

# Annual Technical Report for ACCESS for ELLs Paper English Language Proficiency Test

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## References

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## References

- Airhart, K., Strunk, K., Hinkle, A. R., Warren, S. H., Lazarus, S. S., & Fleming, K. (2021). *Education for each and every student: Perspectives on universal design in 2021.* National Center on Educational Outcomes.
- Allen, N. L., Carlson, J. E., & Zalanak, C. A. (1999). *The NAEP 1996 Technical Report.* National Center for Education Statistics.
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). Standards for educational and psychological testing. American Psychological Association.
- American Institutes of Research. (2018). *ELPA21 Technical Report, part I—Summative assessment*.
- Andrich, D. A. (1978). A rating scale formulation for ordered response categories. *Psychometrika*, *43*, 561–573.
- Bachman L. F. & Palmer A. S. (2010). Language assessment in practice. Oxford University Press.
- Brennan, R. (2004). *Linking with equivalent group or single group design (LEGS)* (Version 2.0) [Computer software]. Center for Advanced Studies in Measurement and Assessment.
- Center for Applied Linguistics. (2016). ACCESS for ELLs Series 400 listening and reading scale maintenance: Technical brief.
- Center for Applied Linguistics. (2017). ACCESS for ELLs 2.0 speaking and writing score scale reconstruction: Technical brief.
- Center for Applied Linguistics. (2018). Annual technical report for ACCESS for ELLs 2.0 Online English Language Proficiency Test, Series 401, 2016–2017 administration. (WIDA Consortium Annual Technical Report No. 13B).
- Cook, H. G., & MacGregor, D. (2017). *The ACCESS for ELLs 2.0 2016 Standard-setting study* (Technical Report). Board of Regents of the University of Wisconsin System.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16,* 297–334.
- Dorans, N. & Holland, P. (1992). DIF Detection and Description: Mantel-Haenszel and standardization. *ETS Research Report Series*, 1992, i-40. https://doi.org/10.1002/j.2333-8504.1992.tb01440.x
- Elementary and Secondary Education Act of 1965, amended 2015. 20 USC §6301-8961.

- Engelhard, G., Jr., & Wind, S. A. (2018). *Invariant measurement with raters and rating scales:*Rasch models for rater-mediated assessments. Routledge/Taylor & Francis Group.
- Ercikan, K, & Julian, M. (2002). Classification accuracy of assigning student performance to proficiency levels: Guidelines for assessment design. *Applied Measurement in Education*, 15(3), 269–294.
- Every Student Succeeds Act (ESSA), 20 U.S.C. § 6301 (2015). https://www.congress.gov/bill/114th-congress/senate-bill/1177
- Feldt, L. S., & Brennan, R. L. (1989). Reliability. In R. L. Linn (Ed.), *Educational measurement* (3rd ed., pp. 105–146). Macmillan.
- Gottlieb, M. (2004). English language proficiency standards for English language learners in kindergarten through grade 12: Framework for large-scale state and classroom assessment. WIDA Consortium, Board of Regents of the University of Wisconsin System.
- Kamata, A., Turhan, A., & Darandari, E. (2003, April). *Estimating reliability for multidimensional composite scale scores*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Kane, M., & Case, S. M. (2004). The reliability and validity of weighted composite scores. *Applied Measurement in Education, 17,* 221–240.
- Kenyon, D. M. (2006). *Development and field test of ACCESS for ELLs®* (WIDA Consortium Technical Report No. 1). Center for Applied Linguistics.
- Kenyon, D. M., Ryu, J. R., & MacGregor, D. (2013). Setting grade level cut scores for ACCESS for ELLs (WIDA Consortium Technical Report No. 4). Center for Applied Linguistics.
- Kim, A., Kondo, A., Blair, A., Mancilla, L., Chapman, M., & Wilmes, C. (2016). *Interpretation and use of K–12 language proficiency assessment score reports:* Perspectives of educators and parents. WCER Working Paper No. 2016-8. Board of Regents of the University of Wisconsin System.
- Kim, A., Chapman, M., Kondo, A., & Wilmes, C. (2020). Examining the assessment literacy required for interpreting score reports: A focus on educators of K-12 English learners, *Language Testing*, *37*(1) 54-75.
- Kolen, M. J., Hanson, B. A., & Brennan, R. L. (1992). Conditional standard errors of measurement. *Journal of Educational Measurement*, 29, 285–307.
- Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The sources of four commonly reported cutoff criteria: What did they really say? *Organizational Research Methods*, 9(2), 202-220. https://doi.org/10.1177/1094428105284919

