

The Cross-Cultural Validity of Teachers' Attitudes Instrument : Empirical Testing with Data from Four Countries

Ali Abdulrahman LOORI
Arabian Gulf University, Bahrain

The study aimed at exploring the attitudes of teachers from four countries (Bahrain, Finland, Hong Kong, USA) toward gifted children and programs for the gifted by administering an attitudinal scale developed by Gagne and Nadeau (1985) and analyzing data by employing the Bayesian Classification Model. The study participants were 240 Bahraini teachers, 147 Finish teachers, 214 Chinese from Hong Kong and 160 Americans. They were classroom teachers, gifted program teachers and pre-service teachers. The results revealed that there were significant differences among cultures and teacher types. Furthermore, the Bayesian Classification Model showed a successful classification of cultural dependent attitudes. In conclusion, the finding of this study adds new knowledge on the cross-cultural differences in gifted education teachers' attitudes.

The Cross-Cultural Validity of Teachers' Attitude Instrument Empirical Testing with Data from Four Countries

In prior studies, few variables have consistently emerged as substantial explanatory factors for attitudes toward and perceptions of gifted children and services for gifted learners. Begin and Gagne (1994), in their analysis and summary of results of 30 studies with almost 50 variables, concluded that only three potentially valid predictors emerged. These were contact with gifted children, sex of the respondents, and teachers vs. parents. However, methodological problems and much variation among studies prompted them to make several recommendations for future studies. Results from several other studies (e.g., Copenhaver & McIntyre, 1992; Morris, 1987) demonstrated that those with more knowledge about gifted children hold more favorable attitudes toward them. Another factor that emerged from many studies is experience working with gifted children. In general, teachers who have worked with them have more positive attitudes toward them than teachers who have no experience teaching gifted children (Begin & Gagne, 1994; Copenhaver & McIntyre, 1992; Dettmer, 1985; Townsend & Ppatrick, 1993).

Among the studies investigated teachers' attitudes using the same instrument used in this study, only three (Busse, Dehme, Wagner & Wiczerkowski, 1986; Ojanen & Freeman, 1994; & Tallent-Runnels, Tirri & Adams, 2000) of them were cross-cultural. The first one (Busse, Dehme, Wagner & Wiczerkowski, 1986) compared samples from Germany and from the United States. This study examined teacher perceptions of characteristics of highly gifted students. There were some differences, with German teachers focusing more on creativity and American teachers focusing on intelligence as indicative of giftedness. The other cross-cultural study (Ojanen & Freeman, 1994) examined the attitudes and experiences of head teachers, classroom teachers, and highly able students toward the education of highly able learners in Finland and Britain. According to this study, the British head teachers were more concerned than the Finns about the potential problems of their highly able students. The Finnish teachers preferred to keep highly able students within normal classroom routines and with other children, in order to promote their social skills, and also to have them as good examples for the less talented students. They were afraid of the isolation that might occur should talented children be placed in special schools, something they all deplored. Instead, they preferred special arrangements within ordinary, mixed-ability classes and schools (Ojanen & Freeman, 1994).

In the most recent cross-cultural study on teacher attitudes toward gifted education, the Finnish teachers were shown to be more concerned about the negative side effects of special classes and other special arrangements for gifted learners outside the regular classroom than their American colleagues (Tallent-Runnels et al., 2000).

In this study, the aim is to further explore those attitudes toward gifted education that are strongly culture-dependent.

Methods

Participants were from Bahrain (N = 240), Hong Kong (N = 214), Finland (N = 147), and the United States of America (N = 160). These were regular classroom teachers, preservice teachers, and gifted program teachers. All groups included elementary and secondary teachers, several grade levels, several subject areas, and varying years of experience. Table 1 depicts the type of teachers.

