

A Status Report on the Implementation of the Dance Entry Level Teacher Assessment (DELTA):

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Dance is the only art form for which there is no national entry level teaching examination, comparable to the Praxis II that serves as a *gateway* for dance certification and measure of subject-matter competency (similar to the exams developed and administered by ETS for music, theatre, and visual art). A major ramification of the absence of a teacher readiness assessment is that without it, states have difficulty determining baseline competencies and no means of attesting to the abilities of individual teachers seeking certification in dance education. In some states, the absence of a means of verifying teacher's Pedagogic Content Knowledge (i.e., the intersection between requisite content knowledge and application (Shulman, 1987)) has been a barrier to dance licensure.

To complicate matters, licensure decisions are the purview of individual state departments of education. Furthermore, each state has its unique sets of procedures and over time, each state has developed its own sets of standards for teaching resulting in literally hundreds of sets of teaching standards; all of varying quality (Darling-Hammond, L., 2001). Some states also have multiple pathways to certification. Consequently, what prospective teachers often encounter, "when they try to prepare for their future profession is often quite idiosyncratic to the state, college, and program in which they enroll and to the teachers with whom they study" (Darling-Hammond, L., 2001, p.769). It's not surprising then, that there is tremendous variability in content focus among the fifty-seven colleges that offer teacher preparation programs leading to K-12 teacher dance certification throughout the country.

These circumstances led to the creation of the Dance Entry Level Teacher's Assessment (DELTA) from 2012-2015. Funded by two successive grants from the National Endowment for the Arts (NEA), DELTA is a collaborative endeavor between the National Dance Education Organization (NDEO) and the State Education Agency Directors of Arts Education (SEADAE), to codify crucial Pedagogic Content Knowledge (PCK) in dance education with the intent of inculcating commonly held values into the nation's dance teacher preparation programs. The *intent* of DELTA is to serve as one measure of allowable proof of subject-matter competency. DELTA is not envisioned to supplant other measures of readiness such as portfolio reviews.

It is the belief of NDEO and SEADAE that widespread adoption of a national entry-level teacher readiness examination will begin to ameliorate some of the current disparities in dance teacher preparation. Additionally, by attaining more commonality of instruction across programs organized by big ideas, the likelihood is increased that newly entering K-12 dance educators will be well-informed in the artistic processes of creating, performing, and critically analyzing works of art (NDEO, 2011). DELTA represents a first step toward reaching national consensus on crucial fundamental skills for beginning dance teachers. Ultimately, greater parity of content focus in dance education preparation programs throughout the country will be advantageous to beginning dance teachers as they seek entry-level teaching positions wherever they may arise.

DELTA's Goals:

The broad goals of DELTA are to empower new dance educators to:

1. Understand the content, skills, and knowledge students are expected to know and be able to do as set forth in the National Standards for Dance Education (1994), the Standards for Learning and Teaching Dance in the Arts: Ages 5-18 (2005), and the National Core Arts Standards (2015);
2. Discern how students develop content, skills, and knowledge in dance in a developmentally appropriate manner;
3. Know industry-standards for learning and teaching dance (including dance content, education theory, practice, and methodology) as set forth in the Professional Teaching Standards for Dance Arts (NDEO 2005, 2011), which were developed by NDEO in cooperation with the National Board for Professional Teaching Standards (NBPTS, undated);
4. Measure knowledge and skills as a means of engaging students and informing teaching and learning in a manner consistent with national standards (NDEO, 2011 and NCAS, 2015);
5. Function as reflective practitioners driven by self-knowledge of pedagogic strengths and weaknesses; and,
6. Embrace lifelong learning and a commitment to continuous improvement.

In this context, DELTA promotes the use of standards-based curriculum and assessments aligned to the national content standards, which undergird the DELTA Framework. It also engenders strengthened understanding of NDEO's *Standards for a K-12 Model Program: Opportunities to Learn in Dance Arts Education*¹, which provide guidance on the delivery of curriculum, scheduling, facilities, safety, and equipment; as well as NDEO's *Professional Teaching Standards for Dance Arts*².

DELTA was created in several phases, informed by the use of both empirical data and input from expert groups of dance education professionals including K-16 dance teacher, program directors from college and university dance teacher preparation programs, item development specialists, and several psychometricians³. Throughout the entire process, the DELTA development team

¹ The Standards for a K-12 Model Program: Opportunities to Learn in Dance Arts Education describe the minimum criteria expected of model dance programs in K-12 schools. These standards provide guidelines for the channel of delivery, curriculum, access, scheduling, high school graduation requirements, budgeting, teacher qualifications, assessment and evaluation, professional development, facilities and equipment, and the professional engagement of educators and administrators.

