a large tray.
Student 1A product titled “Me and my mom going to Florida to see grandpa”.

*Student participant 1B.* Student 1B developed a flower underneath a rainbow and sun product titled “The flower under the rainbow” (Figure 2). The student worked consistently after the administration directions were provided. He pulled out buttons one at a time and developed the flower, then rainbow, and finally the sun during a 5 minute 58 second timeframe. Student 1B carefully cleaned off a few excess buttons and paused to think a moment before stopping. Student 1B explained he developed a flower under the rainbow because “Yesterday, I saw it raining and there is stuff outside growing.” The student explained the sun represented the sun being out today and the circle and heart buttons made him think of the flower. Finally, the student wrote his title on the notecard after a prompt.
Student 1B product titled “The flower under the rainbow”

**Student participant 1D.** Student 1D developed a grounded tree with a bird at the top product titled “The cool tree” (Figure 3). The student asked “Is color needed?” and then went to work after the administration directions were provided. He pulled out a handful of buttons for the top of the tree and dark buttons for the trunk one at a time during the 6 minute 42 second timeframe for development. A bird and the grass were developed with a variety of button colors and other buttons were shifted around with careful thought. Finally, the student created a title on the notecard and a drawing of the product on notebook paper.

Student 1D explained he made “a picture of a tree with a bird that stays there because it is comfortable.” He pointed out the dark bark, grass, and bird. When asked how the buttons were
chosen, the student said, “I thought about adding a rainbow, but wanted to keep it simple and random.” The student also provided that the “Cool Tree” title refers to temperature because it gets hot at night and he can turn on the A/C but the bird can get in the tree. Finally the student provided the tree is most creative “Because it caves in at the bottom versus sinking into the ground.”

*Figure 3.* Student 1D product titled “The cool tree”.

*Student participant 3C.* Student 3C developed a house with a picnic area inside and a person with a picnic basket and a tree on the outside product titled “The picnic house” (Figure 4). The student took time to think and draw for over four minutes after the administration directions were provided. He talked about his ideas out loud throughout the full 20 minute administration
timeframe for development. The student began to take out buttons and compare the buttons to the drawing. He erased and modified the drawing after he searched for buttons. Uneven buttons that were not flat were not used and the scale of house parts seemed to be important. The title was written on the notecard after the teacher prompted him as part of the student feedback questions.

Student 3C explained he had created a picnic house because he likes to picnic, but not really go outside to be hot and around bugs. He described the house interior with fake grass, glass in the roof for sky views, a food court upstairs, a nature sound machine, nature scenes on the wall, a butterfly area, and a water area to eat beside and put your feet in. The water was only used for one week because it had to be cleaned due to people placing feet in it. The tiny buttons were placed on the ground to look flat, the medium buttons were used for the wall for thickness, and the roof was different sized buttons with a clear window area. The student stated the windows for the sky, sounds of water, and nature sounds were the most creative part of the display. Finally, the student stated “The last creative thing was hard. This was better because I couldn’t think of things after all those tasks and got boggled down.” The student had completed both the PCA and TTCT Figural Form A due to teacher concern with a very low score on the PCA.
**Figure 4.** Student 3C product titled “The picnic house”.

**Student participant 3D.** Student 3D developed a transformable motorcycle product titled “The super cycle” (Figure 5). The student talked about LEGO movies immediately after the administration directions were provided. He pulled out buttons individually and grouped the buttons in the center of the board. He worked excitedly for two minutes and 48 second before stopping and stating, “I call this the super cycle.

Student 3D explained the super cycle was from LEGO movies and was used to escape to the Wild West through portals. He shared that the red buttons were red handlebars to pull, fire boosters were in the back, other parts change to change into a super plane, and the wheels have a fire boost. The shooting parts were described as the most creative because the shooting parts
shoot super seeker robots. The student said he saw the movie a long time ago, but has the LEGO games and movie series. The teacher asked the student what he thought would happen in the next movies and he stated he did not know.

Figure 5. Student 3D product titled “The super cicle”.

Student participant 3E. Student 3E developed a Martin Luther King speech scene and “I have a dream” product titled “Martin had a dream and it came true” (Figure 6). The student was asked about the purpose of the activity after the administration directions were provided. He pulled out only brown buttons initially and placed the buttons around a heart-shaped button that was later removed. A figure and circle was added to the right side of the brown button circle. The student then spend time spelling out “I have a dream.” The buttons were chosen carefully as
much attention was provided to two gold buttons. A total of 18 minute 31 seconds was used for development before 40 seconds was used by the student to write the title on the provided note-card.

Student 3E explained the figure was Martin Luther King with people around him as he gave the “I have a dream” speech. He explained with Thanksgiving coming up, he thought about what he was thankful for and made the display. The student stated the different buttons represented different people and the two gold buttons that received so much attention were picked to represent “It doesn’t matter if you’re different.” When asked if he had a story or poem to go with the display, the student said, “In Washington D.C., one of the most famous speeches was given to a large amount of people there. He said I have a dream that my kids could be friends with White people.” He stated “the letters were most creative because he had to think awhile and couldn’t but did this because it is Thanksgiving.” His original thought was of a dinosaur and the brown buttons were originally for a volcano. Finally, the student stated he wanted his class to see the display in a proud manner.
Student participant 4A. Student 4A developed a scientifically modified bug product titled “The amazing bug beast” (Figure 7). The student worked quickly after the administration directions were provided. He started with two similar sized white buttons and proceeded to pull out buttons randomly with an occasional pause during the 2 minute 4 second timeframe for development.

Student 4A explained he made a bug beast in a confident manner. He said the beast had four legs, three eyes, horns like a bull, triangle-shaped body, and no arms. When asked how he decided to develop this product, he said “I like bugs and beasts, so put them together”. He did not have a reason for the selection of buttons, but did provide the following story: “Once there
was a bug made by a scientist. He put juice on it that was to make it giant, but it made it a beast.” The student stated the bug eats flesh and is similar to a type of maggot. The title was chosen because “It sounds amazing” and the most creative aspect according to the student was the bug has three eyes.

**Figure 7.** Student 4A product titled “The amazing bug beast”

**Student participant 4B.** Student 4B developed a human body with exposed internal anatomy product titled “I made a person” (Figure 8). The student asked if the display had to be something not in real life after the administration directions were provided. The student spent over three minutes speaking about his ideas of sheep and drawing a cube. Later he chose a heart-shaped button and decided to make a person. He started to talk about types of bones, organs, and
ears and pulled out simple similar buttons. Symmetry appeared to be important except for the left alignment of the heart. The student spent 19 minutes 26 seconds for product development before he explained his creation.

Student 4B explained he chose buttons based on how the body parts looked and worked and that he wanted to make how someone looked on the inside. The ribs were made with small buttons because of the lines across the middle and he stated if he used larger buttons they would look round and touch the heart. The student explained he had a rule that “One button could not go over another button”. A flower button was chosen because the button hole represented the opening in the neck. The larger leg buttons represented the hips and knees. He stated his favorite part was the lungs, but the feet were most creative because of the resemblance to paws like the school wildcat mascot. The title was written when prompted but the kindergartener had to ask how to write “person” and he kept the title simple; the teacher offered to write the title initially.
Student 4B product titled “I made a person”.

