

## Steps and procedures for adaptation of sign language tests

(Haug, 2011)

Steps	Description	Procedure / Method
(1) Test items	<p>(a) Identify test items of source language test and check their “equivalence” in target language</p> <p>(b) Identify vocabulary of age target group</p> <p>(c) Identify regional variations of different vocabulary items</p> <p>(d) Identify target language-specific structures</p> <p>(e) Identify developmental pattern of structures represented in test (e.g., review of acquisition studies of other sign languages)</p> <p>(f) Check suitability of distractors from the content side (not pictures, but what they represent, i.e. if they also represent a phonological, lexical, or morpho-syntactic distractor in the target language)</p>	<p>(a) – (e) Review of research literature &amp; consultations with Deaf and hearing experts (linguists, native signers)</p> <p>(c) Small piloting (if needed)</p>
(2) Test materials	<p>(a) Test materials: check for cultural appropriateness of test materials and concept representation, also for distractors</p> <p>(b) Scoring sheets: check for appropriateness of scoring sheets for the target language (e.g., certain categories do not apply in target language)</p>	(a) Consultations with Deaf and hearing experts
(3) Construct definition	<p>(a) Defining the construct (e.g. language development)</p> <p>(b) Ranking of item complexity</p>	<p>Results of literature review of steps (1) and (2)</p> <p>Results of consultations of steps (1) and (2)</p>
(4) Operationalization of construct (adaptation of test items)	<p>(a) Adaptation of source language items into the target sign language</p> <p>(b) Translation/adaptation of test instructions</p> <p>(c) Develop additional items for the target sign language</p> <p>(d) Decision of items order (based on ranking of item order and item order of source language test)</p>	Results of previous steps (1) – (3)
(5) Technical realization	<p>(a) Filming of adapted test items</p> <p>(b) Decision and realization of test format, i.e. Computer- or Web-based test format or on DVD/Video</p>	

(6) Pre-pilot test	(a) Review of pre-pilot test version (b) Revisions - depending on (1)	(a) Panel of experts providing input
(7) Pilot with Deaf adults	(a) Conduct pilot study of the test with Deaf adults (b) Revisions to test structure, items, and materials	(a) Testing (a) Open-worded questionnaires/interviews for input
(8) Pilot test version	(a) Review of pilot by (Deaf) sign linguist(s)	(a) Prepared criteria for review
(9) Pilot with Deaf children	(a) Conduct pilot study with Deaf children (b) Obtain social-demographic information about the Deaf children and the teachers	(a) Testing (b) Questionnaires / interviews
(10) Analyses of pilot study	(a) Analyze the results of the pilot study with Deaf children (b) Check the effectiveness of the items (c) Check the effectiveness of the distractors (d) Check how well other variables explain differences in performance (e) Reliability (f) Validity (e.g., external variable) (g) Suggestions for revisions	(a) – (f) Statistical analysis (item and distractor analysis, different variables in relation to test performance)
(11) First test version	(a) Revision of pilot test version based on the results of pilot	
(12) Construct validation	(a) Deaf adults rank the ascribed age of acquisition of linguistic structures represented in items of first test version (b) This ranking should be compared with the original ranking of item order (see construct definition) and results of pilot (item analysis) as a source of validity (c) The results of (a) and (b) should be comparable	(a) Map <i>Ranking of Items Complexity</i>
(13) Pilot with hearing children (optional)	(a) Conduct pilot study with same aged hearing non-signing peers to investigate the effect of iconicity (b) Consequences of results?	(a) Testing (a) Questionnaires
(14) Standardization study	(a) Define criteria for norming sample (e.g., linguistic experience, age groups) (b) Conduct a standardization study	(b) Testing (b) Questionnaires / interviews
(15) Analysis of standardization study	(a) Analyzing the results of standardization study (b) Establishment of age-related norm	(a) & (b) Statistical analysis (same as above, plus standard scores)

(c) Final revisions if needed

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(16) Publication

(a) Prepare for publication for practitioners in schools (manual, ease of test use etc.)

(b) Decide on the format how the test should be delivered (e.g., DVD/video, computer- or web-based)

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(17) Stay in touch

(a) Stay in contact with schools, further obtain information of scoring (i.e. collect scoring sheets)

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Reference:

Haug, T. (2011). Adaptation and evaluation of a German Sign Language Test - A computer-based receptive skills test for deaf children ages 4-8 years old. Hamburg, Germany: Hamburg University Press. [Free download at: [http://hup.sub.uni-hamburg.de/purl/HamburgUP\\_Haug\\_Adaptation](http://hup.sub.uni-hamburg.de/purl/HamburgUP_Haug_Adaptation)].