Reliability & Concurrent Validity of the edTPA
& The *Summative Instrument* (2012)

Summary
1. Both the edTPA area scores demonstrated reasonable (moderate) internal consistency reliability

2. The total edTPA score was highly internally consistent.

3. The *Summative* (*Performance-Based*) instrument employed during student teaching proved internally consistent enough for use (total score) for both university supervisor (α = .92) and for cooperating teacher (α = .91) ratings.

4. Though α is not a construct validity metric, it does appear the both the *EdTPA* and the *Summative* instrument may behave in a more univariate fashion than their designers expected.

5. Formal conclusions will need to wait for increased N so that structural analyses can be run.

6. Generally, the edTPA and the *Summative* instrument measure different constructs; this supports continued use of both instruments.

7. Evidence for the predicative validity of the *Summative* instrument deserves more attention. Concurrent validity was only supported for two of eleven metrics.

Context/Background
National accrediting agencies require, and best practices demand, periodic review of evidence for the reliability and validity of the instruments employed in assessing and evaluating candidates.

In years past, we have provided evidence for the reliability and validity of the *Performance Based* (Summative) instrument employed during student teaching. These data were in the form of internal consistency reliability (ICR, reliability across items). In addition, we calculated significant, though moderate correlations between the independent ratings of university supervisors and cooperating teachers for most of the eleven *Summative* ratings.

The advent of the *Teacher performance Assessment* (*EdTPA*) creates a unique opportunity to revisit the *Summative Instrument*. The reliability and validity of the *EdTPA* remains under consideration. However, several studies on the instrument's predecessor, the *Performance Evaluation of California Teachers* (PACT) have been conducted (see especially Pecheone & Chung Wei, 2007).

We downloaded scores for the first 60 externally scored *EdTPA*s, entering these into SASW (Version 18). In addition, we loaded scores from the summative assessment collected during the same semester into the same data file. Internal consistency reliability and validity assessments were undertaken. These data were collected during the spring of 2012. A more complete description of the study is available upon request.

Reliability indicants. Table 1 shows the simultaneous internal consistence reliabilities of the edTPA and *Performance based* instrument. These data are based on the 60 candidates in this study.

Table 1. Internal consistency reliability indicants.

Instrument/Scale	N Items	Reliability (Chronbach's alpha)
EdTPA Planning	4	.85
EdTPA Instruction	2	.89
EdTPA Assessment	3	.82
EdTPA Academic Language	3	.79
TOTAL EdTPA	13	.93
TOTAL Performance Based (*Summative*), University Supervisors' Data	11	.92
TOTAL Performance Based (*Summative*), Cooperating Teachers' Data	11	.91

Validity indicants. Tables 2 and 3 show several aspects of concurrent criterion-referenced validity. In table 2 we have entered Pearson correlations between the edTPA (total score) and *Summative* ratings. Table 3 includes correlations between simultaneous university supervisor and cooperating teacher ratings.

Table 2. *EdTPA* and *Summative/ Performance –Based* total score correlations.

Items and Domains	Total *EdTPA*	*Sum* US	*Sum* CT
Total *EDTPA*	1.00	-.07	.08
Total *Summative* (University Supervisor Ratings)		1.00	.21
Total *Summative* (Cooperating Teacher Ratings)			1.00

Table 3. Correlations between US and CT ratings for the 11 items.

Standard/Item/ Principle[1]	r_{xy}	Sig?
Standard 1: Subject Matter	.21	NO
Standard 2: Student Learning	.17	NO
Standard 3: Diverse Learners	.13	NO
Standard 4: Instructional Strategies	.22	NO
Standard 5: Learning Environment	.36	YES
Standard 6: Communication	.27	NO
Standard 7: Planning Instruction	.12	NO
Standard 8: Assessment	.14	NO
Standard 9: Reflection & Professional Development	.24	NO
Standard 10: Partnerships	-.10	NO
Item 11: Dispositions	.30	YES

[1]The item descriptions for the *Summative Instrument* are based on the original INTASC standards (at that time labeled "principles") with the addition of a dispositions [to the field of teaching] item. Significance figures adjusted for the family-wide error rate problem via Bonferroni's method.

References

EdTPA (2012). *An initial reliability and validity of the EdTPA considering MTLE Writing scores*. St. Cloud, MN: Education Unit.

Pechone R. L., & Chung Wei, R.R. (2007*). Technical report of the Performance Assessment for California Teachers (PACT): Summary of Validity and Reliability Studies for the 2003-04 Pilot Year*. Palo Alto, CA: Stanford University. Downloaded on July 1, 2010 from http://www.pacttpa.org/_files/Publications_and_Presentations/PACT_Technical_Report_March07.pdf.