Table 1

Frequencies for Type of Teacher by Elementary and Secondary for Bahrain, Hong Kong, and USA (N = 761)

Type of Teachers	Country							
	Bahrain		Hong Kong		Finland		USA	
	Level		Level		Level		Level	
	E	S	E	S	E	S	E	S
Student Teachers	40	40	15	59	44	0	27	52
Practicing Teachers	39	41	23	97	39	9	27	14
Gifted Teachers	42	38	13	7	17	32	27	12

E = Elementary Education

S = Secondary Education

The instrument utilized was Form A of the Attitudes Toward Giftedness scale developed by Gagne and Nadeau (1985) (see Appendix A). The scale contains 60 statements and uses a 5-point Likert-type scale (from Strongly agree to Strongly disagree). Copies of the instrument was sent to colleagues with whom

this researcher has had academic relationship at universities in Hong Kong, Finland and the USA. These colleagues for the following universities : University of Hong Kong, Hong Kong, university of Helsinki, Finland, and Texas Tech University, the USA. In all four countries, the instrument was administered to preservice and inservice teachers. In addition to the attitudinal scale, participants were asked to fill in a demographics sheet with information regarding their age, subjects taught, grade level taught, whether respondents were gifted, or whether they had a gifted family member.

Results and Discussion :

MANOVA results by country (Finland, United States, Hong Kong, Bahrain) and type of teacher (pre-service, regular classroom, gifted program) suggested differences among cultures and among teacher types. For the 16 factors, there was a significant main effect for country [Wilk's Lambda = .271, $F = 25.03$, $p = .001$]. There was also a main effect for the type of teacher [Wilk's Lambda = .844, $F = 4.05$, $p = .001$]. Finally, there was a significant interaction effect [Wilk's Lambda = .701, $F = 2.80$, $p = .001$].

To further examine teachers' attitudes with respect to prediction their country of origin, a Bayesian analysis with all the items of the questionnaire was performed. This allowed the identification of the culture-dependent and culture invariant variables in the Gagne instrument. The data set ($N = 759$) was prepared by replacing missing values with series mean and conducted the Bayesian classification analysis (Silander & Tirri, 1999) in order to find out more evidence for identifying those teacher attitudes that are the most culture-dependent.

A model for classifying the data items according to the class variable "Country" (USA, Finland, Hong Kong, Bahrain) with the sixty variables of attitude scale toward gifted education as predictors was derived. The final model, a pack of variables, is the estimated best classifier found in time used for searching. It can be estimated that using the selected model 85.1% of future classifications will be correct. The classification performance of our model (85.1%) exceeds the performance obtainable by a "default" classification procedure (31.5%) that always guesses the class of the data item to be the class of the majority ("Bahrain" in this case).

Table 2

The Means and Standard Deviations of Each Factor by Country

Factor	USA		Finland		Hong Kong		Bahrain	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Factor 1	3.59	.89	3.79	.68	3.32	.95	3.74	.83
Factor 2	2.95	.72	3.17	.69	2.78	.60	2.22	.56
Factor 3	3.02	.85	3.21	.75	3.70	.66	3.33	.85
Factor 4	4.08	.74	3.95	.71	3.94	.73	3.49	.96
Factor 5	3.36	.59	3.21	.57	3.13	.48	3.01	.58
Factor 6	2.75	.85	2.69	.93	2.74	.81	2.72	.71
Factor 7	2.54	.88	2.71	.92	3.24	.76	3.01	.77
Factor 8	3.71	.71	4.09	.64	3.87	.73	3.37	.66
Factor 9	2.58	.70	2.85	.73	2.80	.61	2.76	.65
Factor 10	3.24	.79	3.73	.68	3.35	.72	3.82	.68
Factor 11	3.16	.55	3.05	.46	3.05	.45	3.09	.54
Factor 12	4.09	.63	4.20	.52	3.91	.66	4.50	.48
Factor 13	3.01	.55	3.20	.65	3.25	.53	2.97	.63
Factor 14	3.63	.84	3.86	.82	3.72	.71	4.02	.85
Factor 15	3.09	.77	2.47	.65	3.21	.66	2.95	.80
Factor 16	3.40	1.20	3.36	1.15	2.23	.88	2.80	1.27

Table 3 lists the variable ordered by their estimated classification performance in the model. The strongest variables, i.e. those that discriminate the four countries best, are listed first. The percentual value attached for each variable in Table 3 indicate the predicted decrease in the classification performance if the variable is dropped from the model. Table 3 indicates that variables in the model spread into three categories: Top (three variables), middle (twelve variables), and lower class (thirteen variables). The most important variable in the top three class is variable 18 “All children are gifted.” Removal of that variable would weaken the performance of the whole model from 85.1% to 81.8%. In addition, other top three variables, variable 51 “Special educational services for the gifted are a mark of privilege,” and variable 60 “There are no gifted children in our school” have explanation proportions greater than three percent adding total effect of this group to 9.5 percent. Three most effectively classifying variables of the middle class, variable 20 “A greater number of gifted children should be allowed to skip a grade,” variable 17 “The gifted come mostly from wealthy

families,” and variable 47 “The gifted should spend their spare time helping those who progress less rapidly,” also sum up their explanation weight to 7.1% out of 85.1% (see Table 3).