Student participant 4C. Student 4C developed a house with a fence and flowers product without a title (Figure 9). The student seemed to be nervous and hesitant after the administration directions were provided. He pulled out a black button, two gold buttons, and a row of buttons with a heart at the bottom and stopped after 63 seconds. The teacher asked the student about his product and he stated he “did not know what to say”, but started working on the display again when asked if the product has a title. The student chose buttons randomly for another 17 minutes 37 second timeframe with multiple start and stop sessions that followed the teacher question of “Anything else?”. A house with a chimney, door, door knob, window, fence, and plants with a sun and clouds overhead were developed in the second work period.
Student 4C explained he just picked buttons, but he wanted the same color buttons for the sun and clouds. He also stated he liked to make flowers, but could not think of a title. Finally, the student said he considered all of the display as most creative in a shy and rushed manner.

![Image of Student 4C's product](image)

*Figure 9. Student 4C product “untitled”.*

**Student participant 4D.** Student 4D developed a baby goose being fed by a hand full of food product titled “The goose hand” (Figure 10). The student was very outgoing and knew immediately what he wanted to create after the administration directions were provided. He started with a large brown button and stated “Perfect shape.” The student carefully chose buttons and used his hand as a model to place and stack buttons. Buttons were shifted continuously until the student asked if he could make more than one thing after a 10 minute 16 second timeframe. The
student quickly grabbed a handful of buttons that were shaped into a bird. A great deal of attention was placed in the shape of the eyes and legs before time expired.

Student 4D explained he first thought of two pictures of a baby goose and a hand because his parent told him to not get near an adult goose. He stated, “I thought if I had food in my hand, the chick may come over”. The student shared that he likes animals, bird singing, music, and watching birds at his grandpa’s house. The clear buttons were chosen to show webbing in the feet and the 3-D hand was created to show food in the hand to avoid a goose bite. The goose legs received additional attention because the curves were to show the goose walking towards the hand. Finally, the student shared the good head was most creative because he had never seen a goose head made with buttons.

*Figure 10.* Student 4D product titled “The goose hand”. 
As provided, the seven male student participants who scored 75 or higher on the A&W Buttons Creativity Performance Task all created unique products and explanations. Overall male student performance scores on the A&W Buttons Creativity Performance Task rubric in the five divergent thinking characteristic areas were promising as overall performance improved. Female performance with the A&W Buttons Creativity Performance Task was not as promising.

**Female performance.** Female students who scored 75 or above on the A&W Creativity Performance Task included students 1C, 2A, 2C, 2D, and 5C. Students 2B, 3A, 3B, 5A, and 5B did not score 75 or above on the A&W Creativity Performance Task. Students 2B, 3A, and 3B also did not meet the 90th percentile for performance on the PCA. Students 5A and 5B both scored above the 90th percentile on the PCA, but shyness was a common limiting factor with the A&W Buttons Creativity Performance Task. Each of the female students developed a unique product and explanation as provided in the subsequent examples.

**Student participant 1C.** Student 1C developed an old lady walking in a field of talking roses product titled “The old lady who wasn’t afraid of anything” (Figure 11). The student worked slowly after the administration directions were provided. She pulled out buttons individually after searching for two black buttons, then big brown buttons and two shiny buttons followed by colorful buttons. Student 1C thought between her selections of each button during the 13 minute 46 second timeframe for development.

Student 1C wrote a story to accompany her product and wrote a title for both the product and story on the provided notecard. The story is as follows:

My product is about an old lady and she goes around and she’s not afraid of anything. She’s very, very tough and she’s just not afraid of anything that come her way. She’s not even scared walking shoes with no one walking in them. She just keeps walking around
everything then soon she comes to a talking rose and then she’s scared. She runs back to her cottage and no one ever sees the old lady again. People say she was weird. The end.

The student explained the product was based on her favorite story which shared the same name as her product. The product display was described by the student as the colorful buttons representing the talking roses and the old lady was in the middle with a smiley face. Student 1C also added that the roses were planted with special seeds and the colors of the roses change to red, purple, and brown. The student’s favorite book was reviewed by the gifted teacher and researcher to determine that student 1C had developed an alternative ending to the original story by creating an event and objects in which the old lady who wasn’t afraid of anything really was.

*Figure 11.* Student 1C product titled “The old lady who wasn’t afraid of anything”.
Student participant 2A. Student 2A developed a gold eating monster with a person inside product titled “The gold thief of thieves!” (Figure 12). The student appeared to be thinking while the administration directions were provided. She asked for the directions to be clarified three times and then started to write the following on the notebook paper: “I am going to draw something gold and it has lines on it and it eats gold. It has a person inside it, is mean and it is called THE THEIVE OF THIEVES!” She pulled out gold buttons after 6 minutes one-by-one and placed the buttons in a line to start the product shape. Next the student pulled out jewel-like, pearl, and silver buttons to fill in the center of the product during the 10 minute 25 second timeframe for development.

Student 2A explained her product as she added buttons periodically. She stated the product was a “gold monster that eats people’s gold and has a person inside who is eating people’s gold until one day someone cuts open the monster and the person inside goes to jail.” When asked how she decided to develop the product, she said that no one would be able to figure it out as she proceeded to point out the belly button, foot would a leg, hands, and head. The same buttons were used for symmetrical appearances of the hands, feet, “googly” eyes, and other body parts. The student shared that the hips were red and purple because of soreness from running to the village. Finally, the student said the ideas started from a spikey person who was dressed in a costume and stole gold on the cartoon Adventure Time. The cartoon was reviewed to determine originality and it was determined that the students product was not copied from the cartoon Adventure Time.
Student 2A product titled “The gold thieve of thieves!”.

Student participant 2B. Student 2B developed a heart, flower, Earth, triangle, house, square, and rock products titled “Button objects” (Figure 13). The student thought for a few seconds and began to pull out dark buttons after the administration directions were provided. She pulled out the buttons one at a time, spread the buttons out, and began to form shapes. The student continued to search for buttons in the bag and paused to review each button before placement during the initial 11 minute 39 second timeframe for development. She then wrote “a button flower, word flower made out of buttons, a button heart, a button house, a button earth, a button square, a button triangle, and a button rock” before working with buttons display another 2 minutes and 55 seconds.
Student 2B explained each of the items in the display were separate button objects. She said each of the items was made of buttons, so that is why she called her display “Button objects.” No reason for the choice of buttons was provided except that “gold represents gold and gems were put together.” Finally, the student added that the activity was fun.

![Image of student 2B's display titled “Button objects”](image)

*Figure 13. Student 2B product titled “Button objects”.*

**Student participant 2C.** Student 2C developed display of her mom, herself, and two cats titled “My life’s display” (Figure 14). The student stated “I have had an idea in my head for a while” after the administration directions were provided. She pulled out specific buttons from the bag individually and carefully placed or stacked the buttons on the white board. Shiny buttons were held to opposite sides and identical red and gold buttons were grouped during the 8 minute
10 second timeframe for development. She stated she had a hard time finding buttons she was looking for and that she was nervous at times when finished.

Student 2C explained that her product was not make believe and no one else would think of it because it was her life. The student said the “two opposite gold buttons were held for the two cats that look alike and the hearts were placed above the family to show we love each other.” The title was provided quickly when asked by the gifted teacher for a title. Student 2C liked the “catchiness” of the title. The gold sun, blond buttons under brown buttons for 3-D hair, and the little buttons for arms and legs were provided by the student as the most creative parts for the product. Finally, the student said, “it was fun and I wish I could take the picture to show my mom.”