- Lee, W., Hanson, B. A., & Brennan, R. L. (2002). Estimating consistency and accuracy indices for multiple classifications. *Applied Psychological Measurement*, 26, 412–432.
- Linacre, J. M. (2002). What do infit and outfit, mean-square and standardized mean? *Rasch Measurement Transactions*, *1*6(2), 878. http://www.rasch.org/rmt/rmt162f.htm
- Linacre, J. M. (2006). Winsteps Rasch analysis (Version 3.60.1) [Computer software]. https://www.winsteps.com
- Livingston, S. (2018). Test reliability—Basic concepts (ETS Research Memorandum No. RM-18-01). https://www.ets.org/Media/Research/pdf/RM-18-01.pdf
- Livingston, S. A., & Lewis, C. (1995). Estimating the consistency and accuracy of classifications based on test scores. *Journal of Educational Measurement*, *32*, 179–197.
- Lord, F. M. (1980). *Applications of item response theory to practical testing problems*. Lawrence Erlbaum Associates.
- MacGregor, D., Kenyon, D. M., Gibson, S., & Evans, E. (2009). *Development and field test of Kindergarten ACCESS for ELLs*. WIDA Consortium. Board of Regents of the University of Wisconsin System.
- Mantel, N., & Haenszel, W. (1959). Statistical aspect of the analysis of data from retrospective studies of disease. *Journal of the National Cancer Institute*, 22, 719–748.
- Meyer, J. P. (2018). jMetrik [Computer software]. Retrieved from http://itemanalysis.com/jmetrik-download/
- Muraki, E. (1993). Information functions of the generalized partial credit model. *Applied Psychological Measurement*, *17*(4), 151–363.
- Nunnally, J.C. (1978). An Overview of Psychological Measurement. In: Wolman, B.B. (eds) Clinical Diagnosis of Mental Disorders. Springer, Boston, MA. https://doi.org/10.1007/978-1-4684-2490-4\_4
- Price, L. R., Lurie, A., Raju, N., Wilkins, C., & Zhu, J. (2006). Conditional standard errors of measurement for composite scores on the Wechsler Preschool and Primary Scale of Intelligence Third Edition. *Psychological Reports*, 98(1), 237–252.
- Rudner, L. (2001). Informed test component weighting. *Educational Measurement: Issues and Practice*, 20(1), 16–19.
- Sahakyan, N. (2020). Generating alternate overall composite scale scores for English Learners with disabilities who are missing domain scores in the ACCESS for ELLs assessment.

  WIDA Technical Report. Board of Regents of the University of Wisconsin.

- U.S. Census Bureau (n.d.). *About the Topic of Race*. Retrieved from https://www.census.gov/topics/population/race/about.html
- U.S. Department of Education. (2018). A state's guide to the U.S. Department of Education's assessment peer review process.
- Waller, N. G. (n.d.). EZDIF: A computer program for detecting uniform and nonuniform differential item functioning with the Mantel-Haenszel and logistic regression procedures [Computer software]. University of California-Davis.
- Waller, N. G. (1998). EZDIF: Detection of uniform and nonuniform differential item functioning with the Mantel-Haenszel and logistic regression procedures. *Applied Psychological Measurement*, 22(4), 391.
- WIDA. ACCESS for ELLs Test Practice and Sample Items. (n.d.). https://wida.wisc.edu/assess/access/preparing-students/practice
- WIDA. (2007). English Language Proficiency Standards and Resource Guide, 2007 Edition, Prekindergarten through Grade 12. Board of Regents of the University of Wisconsin System.
- WIDA. (2012). 2012 Amplification of the English Language Development Standards

  Kindergarten-Grade 12. Board of Regents of the University of Wisconsin System.

  https://wida.wisc.edu/sites/default/files/resource/2012-ELD-Standards.pdf
- WIDA. (2021). WIDA's Equipercentile Method and Procedure for Comparability Analysis. Board of Regents of the University of Wisconsin System. <a href="https://sea.wida.us/documents/widas-equipercentile-method-and-procedure-comparability-analysis">https://sea.wida.us/documents/widas-equipercentile-method-and-procedure-comparability-analysis</a>
- WIDA. (2022). ACCESS for ELLs Interpretive Guide for Score Reports. Board of Regents of the University of Wisconsin System.
- Wright, B. D., & Stone, M. H. (1979). Best test design: Rasch measurement. MESA Press.
- Young, M. J., & Yoon, B. (1998). Estimating the consistency and accuracy of classifications in a standards-referenced assessment (CSE Technical Report 475). Center for the Study of Evaluation, National Center for Research on Evaluation, Standards, and Student Testing, Graduate School of Education and Information Studies.
- Zieky, M. (1993). DIF statistics in test development. In P. W. Holland & H. Wainer (Eds.), *Differential item functioning* (pp. 337–347). Erlbaum.
- Zwick, R., Donoghue, J. R., & Grima, A. (1993). Assessment of differential item functioning for performance tasks. *Journal of Educational Measurement*, 30, 233–251.

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