The weakest predictor of the model were variable 44 “We have a greater moral responsibility to give special help to children with difficulties than to gifted children,” variable 32 “The speed of learning in our school is far too slow for the gifted” and variable 38 “The enrichment tract is a good means with which to meet certain special needs of gifted children.” Those variable were thus the most common factors among USA, Finland, Hong Kong and Bahrain (see Table 3).

Table 3
Importance Ranking of the Variables in the Bayesian Classification Model

Variable Name	Decrease in predictive Classification if variable Is dropped (%)
18. All children are gifted.	3.29
51. Special educational service for the gifted are a mark of privilege.	3.16
60. There are no gifted children should be allowed to skip a grade.	3.03
20. A greater number of gifted children should be allowed to skip a grade.	2.50
17. The gifted come mostly from wealthy families.	2.37
47. The gifted should spend their spare time helping those who progress less rapidly.	2.24
8. Children with difficulties have the most need of special educational services.	1.97
25. The best way to meet the needs of the gifted is to put them in special classes.	1.84
40. It is less profitable to offer special education to children with difficulties than to gifted children.	1.71
37. It isn't a compliment to be described as a “whiz kid.”	1.71
5. Special programs for gifted children have the drawback of creating elitism.	1.45

27. By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.	1.32
48. It is parents who have the major responsibility for helping gifted children develop their talents.	1.32
21. Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.	1.32
13. Whatever the school program, the gifted will succeed in any case.	1.18
50. Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child.	1.05
34. Average children are the major resource of our society, so, they should be the focus of our attention.	1.05
33. I am sometimes uncomfortable before people I consider to be gifted.	1.05
22. Schools should allow gifted students to progress more rapidly.	0.92
57. When gifted children are put together in a special class most adapt badly to the fact that they are no longer at the head of the class.	0.92
14. Because of a lack of appropriate programs for them, the gifted of today may become the dropouts and delinquents of tomorrow.	0.79
15. The gifted waste their time in regular classes.	0.79
12. The gifted are already favoured in our schools.	0.66
45. In order to progress, a society must develop the talents of gifted individuals to a maximum.	0.66
24. An enriched school program can help gifted children to completely develop their abilities.	0.53
44. We have a greater moral responsibility to give special help to children with difficulties than to gifted children.	0.39
32. The speed of learning in our schools is far too slow for the gifted.	0.39
38. The enrichment tract is a good means with which to meet needs of gifted children.	0.26

In the classification process the automatic search tried to find the best set of variables that predict the country for each data item. This procedure is akin to the stepwise selection procedure in the discriminant analysis (Klecka, 1981). The variables that were not selected for any subset are not good ones to predict cross-cultural attitudes in our data. These variables are presented in Table 4.

The overall result of 85.1% is just an average performance rate of the classification model. Table 4 presents classification performance by group. The second column in Table 5 (“Success for different predictions”) presents the estimated correctness of classification performance and its reliability by groups. The figure in this column show the probability for correct classification for each country in percentages. Next to each estimate there is a figure indicating the percentage of the sample size used to calculate this estimate. The third column in Table 5 (Success in different classes”)

Table 4
The Variables Excluded from the Bayesian Discriminant Analysis

Variable Name
1. Talent is a rare commodity which we must encourage.
2. Devoting special funds to the education of gifted children constitutes a profitable Investment in the future of our society.
3. Offering special help to the gifted helps perpetuate social inequalities.
4. Special services for the gifted constitute an injustice to other children.
6. Since we invest supplementary funds for children with difficulties, we should do the same for the gifted.
7. It is unfair to deprive gifted children of the enrichment which they need.
9. In our schools, it is not always possible for gifted children to fully develop their talents.
10. Our schools are already adequate in meeting the needs of the gifted.
11. Gifted children don't need special educational services.
16. If the gifted are not sufficiently motivated in school, they may become lazy.
19. People are born gifted, you can't become gifted.
23. Enriched school programs respond to the needs of gifted children better than Skipping a grade.