*Figure 14.* Student 2C product titled “My life’s display”. 
Student participant 2D. Student 2D developed a little girl in a mine with a waterfall mining for gems and diamonds product titled “A mining place” (Figure 15). The student starting writing the product title immediately after the administration directions were provided. She pulled out buttons in a small pile and separated dark buttons into a cluster. Tan, brown, and white buttons were lined up around the dark cluster in a sideways “u-shape”. Lighter colored buttons were added to the dark cluster and other buttons were shifted around before she had used the full 20 minute timeframe for development.

Student 2D explained that when she saw the fancy and shiny buttons she knew she could make a girl mining for gems and sparkly stones. The dark cluster was described as a waterfall with the lighter colored buttons representing bubbles. The sideways “u-shape” represented a 3-D mine and the sparkly buttons within the tan/brown dirt buttons represented the sparkly stones spread around the mine. The student shared that the most creative part of her display was the girl holding a pickaxe. Finally, she added that the display made her think of Snow White and the Seven Dwarfs movie.
Student participant 3A. Student 3A developed a framed mouth with the world colors in it product titled “World Mouth” (Figure 16). The student was ready to start the display prior to the completion of the administration directions. She pulled out matching buttons one at a time and focused on symmetry for the full 25 minute timeframe for development. A frame was added around the face as she finished her display. The student asked how to spell the word mouth as she wrote her title on the notecard after completion of the display.

Student 3A explained her first idea was a face, but the blue and green buttons made her think of Earth, so she made the Earth in the mouth. The blue represents the oceans, the green represents towns, and the eyes and nose were chosen to be shiny like the rest. She shared the most
creative part of the product was the shiny buttons and that she knows a lot about shiny things like glass and sand. The picture frame around the face was black and gold to represent her school colors and the wildcat mascot. Finally, she stated the activity was fun.

![Image of a product with buttons]

*Figure 16. Student 3A product titled “World Mouth”.*

*Student participant 3B.* Student 3B developed a doll house product titled “House Doll Girl” (Figure 17). The student began quickly after the administration directions were provided. She pulled out a large brown button and replaced it with a purple and gray button in the center of the board. Other buttons were gathered individually to form the outline of a house. The student stated “done” after a 3 minute 58 second timeframe for product development. She then asked the
teacher if she had an idea for the house. The teacher reread the directions for the title and the student wrote the product title on the notecard.

Student 3B explained she made a house because she likes to watch doll house videos on her dad’s phone and that she wants a doll house for Christmas. She said she tried to make buttons match for the parts of the house and purple is her favorite color. The student did not provide an answer for what was most creative about her display.

Figure 17. Student 3B product titled “House Doll Girl”.

**Student participant 5A.** Student 5A developed a Statue of Liberty product titled “The United States” (Figure 18). The student thought about using the notebook paper first, but decided to create the display first after the administration directions were provided. She pulled out two
matching buttons, and then other similar-sized buttons to form a box-like cluster at the bottom of the board. The student continued to carefully add to the top of the cluster and paid special attention to button pairs and to red buttons that she placed above an arm-like structure. The student spent 21 minutes and 7 seconds on the display before her explanation.

Student 5A was shy as explained she created a Statue of Liberty display. She began to write on the notebook paper when asked by the teacher how she decided to create the product. She wrote, “Up top on the right side is the fire that the arm with the fire under it is that little green and the five on top of it. On the bottom it has three windows and the door on the sides is the building. And that’s his head with a smile and nose.” The student then shared that the big buttons are the building under the statue and she seemed to be proud of the red fire and green bronze buttons. Her title was “The United States” and the body and body parts were shared as the most creative part of the display by the student.
Figure 18. Student 5A product titled “The United States”.

**Student participant 5B.** Student 5B developed a jewelry store with three people product titled “There was a lady who went to the jewelry shop” (Figure 19). The student began immediately after the administration directions were provided. She began stacking buttons and searched for matching button pairs. The heart buttons were used as a head and the student spent considerable time to stack a smaller button on the heart. Gold and jewel-like buttons were clustered in between the two larger people. The student searched the entire bag of buttons to locate matching buttons for the arms until the 25 minute time period expired.

Student 5B explained she made a display of people going to the jewelry store and the hearts were used to make faces. The gold and jewel-like buttons were the stacks of jewelry on
tables and rings were in holders. She shared verbally “A lady was coming from church to buy earrings and another lady was looking for a necklace with her son. Both ladies had a flower on their hat. One lady had been to another store, but there wasn’t anything, so she was going to the other store that had jewelry in the middle” as her story. Finally, the student stated the title was chosen because the ladies were going to shop and the jewelry was most creative because there was a lot of it.

*Figure 19.* Student 5B product titled “There was a lady who went to the jewelry shop”.

**Student participant 5C.** Student 5C developed a model of the attack of the Twin Towers in New York product titled “The attack of the Twin Towers” (Figure 20). The student was eager and started her display immediately after the administration directions were provided. She ran-
domly chose buttons and quickly made two rectangles. Details were added inside the rectangular structures and then to the top. The student added another structure, later described as an airplane to display as the final component. Only 5 minutes and 14 seconds were used for product development before the student explanation.

Student 5C excitedly explained she created a display of the attack of the Twin Towers by an airplane. She stated the instructions made her think of the Twin Towers and that her teacher taught in New York during the attack. The buttons were organized to show fire at the top, doors at the bottom, windows, shaved areas of the building, and a plane angled to show a guy looking out. The student explained the title, “The attack of the Twin Towers” was chosen because the product “Made the buttons show fire from the airplane and added a second airplane to show the towers were being attacked.” The plane was considered most creative by the student because of all of the detail and the angle of the wings show it is turning into the tower. Finally, she added that the doors were different sizes to show one of the towers collapsing.
As formerly stated, five of the seven students who met qualification with the PCA, also met qualification with the A&W Creativity Performance Task. However, no significant Pearson $r$ correlations were found between the PCA and A&W Creativity Performance Task. The correlation coefficient ($r = -.033$) for PCA total creativity index standard score and A&W Creativity Performance Task total score was zero and not significant ($p = .89$). PCA total creativity index standard score and A&W Creativity Performance Task total scores correlation coefficients for
males \( r = -.029 \) and females \( r = .086 \) were zero and not significant. The PCA Drawing subtest 1 and A&W Creativity Performance Task correlation coefficient \( r = .10 \) was weak and not significant and the PCA Categories subtest 2 and A&W Creativity Performance Task correlation coefficient \( r = -.23 \) was also weak and not significant.

Half of the 20 student population demonstrated a noticeable fluctuation in performance or varied more than 25 points between the PCA percentile rank and the A&W Creativity Performance Task total score. Male and female performance varied on the PCA and A&W Creativity Performance Task. Based on the results of a two-tailed independent \( t \)-test, females \( (M = 26.2, SD =3.65) \) performed 6.5% higher than males \( (M = 24.6, SD =4.12) \) on the PCA, but the difference was not significant \( [F (2, 18) = .18, p = .37] \). Based on the results of a two-tailed independent \( t \)-test, males \( (M = 79, SD =17.9) \) performed 16.2% higher than females \( (M = 68, SD =20.8) \) on the A&W Creativity Performance Task, but the difference was not significant \( [F (2, 18) = 1.27, p = .22] \). The teacher who worked with student 3C, 3D, and 3E pointed out the variation of male performance on the A&W Creativity Performance Task compared to PCA when interviewed.

