

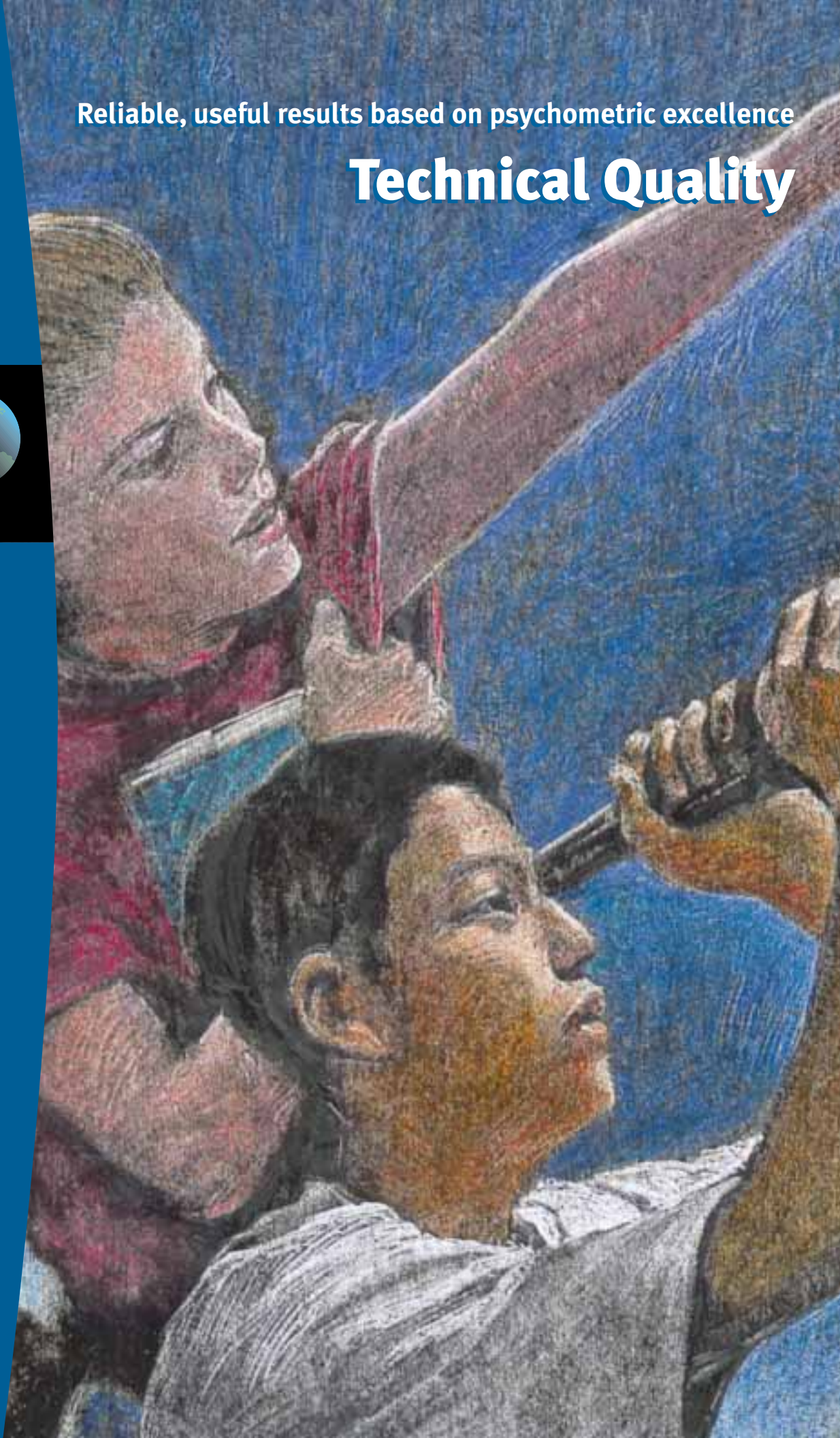
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References

- Allen, M. J., & Yen, W. M. (1979). **Introduction to measurement theory**. Monterey, CA: Brooks/Cole.
- Bock, E. Darrell (1997). A brief history of item response theory. *Educational Measurement: Issues and Practice*, 4, 21–33.
- Bock, R. D., & Aitkin, M. (1981). Marginal maximum likelihood estimation of item parameters: Application of an EM algorithm. *Psychometrika*, 66, 443–459.
- Burket, G. R. (1988). ITEMSYS [Computer program]. Unpublished.
- Burket, G. R. (1991). PARDUX [Computer program]. Unpublished.
- Fitzpatrick, A. R., Link, V., Yen, W. M., Burket, G. R., Ito, K., & Sykes, R. (1996). Scaling performance assessments: A comparison of one-parameter and two-parameter partial credit models. *Journal of Educational Measurement*.
- Green, D. R., Yen, W. M., & Burket, G. R. (1989). Experiences in the application of item response theory in test construction. *Applied Measurement in Education*, 2, 297–312.
- Gulliksen, H. (1950). *Theory of mental tests*. New York: John Wiley & Sons.
- Jolly, S. J., Johnson, R., Jones, B., & Abalus, J. (1986, April). **The effect of test speededness and random guessing on the validity of reading comprehension scores**. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.
- Lewis, D. M., Mitzel, H. C., Green, D. R. (1996). Standard Setting: A Bookmark Approach. In D. R. Green (Chair), *IRT-Based Standard-Setting Procedures Utilizing Behavioral Anchoring*. Symposium presented at the 1996 Council of Chief State School Officers 1996 National Conference on Large Scale Assessment, Phoenix, AZ.
- Lewis, D. M., Green, D. R., Mitzel, H. C., Baum, K., & Patz, R. J. (April, 1998). **The Bookmark Standard Setting Procedure: Methodology and Recent Implementations**. Paper presented at the 1998 National Council for Measurement in Education annual meeting, San Diego, CA.
- Lin, M. H. (1986, April). **The impact of time limits on test behaviors**. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.
- Linn, R. L., & Harnisch, D. (1981). Interactions between item content and group membership in achievement test items. *Journal of Educational Measurement*, 18, 109–118.
- Macmillan/McGraw-Hill. (1993). **Reflecting Diversity: Multicultural Guidelines for Educational Publishing Professionals**. New York, NY.
- McGraw-Hill. (1983). **Guidelines for Bias-free Publishing**. Monterey, CA.
- Munger, G. F., & Loyd, B. H. (1991). Effect of speededness on test performance of handicapped and nonhandicapped examinees. *Journal of Educational Research*, 85 (1), 53–57.
- Muraki, E. (1990). Fitting a polytomous item response model to Likert-type data. *Applied Psychological Measurement*, 14, 59–71.
- Muraki, E. (1992). A generalized partial credit model: Application of an EM algorithm. *Applied Psychological Measurement*, 16, 159–176.
- Patz, R. J., and Junker, B. W. (1999). Applications and extensions of MCMC for IRT: Multiple item types, missing data, and rated responses. *Journal of Educational and Behavioral Statistics*, 24, 342–366.
- Stocking, M. L., & Lord, F. M. (1983). Developing a common metric in item response theory. *Applied Psychological Measurement*, 7, 201–210.
- Thissen, D. (1982). Marginal maximum likelihood estimation for the one-parameter logistic model. *Psychometrika*, 47, 175–186.
- Yen, W. M. (1993). Scaling performance assessments: Strategies for managing local item dependence. *Journal of Educational Measurement*, 30, 187–213.



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