Candidate Preservice Assessment of Student Teaching (CPAST) Form Summary

**What is the CPAST Form?**

A formative and summative assessment during the student teaching practicum.

- The 21-row rubric has **two subscales**: (1) Pedagogy and (2) Dispositions with detailed descriptors of observable, measurable behaviors, to guide scoring decisions.
- An additional “Look Fors” resource provides and elaborates on the qualities and behaviors for a given level of performance (i.e., evidence and sources of evidence).
- A self-paced **90-minute training module** is available for users of the Form.

**What analyses did we perform on the Form data?**

We explored:

- Validity (content, construct and concurrent)
- Reliability (internal consistency, inter-rater reliability)

**Who were the participants?**

- During the academic year of 2015-2016 we collected valid data from **1203 teacher candidates** from **23 EPPs in Ohio**.
- Of the 1203 teacher candidates, **32** were recruited to participate in the inter-rater reliability study, in which each teacher candidate was evaluated by two supervisors – their primary university supervisor (i.e., the supervisor who was formally assigned by the EPPs to supervise the teacher candidate during the student teaching), and a secondary rater (i.e., a supervisor who completed a minimum of three observations of the teacher candidates throughout the semester).

**What were the findings?**

Validity and reliability met standards for instrument development.

**Content Validity**

- Investigated by calculating a **content validity ratio** (CVR; Lawshe, 1975) for the aspects of clarity, importance, and representativeness of the CPAST Form. \[ \text{CVR} = \frac{n_e - (N/2)}{N/2} \]
- Where \( E \) refers to the number of experts who rated the item as equal to or above 3, and \( N \) refers to the total number of experts.
- Three experts (a K-12 teacher, a university teacher education professor, and a psychometrician) provided ratings of these aspects on a scale of one to four.
- **Clarity**: All items (except Row D in Pedagogy and Row G in Disposition), reached a CVR of 1. **The average CVR for all the items was 0.94**, exceeding the criterion of 0.8, indicating that the scale had strong content validity for clarity.
- **Importance**: All items reached a value of 1, revealing that all the item questions were important in measuring the constructs of pedagogy and disposition.
- **Representativeness**: All items (except Row H in Pedagogy and Row G in Disposition) reached a value of 1. **The average CVR for all the items was 0.94**, suggesting that the rows were representative of the theoretical domain of the constructs.

**Construct Validity**

- Confirmatory factor analysis (CFA) was conducted using Mplus Version 7.11 (Muthén & Muthén, 1998-2015) to examine the construct validity.
• The estimator of weighted least squares with mean and variance adjustment (WLSMV) was adopted, which was demonstrated to be suitable for handling ordinal data (Flora & Curran, 2004).
• The three indices selected for this study were the root mean-square error of approximation (RMSEA), the comparative fit index (CFI), and the Tucker–Lewis index (TLI), and the model fit was evaluated based on the following criteria: RMSEA <.06, CFI >.95, and TLI >.95 (Hu & Bentler, 1999).
• The model fit indexes RMSEA (0.048), CFI (0.980) and TLI (0.978) indicated that the hypothesized two-factor model fit the data reasonably well.
• The loadings of items ranged from 0.676 to 0.841, all at .001 significance level, indicating that all the items are moderately or strongly associated with their corresponding latent factors.
• The Pedagogy and Dispositions scales were highly correlated (r=.873, p <.001), indicating a strong association between a teacher candidate’s teaching knowledge/skills and dispositions.

![Figure 1. Two-factor Model of CPAST Form](image)

**Test-retest reliability**
• Examined by correlating Pedagogy and Disposition scores in midterm and final term under the CFA model.
• Pedagogy in the midterm and Pedagogy in the final term were significantly correlated (r=0.752).
• Disposition in the midterm and Disposition in the final term were significantly correlated (r=0.845).

**Inter-rater Reliability**
• Although several types of inter-rater reliability analyses were conducted to examine the inter-rater reliability of the CPAST Form, only adjacent agreement and Kappa-n were shared here because SCALE (2013) used them when assessing the inter-rater reliability of edTPA.
• The average adjacent agreement rate was 98% and the average Kappa-n was 0.97.

**Internal consistency reliability**
• Examined by calculating the Cronbach Alpha coefficient using SPSS 23.0.
• Cronbach’s Alpha coefficient is 0.907 for the Pedagogy subscale, 0.831 for the Dispositions subscale, and 0.929 for the total scale, suggesting that the subscales and the total scale display good internal consistency.