**Teacher perception**

Immediately after the administration of the A&W Creativity Performance Task, each teacher participant was interviewed (Appendix I). Five questions were used to elicit feedback related to teacher perception of the A&W Creativity Performance Task. Each response was recorded and later transcribed to review for positive and negative themes using a t-chart to support research claim(s) (Teddlie & Tashakkori, 2009).

The first question asked was open-ended and basic to establish initial rapport and served as a warm-up (Teddlie & Tashakkori, 2009). Teachers were asked to refer to the student products created with the A&W Creativity Performance Task in responding to the first question. Two of
the teachers explained that the student products were more elaborate than expected and that the
task was good for students who did not draw well. The general theme of the ability to see crea-
tivity in multiple ways was consistent among the five teachers and was elaborated on with the
teacher participant comment,

I thought it provided a good way to see their creative ability in a different way, other than
drawing, because not all students draw well. So this gave a different look to creativity. It
also provided a chance for them to elaborate orally about their story as they were creating
it, or after they created it. I think it's a great alternative.

The teachers were then asked to talk about how the A&W Buttons Creativity Performance Task
did or did not allow the students to demonstrate creativity characteristics.

Several of the teachers elaborated on their initial responses and explained there was ex-
citement when viewing student performance on A&W Creativity Performance Task. Teacher 4
provided, “It's almost like I got to view their thought process as they were creating them, versus
just drawing a picture where I don't feel like you get to see as much.” The final themes provided
for the first two questions were that students seemed to start quickly and enjoyed the A&W Cre-
ativity Performance Task.

Next, teachers were asked to describe how the PCA and the A&W Buttons Creativity
Performance Task activities compared or differed in providing the students an opportunity to
demonstrate creativity. Each teacher shared the importance of hands-on manipulation, the open-
edendedness, and verbal expression opportunities of the A&W Creativity Performance Task. Four
of the teachers elaborated on how the PCA and the A&W Buttons Creativity Performance Task
activities compared or differed. Teacher 2 stated:
I think it's a little bit more out of the box. I think some of the kids or students might be a little intimidated by the others because maybe they can't draw too well, their artistic skills aren't very good. I think this allowed for more ... just more expressive. They were able to express it better than just drawing skills. It's a lot more verbal than the others, so I like that part of it.

Teacher 3 stated:

With the PCA, the first part of course is just taking a prompt and turning it into something else by drawing. I like the PCA in the fact that it is not timed, so they have plenty of time to think and to add details. I like that part of the PCA. Also like the part where they have to be creative in another way by grouping those items that go together in a certain way. Grouping three items together in a certain way, because I think that measures a different type of creativity, which is also very good. The A&W Buttons Creativity Performance Task I thought is a very good compromise of both. I think it allows them to be very creative without having to draw. And since it is buttons, I think the child feels less threatened that it doesn't have to be precise, because you're not going to be precise with buttons. So to me it seems less threatening.

Teacher 4 stated:

I think that one way that they're similar is that when you're evaluating the students product on the buttons activity, if you say something basic like a house, you're not going to give them as high as a rating on the rubric; same thing with the PCA. When they're manipulating a figure to change it into another picture, if it's something basic, like a house again, it's going to be in the PCA originality list where they would give zero points or minimal points, instead of receiving the two points. Also, with the categorizing and
grouping that's on the PCA, I think they can do similar things with the buttons. They can find, they're not required to, but they can find ways that the buttons go together. It might be the colors, the size, whether they are see-through or not, or how many holes the button has. They can categorize them in many different ways, similar to the PCA. The difference though, I would think, is that they have the opportunity to expand upon their creativity with the buttons activity, where with the PCA, it's all put on paper and then judged from that form.

Teacher 5 stated:

On this assessment they can verbalize, where on the others, it's minimal. They can write their title or tell you their title, but they don't get the opportunity to expand like they do on this. So, if their creativity is more mental than it is visual or drawing, they can still give you that.

Overall teacher 3 demonstrated favor for the structure of the PCA, but there was a strong positive attitude and regard for the value of the open-endedness, out-of-the-box, verbal, and manipulative approach of the A&W Buttons performance task; all which were common themes among the teacher participants.

The fourth question asked to the teacher participants was “When, if ever, should the A&W Buttons Performance Task be used to assess creativity for the gifted identification process?”. Teacher 1 provided the A&W Buttons Performance Task should be considered as a 2nd measure for the school district. Teacher 2 provided reasoning for the A&W Buttons Performance Task to serve as a first or second measure when they stated:
I like it as an alternate to maybe a re-test. I think it's fine as that. If it needs to be the first test, I'm totally fine with that. I think it's a pretty good test of a child's creativity. Looks pretty accurate from what I've seen.

Teacher 3 provided similar thoughts with additional detail with:

I don't know how we'll be able to use if it's always going to be a second measure or a first measure. I think it could be used depending on the child. Once we've given the other assessments you can look to see the kind of student that you might be working with and see what ... You use your professionalism to decide which measure would be more appropriate for the specific student.

Teacher 4 supported the use of the A&W Buttons Creativity Performance Task as a first measure for students. Teacher 5 provided that student characteristics should be considered before the A&W Buttons Creativity Performance Task or PCA assessment is chosen as first measure with:

I think if you have a student who is more verbal that this gives them the opportunity to really be able to expand their creativity, tell you what's going on in their head. A student who maybe feels intimidated by artistic ability, you put something down in front of them and you want them to draw pictures, and all of a sudden they feel like they're not confident in their work. Something like this, where they can get hands-on, and even if they can't make a beautiful picture with the buttons, they can verbally expand upon it.

The five teachers shared that the A&W Buttons Performance Task should be used in the school district as a first or second measure of creativity. This feedback demonstrated the theme that student characteristics should be consider before the A&W Buttons Performance Task or PCA assessment is considered as part of the gifted identification process.
The final question of the interview was: “Would you recommend for other school districts to explore the use of the A&W Buttons Performance Task or additional creativity assessment techniques beyond PCA or the TTCT?” All of the teacher participants stated they would recommend the use of the A&W Buttons Performance Task to other school districts. Teacher comments included: “I think that it's important that the second measure ... especially for creativity ... be a little different, because all students express themselves differently.” “I'd like to see the button test thrown in there too as an assessment choice.” “Just because it's an additional measure and if we are serving our students and trying to identify students for the gifted program, we ought to be able to have a whole bag of options for the individuality of the child.” “I like the test we've got, but I just think some of the students might be nervous about their artistic or drawing abilities and I think the buttons allow them to go out of the box.” “I like the cost factor, so it's not prohibitive for even school systems that don't have big budgets. Just need a bag of button and it's easy to administer.” Teacher comments provided an overall positive perception of the A&W Buttons Performance Task. Negative feedback included the need for more reliability and validity data in relation to adoption for usage.