26. Most teachers do not have the time to give special attention to their gifted students.
28. Special programs for gifted children make them more motivated to learn.
29. When the gifted are put in special classes, the other children feel devalued.
30. Often, gifted children are rejected because people are envious of them.
31. Gifted children might become vain or egotistical if they are given special attention.
35. We should give special attention to the gifted just as we give special attention to children with difficulties.
36. Some teachers are jealous of the talents their gifted students possess.
39. The gifted need special attention in order to fully develop their talents.
41. Gifted students often disturb other students in the class.
42. The idea of offering special educational services to gifted children goes against the democratic principles of our society.
43. Sooner or later, regular school programs may stifle the intellectual curiosity of certain gifted children.
46. Gifted children are often unsociable.
49. It is more damaging for a gifted child to waste time in class than to adapt to skipping a grade.
52. Generally, teachers prefer to teach gifted children rather than those who have difficulties.
53. Some children are more gifted than others.
54. In our schools, it is possible to meet the educational needs of the gifted without investing additional resources.
55. A child who has been identified as gifted has more difficulty in making friends.
56. All children could be gifted if they benefited from a favourable environment.
58. Skipping a grade emphasizes scholastic knowledge too much.
59. Skipping a grade forces children to progress too rapidly.

presents the group difficulty, i.e. how well the data items of different classes can be predicted. The fourth column of Table 5 (“Predicted group membership”) shows how many of the members of certain class were predicted to be members of certain other class. The entries denoting numbers of correct classifications are denoted by printing them in bold.

The Hong Kong data was more coherent compared to USA, Finland or Bahrain yielding the best predictive classification results with only 20 misclassifications (9 for

Table 5
Classification Performance by Groups

	Success for different Predictions (% , N)	Success in different classes (% , N)	Predicted group membership (% , N)			
			USA	Finland	Hong Kong	Bahrain
USA	77 (154)	74 (160)	119	17	15	9
Finland	79 (147)	79 (147)	21	117	6	3
Hong Kong	85 (227)	90 (214)	9	8	194	3
Bahrain	93 (232)	90 (239)	5	5	12	217

USA, 8 for Finland, and 3 for Bahrain). The model succeed to predict group membership for Bahrain (93% correct) and Hong Kong (85% correct) teachers, but had numerous difficulties predicting group membership for teachers from the USA (77% correct) and Finland (79% correct). This is due to fact that predicted answering profiles of Finnish teachers were most likely to be mixed with their colleagues from USA (21) than from Hong Kong (6) or Bahrain (3) (see Table 3).

Suggestions and Conclusion :

The Bayesian predictive discriminant analysis demonstrated cultural differences with the scale used. Results of this study add to cross cultural studies which are rarely conducted in gifted education. In addition, new knowledge is contributed to the field of gifted education. This new knowledge is more information about factors related to attitudes toward gifted children as well as information about instrumentation used for these studies. This information can be used to promote training of all teachers, including preservice teachers.

This study adds new knowledge on the cross-cultural differences in teachers' attitudes toward gifted education. The new method used for analyzing the data predicts culture-dependent attitudes with 85.1% accuracy. The findings of this study can be sused in developing cross-culturally valid instruments to measure teacher attitudes toward gifted education. Furthermore, the results of this study can guide teacher educators in different countries to provide information and knowledge on the content of special classes and programs for gifted learners.