² The Professional Teaching Standards for Dance Arts (PTSDA) describe the criteria expected of domains of knowledge, which include the mastery of dance content, the skills and knowledge in dance, the mastery of teaching and learning dance in relationship to education and community resources, and the mastery of reflective practice – research, student/teacher assessments, and program evaluation. The PTSDA grew out of a long-term need to recognize master teaching of dance arts within higher education, Pre-K-12 education, private schools of dance, and performing arts institutions. The PTSDA are based on the National Board of Professional Teaching Standards and are corollary to the Council for Chief State School Officers *Interstate New Teacher Assessment and Support Consortium Standards*.

³ In 2013, seventy-nine NDEO candidates were screened as potential DELTA item writers and editors/item development coaches. Twelve were chosen for the writing/review team. The selection criteria was designed to identify project participants with deep content knowledge in dance and dance pedagogy, and reflect the broad range of experience and circumstance of the NDEO membership involved either in K-12 public school dance education, or higher education. In addition, three assessment experts outside of NDEO were retained for project leadership. The seventeen-member item development team represented thirteen states (Schmid, 2015).

attentively employed valid and accepted practices for test development that are in compliance with the American Educational Research Association, American Psychological Association, and the National Council on Measurement and Education, Standards for Educational and Psychological Testing guidelines (AERA, APA & NCME, 2014).

Since completing the developmental work on DELTA in April 2015, NDEO and SEADAE have worked tirelessly to garner acceptance of DELTA as allowable evidence to warrant the transmittal of dance licensure. The extent to which instructional content in dance pre-service programs pair with DELTA’s target domains (PCK skills clusters) will impact novice educators ability to become proficient in “teaching methods, learning activities, and instructional materials of other resources, that are appropriate to the students and that are aligned to the goals of the lesson and can be measured” (ETS, 1995, p. 20 as cited by Porter, 2001).

This approach to teacher preparation supports the supposition of the National Board of Professional Teaching Standards that accomplished teachers must have “knowledge of the most appropriate ways to present the subject matter to students”... Additionally they must be aware of “the most common misconceptions held by students; the aspects they will find most difficult; and the kinds of knowledge, experience, and skills that students of different ages typically bring to the learning of particular topics” (NBPTS, undated, p.19 as cited by Porter, 2001).

Since no experimental design study has been conducted on DELTA, an inferred causal relationship cannot be drawn associating test scores on DELTA with pre-service dance education instruction aligned to the DELTA Framework. However, the assertion is that the PCK Skills Clusters nested within three Domains of Knowledge comprising the DELTA Framework (i.e., Core Dance Processes; Teaching and Learning; and Policies, Facilities, and Technical Production) serve as a proxy for PCK in dance necessary to the success of entry level teachers – and that DELTA serves as a reasonable indicator of future success. All DELTA test items have undergone extensive psychometric analysis. Any items and/or item clusters that did not perform well were either rewritten or set aside for future development.

More specifically, the objective of field-testing and analysis of accompanying performance data was to determine the extent to which DELTA is a fair and reliable indicator of Pedagogical Content Knowledge with respect to:

- i. Content validity;
- ii. Construct validity (including evidence of positive inter-test and inter-item correlations, and the independent identity of skills clusters);
- iii. Statistical and correlational reliability with regard to item difficulty, item discrimination, and internal consistency;
- iv. Stratification, including evidence of external/population validity and the presence or absence of measurement bias (e.g., gender bias, racial bias, geographic bias etc.);
- v. Concurrent and predictive validity (considered together as criterion-oriented validation procedures)

It is posited that once pre-service programs align instruction to the parameters of the DELTA

Conceptual Framework, and student cohorts complete cycles of coursework adhering to the tenants of the Framework, future studies will be able to substantiate the magnitude of the cause and effect relationship between successful completion of such pre-service dance education programs, passing scores on DELTA, and sufficient levels of teacher “readiness” for entry level teachers.