**Conclusions**

Ford and Harmon (2001) stated the overreliance on traditional gifted assessments by school districts has been a barrier for underrepresented gifted student identification. Johnsen (2005) stated, “All students should have an opportunity to demonstrate their best performance” (p. 27). The development of an alternate creativity assessment such as the A&W Buttons Creativity Performance Task supports the critical claim of many researchers (Cramond & Wang, 2012; Johnsen, 2005) and the Office of Civil Rights (OCR) (Johnsen, 2005) of the need for school districts to develop fair and equitable identification systems that include consistently
evaluated multiple assessment measures that accommodate student diversity and gifted pro-
gramming. Districts should not assume that any assessment can accommodate all students. The
A&W Buttons Creativity Performance Task

A PMARS approach was chosen to allow a holistic and iterative analysis of the new
A&W Buttons Creativity Performance Task and related student and gifted specialist data (Ted-
dlie & Tashakkori, 2009). The researcher sought to gather substantive qualitative and quantita-
tive data for triangulation as the study progressed (Teddlie & Tashakkori, 2009; Fraenkel et al.,
2012). These data included student performance data from the A&W Buttons Performance Task,
PCA, observation data, correlation data for the A&W Buttons Creativity Performance Task and
PCA scores, and feedback and interview data. The study was guided by the following research
questions:

1. How does the use of an authentic performance task affect students’ abilities to demon-
strate creativity compared to the Profile of Creative Abilities (PCA)?

2. How do the A&W Buttons Creativity Performance Task Assessment performance rubric
scores correlate with student performance scores on the PCA?

3. How do teachers perceive the use of the A&W Buttons Creativity Performance Task As-
essment compared to the PCA as an instrument for gifted identification?

More students demonstrated equivalent to higher levels of creative behaviors with an authentic
A&W Buttons Creativity Performance Task. Very weak and insignificant correlation coefficients
were found between the A&W Buttons Creativity Performance Task and the PCA. Finally, the
researcher found teachers have a positive perception of the authentic performance task in relation
to the quality, need of the creativity assessment alternative, and student performance.
**Student performance**

Observation, teacher interviews, and assessment score results support the claim that the A&W Buttons performance assessment allows students an alternate method to effectively demonstrate creativity. Results indicated that students may or may not demonstrate higher levels of creativity with the A&W Buttons performance assessment compared to the PCA. It was promising that seven (two males/ five females) or 35% of the 20 students (10 male/ 10 female) met the 90th percentile gifted qualification on the PCA and 12 (seven males/ five females) or 60% (71% increase in qualification) of the same 20 students met the A&W Creativity Performance Task minimum total score of 75 for qualification.

The variation in male/ female and Black/White performance on the PCA and the A&W Creativity Performance Task developed into an interesting theme. Olszewski-Kubilius and Clareback (2012) posed the question, “Do best strategies for identifying talent vary by race, gender, and culture?” (p.25). Qualification increased from 0% to 50% for Black males (N = 4), 20% to 80% for White males (N = 5), and 20% to 70% for all males (N = 10) assessed. Female qualification with the A&W Creativity Performance Task remained at 50% for all females (N = 10) assessed, but White females (N = 3) increased from 33% to 100% and Black females (N = 6) decreased from 50% to 17% qualification.

Robinson, Shore, and Enersen (2007) stated increased procedural interactions or components of tasks tend to “favor performance of Black females and White boys when compared to White girls and Black boys in that order” (p.37). The traditional procedural structure of the PCA and student performance supports this claim. Lubinski and Benbow (1992) claimed girls outperform boys in the verbal domain but not the spatial domain. This claim was also supported by male performance on the less verbal and more spatial A&W performance task. The open-ended A&W
performance task can allow students an opportunity to provide more detail about their products versus the drawing subtest of the PCA, so students are not limited by vocabulary and drawing requirements, which may also vary by gender and ethnicity.

Other noteworthy student performance data included student demeanor, outlier behaviors, and student comments with the A&W Creativity Performance Task. Students 3B, 4C, 5A, 5B demonstrated shyness during the A&W Creativity Performance Task. Three of the four students were Black females and the limited explanation due to shyness could have reduced the total assessment score and resulted in the decreased qualification percentage found with the A&W Creativity Performance Task. Robinson et al. (2007) stated confidence level can affect student performance with gifted assessment and programming. Many of the student participants stated the A&W Creativity Performance Task was “fun” and were proud of the buttons product, including the most extreme outlier student 3C (21st percentile TTCT, 7th percentile PCA, 95 total score A&W Creativity Performance Task). Student 3C also stated “The last creative thing was hard. This was better because I couldn’t think of things after all those tasks and got bogged down.” No student participant requested more time for the A&W Creativity Performance Task and only students 2D, 3A, and 3C or 15% of the 20 students used the full time to complete task, so the 20 to 25 minute assessment timeframe was considered appropriate.

Correlations

No significant correlation exists between the A&W Buttons Creativity Performance Task rubric scores and PCA creativity index standard scores. The PCA assesses students for fluency, flexibility, originality, sensitivity of problems, and redefinition. The A&W Buttons Creativity Performance Task assesses the characteristics of fluency, preparation/organization, abstractness of title, originality, and elaboration. The differences with creativity characteristics and perfor-
mance approaches with the PCA and A&W Buttons Creativity Performance Task provide a case for no significant correlation. Cramond and Wang (2012) stated “All tests are not equal. So, one could get very different measures on two different measures of the same construct” (p.337). Cramond and Wang also recommend for teachers to choose assessments that are most closely aligned with student strengths such very verbal, visual, or performance based, so assessment type may outweigh the correlation coefficient between creativity assessments.

**Teacher perception**

Despite the lack of significant correlation coefficients for the PCA and the A&W Buttons Creativity Performance Task, teacher feedback and student performance supported the criterion and construct validity of the A&W Buttons Creativity Performance Task. Gifted teachers in the pilot research and research study perceived the A&W Buttons Creativity Performance Task assessment positively and support its use for creativity assessment in gifted identification. The positive teacher perception along with high inter-rater reliability and fidelity results support the credibility, transferability, and dependability of the A&W Creativity Performance Task.

The teacher participants stated the individual student should be considered when determining which creativity assessment is most appropriate and Teacher 3 stated the A&W Buttons Creativity Performance Task adds to the bag of options needed to assess our diverse student body. Teacher 4 stated:

I think for instance, I tested a minority student, and she did great on the drawing part, but on the categories section of the PCA I think her limited English was an issue there. I did retest her with the Torrance, but being that it's timed it didn't serve her well.

Positive feedback from the teacher participants was also shared in relation to the A&W Buttons Creativity Performance Task training. Teacher 2 stated “I'm very glad that we took it before we
did it. That was most helpful in understanding the test.” Clary, Brzuszek, and Fulford (2011) stated jurors may not always fully understand rubrics and the difference between included categories after training; limiting construct validity, criterion validity, reliability, transferability, and dependability with any assessment. Finally, several of the teacher participants expressed the importance of making student comfortable before the administration of the A&W Buttons Creativity Performance Task as another point to ensure equity.

**Significance**

The development of a new and effective creativity performance task assessment alternative offers increased equity to the gifted identification process in Georgia beyond current assessments such as the TTCT that was developed many years ago for a much less diverse population and the PCA that requires similar student behaviors, including drawing. The new A&W Buttons Creativity Performance Task assessment allows students to demonstrate creativity behaviors beyond the structured drawing and matching activities utilized by the traditional creativity assessments explained formerly in the introduction. School districts may also decide to use the new creativity assessment as an inexpensive and easy-to-use pre-screening tool for gifted evaluation.