References

- Awanboor, D (1991). Teachers and their gifted children in the classroom : A perceptual analysis. *Gifted Education International*, 7, 82-84.
- Begin, J., & Gagne, F. (1994). Predictors of attitudes toward gifted education: A review of the literature and a blueprint for future research. *Journal for the Education of the Gifted* 17, 161-179.
- Busse, T., Dahme, T. G., Wagner, H., & Wiczerkowski, W. (1986). Factors underlying teacher perceptions of highly gifted students : A cross-cultural study. *Educational and Psychological measurement*, 46, 903-915.
- Copenhaver, R., & McIntyre, D. (1992). Teachers' perception of gifted students. *Roeper Review*, 14, 151-153.
- Dettmer, P. (1985). Attitudes of school role groups toward learning needs of gifted students. *Roeper Review*, 11, 72-76.
- Gagne, F., & Nadeau, L. (1985). Dimensions of attitudes towards giftedness. In A. H. Roldan (Ed.), *Gifted and talented children, youth and adults : Their social perspectives and cultures* (pp. 148-170). *Selected Proceedings of the Fifth World Conference on Gifted and Talented Children, Manila : Reading Dynamics*.
- Huberty, C. (1994). *Applied Discriminant Analysis*. New York : John Wiley & Sons.
- Klecka, W. (1981). *Discriminate analysis*. Beverly Hills, CA : Sage Publications.
- Morris, S. (1987). Student teachers' attitudes toward gifted students. *The Creative Child and Adult Quarterly*, 12, 112-114.
- Nokelainen, P., Ruohotie, P., & Tirri, H. (1999). Professional Growth Determinants - Comparing Bayesian and Linear Approaches to Classification. *ERIC Clearinghouse on Assessment and Evaluation*, ED442850.
- Ojanen, S., & Freeman, J. (1994). The attitudes and experiences of head teachers, class teachers, and highly-able students towards the education of the highly able in Finland and Britain. *Research Reports of the faculty of Education* No. 54
University of Joensuu.
- Silander, T., & Tirri, H. (1999). Bayesian Classification. In P. Ruohotie, H. Tirri, P. Nokelainen and T. Silander, *Modern Modeling of Professional Growth*,

Vol. 1, pp. 61-84. Research Centre for vocational Education, University of Tampere Saarijarvi: Saarijarven Offset.

Talent-Runnels, M. K., Tirri, K. A., & Adams, A. M. (2000). A Cross-Cultural Study of Teachers' Attitudes Toward Gifted Children and Programs for Gifted Children. *Gifted and Talented International*, XV(2), 103-115.

Tirri, K., & Uusikyla, K. (1994). How teachers perceive differentiation of education among the gifted and talented. *Gifted and talented International*, 9(2), 69-73.

Townsend, M., & Patrick, H. (1993). Academic and psychosocial apprehensions of teachers and teacher trainees toward the educational acceleration of gifted children. New Zealand, *Journal of Educational Studies*, 28, 29-41.

Van-Tassel-Baska, J. (1992). Education decision making on acceleration and grouping. *Gifted Quarterly*, 36(2), 68-72.

Appendix A

Attitudes Towards Giftedness

Directions : Indicate your agreement or disagreement using a five-point scale (1 = completely disagree, 2 = moderately disagree, 3 = undecided, 4 = moderately agree, 5 = completely agree).

Circle the appropriate number for each question below.

1. Talent is rare commodity which we must encourage. 1 2 3 4 5
2. Developing special funds to the education of gifted children constitutes a profitable investment in the future of our society. 1 2 3 4 5
3. Offering special help to the gifted helps perpetuate social inequalities. 1 2 3 4 5
4. Special services for the gifted constitute an injustice to other children. 1 2 3 4 5
5. Special programs for gifted children have the drawback of creating elitism. 1 2 3 4 5
6. Since we invest supplementary funds for children with difficulties, we should do the same for the gifted. 1 2 3 4 5
7. It is unfair to deprive gifted children of the enrichment which they need. 1 2 3 4 5
8. Children with difficulties have the most need of special educational services. 1 2 3 4 5
9. In our schools, it is not always possible for gifted children to fully develop their talents. 1 2 3 4 5
10. Our schools are already adequate in meeting the needs of the gifted. 1 2 3 4 5
11. Gifted children don't need special educational services. 1 2 3 4 5
12. The gifted are already favored in our schools. 1 2 3 4 5
13. Whatever the school program, the gifted will succeed in any case. 1 2 3 4 5
14. Because of a lack of appropriate programs for them, the gifted of today may become the dropouts and delinquents of tomorrow. 1 2 3 4 5
15. The gifted waste their time in regular classes. 1 2 3 4 5
16. If the gifted are not sufficiently motivated in school, they may become lazy. 1 2 3 4 5
17. The gifted come mostly from wealthy families. 1 2 3 4 5
18. All children are gifted. 1 2 3 4 5
19. People are born gifted, you can't become gifted. 1 2 3 4 5
20. A greater number of gifted children should be allowed to skip a grade. 1 2 3 4 5
21. Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students. 1 2 3 4 5

