

Examination of the Validity and Reliability of the Kansas Clinical Assessment Tool

Representatives from private educator preparation programs in Kansas, with support from the Kansas State Department of Education, developed the Kansas Clinical Assessment Tool (K-CAT) to evaluate the performance of teacher candidates in the state. To meet the requirements of the Council for the Accreditation of Educator Preparation, the Kansas State Department of Education asked the Regional Educational Laboratory Central to examine the K-CAT’s validity and reliability. The study team used interviews with cooperating teachers, content experts’ ratings of the alignment of the K-CAT to professional teaching standards, K-CAT scores, and scores from the Praxis Principles of Learning and Teaching and the Kansas Performance Teaching Portfolio to assess the face validity, content validity, convergent validity, and criterion-related validity of the K-CAT, as well as internal consistency as a measure of the instrument’s reliability.

Key findings

- **Overall, there is evidence that the Kansas Clinical Assessment Tool is both valid and reliable.** Standards 2, 3, and 9 demonstrated evidence of all four types of validity and evidence of internal consistency, whereas the other standards were missing evidence of at least one type of validity (table 1). The overall K-CAT demonstrated evidence of all types of validity and evidence of reliability.

Table 1. The Kansas Clinical Assessment Tool standards showed varying levels of validity and reliability

Kansas Clinical Assessment Tool standard	Validity				Reliability	
	Face	Content	Convergent	Criterion-related		Internal consistency
				Praxis PLT	KPTP	
Standard 1: Learner Development	✓	✓	✓			✓
Standard 2: Learning Differences	✓	✓	✓	✓		✓
Standard 3: Learning Environments	✓	✓	✓	✓		✓
Standard 4: Content Knowledge		✓	✓	✓		✓
Standard 5: Application of Content		✓	✓	✓		✓
Standard 6: Student Assessment	✓	✓	✓			✓
Standard 7: Planning for Instruction		✓	✓	✓		✓
Standard 8: Instructional Strategies	✓		✓			✓
Standard 9: Professional Learning and Ethical Practice	✓	✓	✓	✓	✓	✓
Standard 10: Leadership and Collaboration	✓	✓	✓			✓
Overall	✓	✓	✓	✓	✓	✓

✓ indicates that the overall tool or a standard has evidence of a given validity type or of reliability.

Praxis PLT is Praxis Principles of Learning and Teaching. KPTP is Kansas Performance Teaching Portfolio.

Note: Face validity was supported if at least four of the six interviewees indicated there was usability or representativeness. Content validity was supported if average rating met “mostly aligned” for the Interstate Teacher Assessment and Support Consortium and Kansas Educator Preparation Program Standards for Professional Education. Convergent and criterion-related validity were supported if correlations were significant at $p \leq .05$ for any comparisons. Internal consistency was supported if Cronbach’s alpha was at least .70 for the Kansas Clinical Assessment Tool (K-CAT) standards and at least .90 for the overall K-CAT.

Source: Authors’ analysis of data provided by Kansas educator preparation programs for the spring 2019, fall 2019, and spring 2020 semesters and interview data collected in spring 2020.