**Limitations**

Limitations for the study include the limited sample size of the study and the minimal research data to support the validity of the newly developed A&W Buttons Creativity Performance Task assessment. The fact that the researcher serves in a leadership role at the research site could limit the reliability, trustworthiness, and credibility of the study. Replication or transferability of the methodology could also vary in future research due to the researcher role (Spradley, 1979).
Future Research

Future research should include a replication study with a larger and more diverse student sample to determine gender and ethnicity performance significance levels. Significant results could provide a more concrete recommendation protocol for usage of the A&W Buttons Creativity Performance Task based on student characteristics such as gender, ethnicity, and age. A future researcher could develop a checklist of student characteristics to accompany the A&W Buttons Creativity Performance Task. Gifted program retention rates of students who qualify for gifted services with the A&W Buttons Creativity Performance Task could be evaluated. Teacher gender and ethnicity, training and background with gifted education, identification, assessment, and referral practices could be explored in regard to student performance and identification percentages. Finally, exploration of the possible uses of the A&W Buttons Creativity Performance Task for talent development could also add to the results of the current research study.
References


APPENDICES

APPENDIX A

A&W Buttons

Creativity Assessment

**Objective**

Students have the opportunity to be creative with buttons in order to demonstrate:

- Fluency
- Preparation/Organization
- Abstractness of title
- Originality
- Elaboration

**Materials:**

- Paper
- Pencil
- Notecard
- Buttons
- White board
- Evaluator Data Form

**Preparation**

This activity should be administered in individual settings.

The activity time limit for K-2nd grade is 25 minutes and 20 minutes for 3rd -12th grade.

Plan to provide each student a white board, package of buttons, paper, pencil, and notecard for a title.

Obtain a timer and the A&W Buttons Creativity Assessment Evaluator Data Form and Post Performance Task Note Form.
Administration and Instructions

1. Provide the student a white board, package of buttons, paper, pencil, and notecard for title.

2. Directions may be repeated during the delivery of instructions and during the assessment.

3. SAY: Today you will develop a creative product or display that no one else may think of using some of or all of the supplied buttons. Your creative product or display may represent a theme, story, scene, thing, or event using the supplied buttons. Your visual display must be created within the area of the whiteboard. (Pause)

4. SAY: There are many interesting and unusual themes, stories, scenes, things, or events that may be represented by these buttons. Remember creativity is encouraged and to use your imagination.

5. SAY: Keep thinking until you have a clear and developed idea. Paper and pencil may be used to organize your thoughts, draw ideas, or write notes. (Pause)
6. SAY: As you develop your product or display, think of a creative title that represents or explains your idea. Your creative title may be written on the notecard provided or you may say it later.

7. SAY: Later, you will also be asked to share an explanation, story, or poem to describe your button product or display. You may use the paper to write your explanation, story, or poem or you may share verbally out loud.

8. SAY: You will have (25 minutes K-2 or 20 minutes 3-12) to complete your creative product or display. Remember to develop a creative title and explanation, story, or poem. If you finish before time is called, please sit quietly.

Administration Requirements

1. Directions may be repeated during the delivery of instructions and during the assessment.
2. Utilize the Evaluator Data Form to record performance task development notes.
3. Once time has been called, capture product with a photo. It is recommended to record the students’ explanation to provide support for further evaluation.
4. Utilize the Post Performance Task Notes form to record student data related to preparation/organization, fluency, elaboration, abstractness of title, and originality.
5. All data should be considered when using the A&W Buttons Creativity Performance Task Product Rubric.
6. Extended time may be needed if required by student accommodation recommendations.
A & W Buttons Creativity Assessment

Evaluator Data Form

Performance Task Development Observation Notes:

Product development-

Preparation/ Organization:

Utilization of Resources (Buttons, Paper, Pencil, Note card, Board)-

Other Notes:
The following questions are to be utilized to probe students to explain their buttons display and products.

(Questions may be modified or adapted as needed for different age groups; additional questions may be considered)

1. Tell me about your display or product you created with the buttons.

2. How did you decide to develop this display or product?

3. Did you organize the buttons in a special way?

4. What do the different buttons represent?
Post-Performance Task Notes (Student Feedback) Continued

5. Did you have a story or poem to go with your display or product (May just explain)?

6. What did you title your display or product?

7. How did you decide on your title for your display or product?

8. What do you think is most creative about your display or product?

9. Do you want to tell me anything else about your display or products?

10. Additional Questions may be considered for evidence.
**Post-Performance Summary Notes**

**Fluency:** (Demonstrates in-depth knowledge/understanding of subject and quickly generates related ideas)

**Preparation/Organization:** (The product shows evidence of insightful planning. There seems to be an organized approach to the assignment or task. There is evidence of a sequencing of the steps involved in the task.)

**Abstractness of Title:** (The title is abstract, but appropriate in capturing the essence of the product, imaginative, or going beyond what is seen. For example, “Pinocchio meets JoAnn’s Fabric” or Love and Happiness)

**Originality:** (The product is unexpected or unusual. It is highly atypical and unlike others of students in this grade level.)

**Elaboration:** (The product, title, and/or explanation have extensive or unique details, which adds clarity or effect and is related to the overall content or topic. For example, richness of imagery and/or humor is added through details in the explanation, poem, or story to enrich the product more than is expected.)
**A & W Buttons Creativity Assessment**

**Product Rubric**

Student ___________________________________________ Date ___________________________

Grade ___________________________ School __________________________

**Directions:** Circle the number beside each statement that best describes the student’s product/performance and multiply the weight. Afterwards, add the total column for a final score.

*Fluency* – demonstrates in-depth knowledge/understanding of subject and quickly generates related ideas

*Preparation/Organization* – insightful planning, organization, resourceful use of materials

*Abstractness of title* – ability to capture the essence of the information involved, imaginative, symbolic

*Originality*-unique, novel, imaginative, atypical for student’s age group

*Elaboration* – extensive details that add clarity or effect to topic of product

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<tr>
<th>Fluency: In-depth knowledge: Ideas</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4 (x)</th>
<th>5</th>
<th>Total Score</th>
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<tr>
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</table>

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<th>3</th>
<th>4 (x)</th>
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<th>Total Score</th>
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<tr>
<td>(The product shows evidence of insightful planning. There seems to be an organized approach to the assignment or task. There is evidence of a sequencing of the steps involved in the task.)</td>
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<thead>
<tr>
<th>Abstractness of Title</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4 (x)</th>
<th>5</th>
<th>Total Score</th>
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<tr>
<td>(The title is abstract, but appropriate in capturing the essence of the product, imaginative, or going beyond what is seen. For example, “Pinocchio meets JoAnn’s Fabric” or Love and Happiness)</td>
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<th>Originality: Unique or Unexpected</th>
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<th>3</th>
<th>4 (x)</th>
<th>5</th>
<th>Total Score</th>
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<tr>
<td>(The product is unexpected or unusual. It is highly atypical and unlike others of students in this.)</td>
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<thead>
<tr>
<th>Elaboration: Detailed; Content-related</th>
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<th>2</th>
<th>3</th>
<th>4 (x)</th>
<th>5</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>(The product, title, and/or explanation have extensive or unique details, which adds clarity or effect and is related to the overall content or topic. For example, richness of imagery and/or humor is added through details in the explanation, poem, or story to enrich the product more than is expected.)</td>
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Evaluation Scoring Guidelines

Score 1 Inconsistent with Expectations

- The students presented a partial, incomplete, or poorly executed product/performance that is difficult to judge for this feature.
- This feature had a compelling example of poor practice or multiple examples of poor practice.
- This feature is inconsistent with expectations.