- | | | | | | |
|--|---|---|---|---|---|
| 22. Schools should allow gifted students to progress more rapidly. | 1 | 2 | 3 | 4 | 5 |
| 23. Enriched school programs respond to the needs of gifted children better than skipping a grade. | 1 | 2 | 3 | 4 | 5 |
| 24. An enriched school program can help gifted children to completely develop their abilities. | 1 | 2 | 3 | 4 | 5 |
| 25. The best way to provide gifted children with special services is by grouping them according to their talents. | 1 | 2 | 3 | 4 | 5 |
| 26. Most teachers do not have the time to give special attention to their gifted students. | 1 | 2 | 3 | 4 | 5 |
| 27. By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc. | 1 | 2 | 3 | 4 | 5 |
| 28. Special programs for gifted children make them more motivated to learn. | 1 | 2 | 3 | 4 | 5 |
| 29. When the gifted are put in special classes, the other children feel devalued. | 1 | 2 | 3 | 4 | 5 |
| 30. Often, gifted children are rejected because people are envious of them. | 1 | 2 | 3 | 4 | 5 |
| 31. Gifted children might become vain or egotistical if they are given special attention. | 1 | 2 | 3 | 4 | 5 |
| 32. The speed of learning in our schools is far too slow for the gifted. | 1 | 2 | 3 | 4 | 5 |
| 33. I am sometimes uncomfortable before people I consider to be gifted. | 1 | 2 | 3 | 4 | 5 |
| 34. Average children are the major resource of our society, so, they | 1 | 2 | 3 | 4 | 5 |
| 35. We should give special attention to the gifted just as we give special attention to children with difficulties. | 1 | 2 | 3 | 4 | 5 |
| 36. Some teachers are jealous of the talents their gifted students possess. | 1 | 2 | 3 | 4 | 5 |
| 37. It isn't a compliment to be described as a "whiz kid." | 1 | 2 | 3 | 4 | 5 |
| 38. The enrichment tract is a good means with which to meet certain special needs of gifted children. | 1 | 2 | 3 | 4 | 5 |
| 39. The gifted need special attention in order to fully develop their talents. | 1 | 2 | 3 | 4 | 5 |
| 40. It is less profitable to offer special education to children with difficulties than to gifted children. | 1 | 2 | 3 | 4 | 5 |
| 41. Gifted students often disturb other students in the class. | 1 | 2 | 3 | 4 | 5 |
| 42. The idea of offering special educational services to gifted children goes against the democratic principles of our society. | 1 | 2 | 3 | 4 | 5 |
| 43. Sooner or later, regular school programs may stifle the intellectual curiosity of certain gifted children. | 1 | 2 | 3 | 4 | 5 |
| 44. We have a greater moral responsibility to give special help to children with difficulties than to gifted children. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|---|---|---|---|---|---|
| 45. In order to progress, as society must develop the talents of gifted individuals to a maximum. | 1 | 2 | 3 | 4 | 5 |
| 46. Gifted children are often unsociable. | 1 | 2 | 3 | 4 | 5 |
| 47. The gifted should spend their spare time helping those who progress less rapidly. | 1 | 2 | 3 | 4 | 5 |
| 48. It is parents who have the major responsibility for helping gifted children develop their talents. | 1 | 2 | 3 | 4 | 5 |
| 49. It is more damaging for a gifted child to waste time in class than to adapt to skipping a grade. | 1 | 2 | 3 | 4 | 5 |
| 50. Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child. | 1 | 2 | 3 | 4 | 5 |
| 51. Special educational services for the gifted are a mark of privilege. | 1 | 2 | 3 | 4 | 5 |
| 52. Generally, teachers prefer to teach gifted children rather than those who have difficulties. | 1 | 2 | 3 | 4 | 5 |
| 53. Some children are more gifted than others. | 1 | 2 | 3 | 4 | 5 |
| 54. In our schools, it is possible to meet the educational needs of the gifted without investing additional resources. | 1 | 2 | 3 | 4 | 5 |
| 55. A child who has been identified as gifted has more difficulty in making friends. | 1 | 2 | 3 | 4 | 5 |
| 56. All children could be gifted if they benefited from a favorable environment. | 1 | 2 | 3 | 4 | 5 |
| 57. When gifted children are put together in a special class most adapt badly to the fact that they are no longer at the head of the class. | 1 | 2 | 3 | 4 | 5 |
| 58. Skipping a grade emphasizes scholastic knowledge too much. | 1 | 2 | 3 | 4 | 5 |
| 59. Skipping a grade forces children to progress too rapidly. | 1 | 2 | 3 | 4 | 5 |
| 60. There are no gifted children in our school. | 1 | 2 | 3 | 4 | 5 |