

Bright IDEA-2 Educator Disposition Questionnaire
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Design and Validation Process - Summary Report

The process of developing and testing the validity/reliability of the Educator Disposition Questionnaire for project Bright IDEA-2 proceeded through four phases. Below, the project's evaluator, Dr. Ron Tzur, provides a summary of this 4-phase process.

Phase 1: Generating the Questionnaire

The evaluator interviewed the director of project Bright IDEA-1 (Gayle) and the principal of one elementary school (Thomasville) that participated in that project (Lupton). These interviews brought up a long list of issues that pertain to changes in teachers' understandings and/or practices as a result of their participation in professional development activities of project Bright IDEA-1. From this list, the evaluator then generated the first draft of a Teacher Questionnaire, which consisted of 90 statements and several biographical information questions.

Phase 2: Expert Construct (Conceptual) Validity

The first draft was sent to nine (9) experts in the field of gifted education and minority students. Each expert was asked to provide one of three responses: (a) keep the item, (b) change the item, or (c) omit the item. The evaluator summarized the experts' responses and maintained 71 statements to which all (or all but one) experts checked the "keep the item" option. These 71 statements were then randomly ordered to comprise the second draft of the Teacher Questionnaire. Next to each statement a teacher (respondent) could choose one of 5 levels of agreement: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree. In addition, on the basis of expert suggestions, the biographical information was better organized into the following 13 items (underlined items indicate a request to circle one of several choices): name, school, grade one teaches, gender, teaching experience, teaching licensure, race, number of schools taught, academic major, academic minor, highest academic degree, distance from home to school, and National Board Certification.

Phase 3: Administration

Draft 2 of the Teacher Questionnaire was administered by principals from two Bright IDEA-1 schools to 19 teachers, some who participated in the professional development (n=9) and some who did not (n=10). In one of the schools, the same questionnaire was administered again 10 days after the first administration (participants=6, non-participants=6). All 31 questionnaires (19 first pass, 12 second pass) were coded by the evaluator and inserted into a statistical spreadsheet (using SPSS 11).

Phase 4: Statistical Tests for Validity and Reliability

Pearson-R correlation coefficient for test-retest reliability was computed for each item on the responses from the school where the questionnaire was administered twice (n=12). All items with $R < .50$ (1-tail significance level $p > .05$) were omitted; the rest (49) were kept in the same order as they appeared in the second draft. Somers' D as well as an independent variable t-test comparisons, with participation in Bright IDEA-1 used as independent variable, was computed for each of those 49 items on all first-pass questionnaires (n=19). Twenty-four (24) among these 49 items showed significant level of between-groups difference, whereas 25 were not significant. Such a difference indicates that these 24 items (questions) clearly distinguish between teachers who participated in Bright IDEA

activities, thus adding a layer of criterion validity to the established construct (expert) validity of the questionnaire.

Finally, Alpha-Cronbach measure for internal reliability was computed for the final version of the questionnaire (49 items). For all cases with no missing values (n=13), alpha = .68; when removing items that contribute missing values, alpha level found for 45 items was .60 (n=19). This level, though not very high, seems reasonable for the number of respondents and items.

Conclusion:

The 49-item version of the questionnaire, re-titled Educator Questionnaire to include principals and AIG coordinators, was made final. To this final version, an improved set of 15 biographical questions were added as follows (again, underlined questions indicate a multiple-choice response set): person's name, school's name, teaching/educational work experience, number of schools worked, grade person teaches, current role in school, gender, teaching licensure, National Board Certification, distance from home to school, race, academic major, academic minor, highest academic level completed, number of years participating in Bright IDEA.

Note: The final educator disposition questionnaire included 43 items. From the 49 original questions in the original version, some of the questions were combined into one question to make the final number of 43.

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