Score 2 Limited as to Expectations

- Although some strength does exist, the student’s product is limited with respect to the expectations of gifted students.
- There is insufficient information or evidence in the product or explanation to judge consistency with expectations of the feature.
- This feature is somewhat inconsistent with expectations.

Score 3 Consistent with Expectations

- The student’s product is somewhat consistent with the expectations of gifted students. Such a product is clear and complete, but not outstanding.
- This product reflects an above average interpretation of the task for this feature. There is real evidence of strength, but not an exceptionally high level.
- An apparent strength in this feature of the product does not significantly enhance the overall product, however.
- This feature is somewhat consistent with expectations.

Score 4 Compelling Evidence of Excellence

- The student’s product represents compelling evidence of having met expectations of excellence.
- This feature was evident in this product at exceptionally high levels.
- This feature of the product was sufficiently strong in that the overall product was enhanced significantly.
- The teacher judges this product to be among the best examples observed for this grade/age level.

Adapted from: Kingore, B. Portfolios: Enriching and Assessing All Students, Identifying the Gifted Grade K-6, 1993.
APPENDIX B

A&W BUTTONS CREATIVITY ASSESSMENT TRAINING AGENDA

1. Welcome/ Refreshments

2. Study Overview
   • Participatory Mixed Action Research Design and Purpose
   • TTCT/ PCA Comparison and Discussion
   • A&W Buttons Design Review and Discussion
   • Data Collection Protocol and Feedback
   • Internal and External Validity

3. Administration Protocol Review and Practice

4. Fidelity Checklist Review

5. Inter-rater Reliability Scoring Activities

6. Scoring Discussion

7. Student Assent Procedures

8. Parent Consent Progress

9. Data Collection Timeline

10. Final Comments
APPENDIX C

FEMALE STUDENT TEACHER TRAINING EXAMPLE

I went to a park and saw the tallest girl. I was
desperate but nice. It is weird to.

A girl was
7'2.5"
APPENDIX D

MALE STUDENT TEACHER TRAINING EXAMPLE

It being Thursday, take aspirin and
bathwater each other in turn.
When each other and
jump. Paint them fast bounds
until they become firm. Be
right.
## APPENDIX E

### ASSESSMENT FIDELITY CHECKLIST

**Date:** __________________________________________________________

**Observer:** ______________________________________________________

**Directions:** Check “yes” if the element occurs during observation of the assessment session. Check “no” if the element does not occur during observation of the assessment session.

<table>
<thead>
<tr>
<th>Y/Yes</th>
<th>N/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment is administered in individual setting with teacher and student.</td>
<td></td>
</tr>
<tr>
<td>Teacher provides student with a white board, package of buttons, paper, pencil, and notecard for title.</td>
<td></td>
</tr>
<tr>
<td>Teacher delivers following directions: Today you will develop a creative product or display that no one else may think of using some of or all of the supplied buttons. Your creative product or display may represent a theme, story, scene, thing, or event using the supplied buttons. Your visual display must be created within the area of the whiteboard.</td>
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<tr>
<td>Teacher delivers following directions: There are many interesting and unusual themes, stories, scenes, things, or events that may be represented by these buttons. Remember creativity is encouraged.</td>
<td></td>
</tr>
<tr>
<td>Keep thinking until you have a clear and developed idea. Paper and pencil may be used to organize your thoughts, draw ideas, or write notes.</td>
<td></td>
</tr>
<tr>
<td>As you develop your product or display, think of a creative title that represents or explains your idea. Your creative title may be written on the notecard provided or you may say it later.</td>
<td></td>
</tr>
<tr>
<td>Later you will also be asked to share an explanation, story, or poem to describe your button product or display. You may use the paper to write your explanation, story, or poem or you may be share verbally out loud.</td>
<td></td>
</tr>
<tr>
<td>You will have (25 minutes K-2 or 20 minutes 3-12) to complete your creative product or display. If you finish before time is called, please sit quietly.</td>
<td></td>
</tr>
<tr>
<td>Teacher repeats directions as needed during delivery of instructions and during assessment.</td>
<td></td>
</tr>
<tr>
<td>Teacher utilizes the Evaluator Data Form to record performance task development notes.</td>
<td></td>
</tr>
<tr>
<td>Assessment is administered within time limit (25 minutes k-2nd or 20 minutes 3rd-12th).</td>
<td></td>
</tr>
<tr>
<td>Teacher takes a photo of the student’s completed assessment product.</td>
<td></td>
</tr>
<tr>
<td>Teacher records student’s explanation of his/her assessment product.</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Teacher utilizes the Post Performance Task Notes form to record student data related to preparation/organization, fluency, elaboration, abstractness of title, and originality.</td>
<td></td>
</tr>
<tr>
<td>Teacher uses Product Rubric to evaluate student’s assessment product.</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong> (yes/yes + no) x 100%</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX F

Georgia State University
Department of Educational Policy Studies
Parental Consent Form

Title: Addressing Gifted Identification Equity through Alternatives: Assessing Creativity using an Authentic Performance Task

Investigator: Dr. Janice Fournillier
Student Investigator: Charles Alex Alvarez

Introduction

We invite your child to participate in this research study. The study will provide an additional measure of creativity for gifted identification. The study will focus on student performance on a creativity task developed by the student researcher at Georgia State University. Georgia State University and Valdosta City Schools have approved the study. We will invite your child to participate in this study as part of his/her normal gifted screening process. There will be about 20 students in this study and five gifted teachers. Research will begin in October of the current school year.

Procedure

We are working to find the best methods to assess creativity for gifted identification in Valdosta City Schools. Your child’s gifted program teacher at his/her school will include the 20 to 25 minute creativity performance task as part of the normal gifted screening process during normal school hours. If your child participates, he or she will develop a creative product to be scored with a rubric. The creativity product will be photographed with your signed permission. The student researcher is a Valdosta City Schools employee and a student at Georgia State University.

We will obtain a copy of your child’s gifted eligibility form to determine the effectiveness of the creativity performance task. We also request permission to take a photo of the final creativity product. This will allow us to see how your child performed. We request your permission to use the photo to train other people on how to use the creativity performance task. Your child’s name will not be shared in this training or in the future.

Risks

The risks of participation are the same as those of everyday life. There is a small chance your child may feel shy, tired, or bored. If that happens, the researcher will stop. Your child can continue at a later time only if your child is willing.

Benefits

Your child may not benefit personally from being in the study. However, the information that we learn from the study may be used as additional evidence to support a qualifying creativity score for gifted identification. Valdosta City Schools will use student performance data to support gifted testing practices.
Voluntary Participation and Withdrawal

Your child’s participation is voluntary. Your child’s classroom activities or grades will not be affected if your child does not participate. You have the right to refuse to allow your child to be in this study. If you decide to allow your child to be in the study and change your mind, you have the right to withdraw your child at any time. Your child may stop at any time. Whatever you decide, you and your child will not lose any benefits.