DELTA’s Conceptual Framework

Individual items sometimes suffer from random measurement error. Therefore, it is often desirable to create scales out of items that address the same underlying concept. When individual items all relate to the same concept, a well-constructed scale will be more reliable than each item individually. For DELTA, a framework was created comprised of ten PCK Skills Clusters (subscales) that drove item development. In order to gain insight into how well these *sets* of items performed in service to the construct being tested (i.e., determining the degree to which individual items contributed to the reliability of the scale), reliability analysis statistics were calculated for all 10 PCK Skills Cluster (i.e., subscales).

DELTA’s Conceptual Framework includes *three* Domains of Knowledge in which ten PCK Skills Clusters are subsumed (See below). The three Domains include: 1) *Core Dance Processes* (Aligned to NCAS Artistic Processes: Creating, Performing, Responding & Connecting); 2) *Teaching and Learning*; and 3) *Policies, Facilities, and Technical Production*.

PCK Skills Clusters subsumed within *Core Dance Processes* include:

- 1A: Performing Dance as an Intentional, Expressive Art Form (guiding principles);*
- 1B: Choreography (exploring, planning, revising);*
- 1C: Integrated Approaches to Historical, Cultural & Contemporary Dance Studies;*
- 1D: Dance Language, Literacy & Critical Analysis.*

PCK Skills Clusters subsumed within *Teaching and Learning* include:

- 2A: Pedagogical Theory & Practice;*
- 2B: Knowledge of the Learner;*
- 2C: Assessment Literacy, Evaluation & Reflective Practice:*
 - Part 1: Assessment Tools,*
 - Part 2: Teacher Reflection.*

PCK Skills Clusters subsumed within *Policies, Facilities, and Technical Production* include:

- 3A: School-based Policies;*
- 3B: Dance Classroom;*
- 3C: Technical Production.*

The Operationalized Exam:

The operationalized form of DELTA is comprised of the highest functioning items from previous field-tests and field-trials, based on item discrimination, item difficulty, and the contribution the item made in support of the tested construct (i.e., Cronbach’s Alpha and Cronbach’s Alpha if item is deleted), and Differential Item Functioning (DIF) (e.g., test bias). It is envisioned that

yearly reporting of cluster and range scores (in addition to cut scores) has the potential to be an extremely useful tool for trend analysis in the interest of programmatic improvement efforts on the part of college and university teacher preparation programs nationwide. The test, which consists of unique selected response items with and without stimulus materials, takes approximately 90 minutes to administer online and is proctored by university faculty and/or SEADAE members or appointees. It is important to note that DELTA is a criterion-referenced measure of course content. It will be some time, if ever, that DELTA becomes normative.

Based on the analysis of field test data, there is solid evidence to indicate that DELTA is a coherent, valid, and reliable instrument for measuring Pedagogic Content Knowledge in Dance, as a demonstration of subject-matter competency. This holds particularly true with respect to DELTA's *Content Validity* (arrived at through consensus of a national expert group of K-16 dance educators from thirteen states); its *Construct validity* (including evidence of positive inter-test and inter-item correlations, and the independent identity of skills clusters); as well as its *Statistical and Correlational Reliability* with regard to Item Difficulty, Item Discrimination, Internal Consistency; and the Absence of Measurement Bias (e.g., gender bias, racial bias, geographic bias etc. (Cronk, B. 2012; Cronback, L.J. 1971; Cronbach, L. J., & Meehl, P. E. 1955; Jaeger, R. M.,1998).

Moving Forward:

As of the publication of this article, Maine has already passed legislation mandating DELTA and SEADAE continues to motivate other state education agency licensing divisions to support DELTA's adoption and/or endorsement as a nationally recognized, valid measure of teacher readiness for entry-level K-12 public school dance educators. Currently, SEADAE is in dialogue with its representatives from seven states (Nebraska, New Jersey, Maryland, Missouri, Colorado, Utah, and Georgia) who expressed strong interest in pursuing the adoption and/or endorsement of DELTA in a recent SEADAE poll. Other states that have expressed moderate interest include Arkansas, Idaho, New Hampshire, Delaware, Florida, and Indiana.

From among these fourteen state, NDEO and SEADAE are endeavoring to stage the first administration of DELTA in the May 2018. NDEO and SEADAE are also exploring several models by which DELTA can be institutionalized, buoyed by the potential of online courses through NDEO's Online Professional Development Institute, and SEADAE's virtual education platform Pepper.

For more information on DELTA, including its technical specifications or how you or your college or university can participate in DELTA, contact Dr. Dale Schmid, NDEO Past-President and DELTA Project Manager, dale.schmid@doe.state.nj.us.

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