Confidentiality

We will keep your child’s information private to the extent allowed by law. Dr. Janice Fournillier and Charles Alex Alvarez will have access to the information you provide. Information may also be shared with those who make sure the study is done correctly. We will use a study number instead of your child’s name. We will not identify your child personally when we present or publish this study. All information from this study will be stored in locked cabinets. Information stored on computers will be password-protected.

Contact Persons

Contact Dr. Janice Fournillier at 404-413-8262 or by email at jfourniller@gsu.edu if you have questions about this study. If you have questions or concerns about your child’s rights as a participant in this research study, you may contact Susan Vogtner in the Office of Research at 404-413-3513 or svogtner1@gsu.edu.

Consent Form

Please mark the answers below. This will let us know if you are willing to allow your child to participate in this research and if you are willing to allow us to record your child’s participation to share with other professionals.

Please return this page to your child’s teacher and keep the front copy for your files.

If your child can participate check here □

If we can include a photo of your child’s creativity performance task product as training for teachers of gifted education children check here □

__________________________________________
Child’s Name

__________________________________________
Parent/Legal Guardian

__________
Date
APPENDIX G

STUDENT ASSENT FORM

Student Ages 5-7

The following assent procedures will take place using this script prior to the administration of the creativity performance task assessment procedures and will serve as assent for the remainder of this study for participants who are 5 to 7 years old.

1. Researcher: “Do you want to participate in the creativity activity?”
2. If the student responds “yes,” the researcher will say, “First we are going review the materials that can be used during the creativity performance task. Next I will read the instructions for the creativity performance task. Later, you will share your creativity product and tell me about it.”
3. If the student responds “no,” the researcher will say, “Okay, maybe you will want to participate later.” Then the researcher will ask the student again at a later time (at least one hour later or the next day). The researcher will make three attempts to receive assent from the student. If the student still refuses to participate or appears upset the researcher will allow him/her to stop. The student will not be asked again and will not be included in the study.
4. If the student responds “yes,” the researcher will ask the participant to sign this assent form to indicate that the student understood the researcher and gave assent to participate in the study.

If any student refuses to participate in the assessment or intervention at any time during the study the teacher or the researcher will allow him/her to stop. During the next assessment or intervention session the teacher or the researcher will ask the student if s/he would like to continue participation. If any student declines, s/he will be allowed to stop participating. This procedure will continue for up to three consecutive sessions. If the student continues to refuse to participate after three consecutive sessions the researcher will discuss the previous assent procedures and ask if the participant would like to stop participation in the study. If the participant wishes to stop participating in the study the researcher will remove him/her from the assessment and intervention procedures.

Participant Name

__________________________________________

Researcher Signature/ Date
APPENDIX H

Georgia State University
Department of Educational Policy Studies
Teacher Consent Form

Title: Addressing Gifted Identification Equity through Alternatives: Assessing Creativity using an Authentic Performance Task

Investigator: Dr. Janice Fournillier
Student Investigator: Charles Alex Alvarez

Introduction

We invite you to participate in this research study. The study will provide an additional measure of creativity for gifted identification. The study will focus on student performance on a creativity task developed by the student researcher at Georgia State University. Georgia State University and Valdosta City Schools have approved the study. We will invite you to participate in this study as part of the normal gifted screening process. There will be about 20 students and five elementary gifted education teachers for a total of 25 participants involved in this study. Research will be conducted September through November of the current school year.

Procedure

We are working to find the best methods to assess creativity for gifted identification in Valdosta City Schools. If you participate, you will be asked to participate in two-hour training on the research study and how to administer and score the creativity performance task assessment. You will be asked to send provided informed consent forms home with students who have met criteria for gifted screening. After parent/legal guardian permission, the 20 to 25 minute creativity performance task will need to be administered to four students as part of the normal gifted screening process during normal school hours. The four creativity products will then need to be scored with a rubric and it is estimated to take 15 to 20 minutes per student product. The creativity product may be photographed to support the rubric score if parent permission is provided. A one to two hour interview will take place at the end of the study and will be audio recorded with your permission.

We will need to obtain a copy of the child’s gifted eligibility form to determine the effectiveness of the creativity performance task. We also request permission to audio record an interview with you based on the creativity performance task assessment and student performance. Your name and information provided will be kept confidential using a research study number. All data will be kept secure in a locked cabinet or password protected computer.

Risks

The risks of participation are the same as those of everyday life.
Benefits

You may not benefit personally from being in the study. However, the information that we learn from the study may be used as additional evidence to support the use of the student researcher developed creativity performance task assessment as an additional creativity assessment instrument for equitable gifted identification in Valdosta City Schools and Georgia.

Voluntary Participation and Withdrawal

Your participation is voluntary. You have the right to refuse to be in this study. If you decide to be in the study and change your mind, you have the right to withdraw at any time.

Confidentiality

We will keep your information private to the extent allowed by law. We will use a study number instead of your name. Charles Alex Alvarez and Dr. Janice Fournillier will have access to the information you provide. Information may also be shared with those who make sure the study is done correctly (GSU Institutional Review Board and/or the Office for Human Research Protection (OHRP)). You will not be identified personally when we present this study or publish its results. We will use a study number rather than your name on study records. The information you provide will be stored in a locked cabinet in the school district. Your name and other facts that might identify you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally.

Contact Persons:

Contact Dr. Janice Fournillier at 404-413-8262 or by email at jfourniller@gsu.edu if you have questions, concerns, or complaints about this study. You can also call if you think you have been harmed by the study. Call Susan Vogtner in the Georgia State University Office of Research Integrity at 404-413-3513 or svogtner1@gsu.edu if you want to talk to someone who is not part of the study team. You can talk about questions, concerns, offer input, obtain information, or suggestions about the study. You can also call Susan Vogtner if you have questions or concerns about your rights in this study.

Copy of Consent Form

We will give you a copy of this consent form to keep.

If you are willing to volunteer for this research and be audio recorded please sign below. Please return this form to Charles Alex Alvarez and keep the front copies for your files.

________________________________________  __________________________  ____________
Printed Name                   Teacher’s Signature               Date

Principal Investigator or Researcher Obtaining Consent  Date
APPENDIX I

GIFTED SPECIALIST/ TEACHER INTERVIEW QUESTIONS DOCUMENT

1. Tell me about the student products created with the buttons activity.
   Refer to student product and focus on initial rapport; warm-up (Teddlie & Tashakkori, 2009).

2. Let’s talk about how the A&W Buttons Performance Task did or did not allow the students to demonstrate creativity characteristics.
   (Refer to Observation Notes and Product Rubric)

3. (Review an example of PCA and the A&W Buttons Performance Task Product)
   Describe how the PCA and the A&W buttons activities compared or differed in providing the students an opportunity to demonstrate creativity?
4. When, if ever, should the A&W Buttons Performance Task be used to assess creativity for the gifted identification process?

   • Why?

5. Would you recommend for other school districts to explore the use of the A&W Buttons Performance Task or additional creativity assessment techniques beyond PCA or the TTCT?

   • Why?

   • How would you explain the need for exploration of additional creativity assessment techniques?