DOCUMENT RESUME

ED 191 876	TH 800 497
AUTHOR TITLE	Beck, Michael D.: Stetz, Frank P. Standardized Testing as Viewed by Test Specialists
	and Users.
PUB DATE NOTE	Apr 80 15p.: Paper presented at the Annual Meeting of the National Council on Measurement in Education (Boston, MA, April 8-10, 1980).
EDFS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Achievement Tests: Attitude Measures; Elementary
DISCRIPTORS .	Secondary Education: *Evaluators: *Expectation:
	*Standardized Tests: *Student Attitudes: *Teacher
1	Attitudes
IDENTIFIERS	National Council on Measurement in Education

ABSTRACT

The National Council on Measurement in Education (NCME) members' expectations of teacher and student attitudes toward standardized testing are compared with the actual attitudes of these grou'rs to ascertain whether the perceptions of test specialists are similar to those of test users. Of a random sample of NCME members, assigned systematically to three grade ranges, 59 percent responded to attitudinal questionnaires as they thought teachers and students would in grades K-4, in grades 5-8, or in grades 9-12. A comparison of the NCME responses is made with actual responses previously obtained from 3,306 teachers and 71,763 students (90% response rate) in grades K-12 who answered identical guestionnaires immediately subsequent to an administration of a standardized achievement test. Highlights of results indicate: (1) ceachers are actually more knowledgeable about, and supportive of standardized achievement tests then NCME members expect them to be: (2) grades K-4 students \* attitudes are far more positive than expected: (3) grades 5-12 students attitudes reflect that the tests are less difficult, less unfair, and less likely to stimulate stress than expected. Attitudes should be monitored in order to assist non-specialist test users successfully. (RL)

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### Abstract

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Standarge ed Testing as Viewed by Test Specialists and Users

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NCME members' expectations of leacher and student attitudes toward standardized testing ware compared with the actual attitudes of these groups. A random sample of NCME members completed the same questionnaire as was used in a previous nationwide study of teacher and student attitudes. NCME members were asked to respond as they believed teachers and students would. Results indicate significant discrepancies between actual teacher and student reactions and the attitudes expected of them by NCME respondents. Teachers and students ' reacted far more positively toward such instruments than NCME members expected.

Paper presented at the meeting of the National Council on Measurement in Education, Boston, April 1980.

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Standardized Testing as Viewed by Test Specialists and Users Michael D. Beck and Frank P. Stetz The Psychological Corporation New York, New York

## Introduction ·

At last year's NCME and AERA annual meetings, Stetz and Beck (1979) and Beck and Stetz (1979) presented findings of a nationwide survey of public and nonpublic teacher and students in Grades K-12. Their inquiry, immediately subsequent to an administration of a standardized achievement test, dealt with such variables as: teachers' opinions and personal feelings toward standardized achievement tests, their opinions of the amount of standardized testing in their school systems, their personal use of such test results, and their predilection toward various testrelated policies. In addition, students were asked such questions as "How many of you were nervous just before you took this test?", "How do you feel about the test now?", and "Would you like to take a test like this one next year?"

Their results showed, among other things, that standardized testing is viewed with some skepticism and anxiety. In general, however, test results are considered useful for certain purposes and cause less anxiety in students than teacher-made tests.

### Objective

With the above in mind, a replication of the above study, was conducted with a random sample of NCME members to ascertain whether the perceptions of test specialists are similar to those of test users. This question has been raised by various NCME members in the past (e.g., Olejnik, 1979; Stetz & Beck, 1978).

## Instrumentation

The same teacher and student questionnaires used in the 1979 Stetz and Beck studies were used. The only modifications were 1) a reminder to NCME members at the top and bottom of each page to respond as they thought a random sample of teachers (or students) would, and 2) a request to respond in percents to certain student questions rather than ask for hand counts of students as was done in the original study.

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Among other questions, the teacher questionnaire contained 11 semantic differential scales surveying NCME members' impressions of teachers' general opinions and feelings. Examples of the bipolar adjective descriptors included: helpful-harmful, unbiased-biased, calm-anxious, supportive-antagonistic. The student portion was originally administered orally by the teacher; teachers recorded the number of hands raised in response to the questions. In this survey, NCME members were asked to respond as they thought students would.

### Method

A random sample of 500 NCME members was selected from the NCME membership list. The teacher and student questionnaires were segmented into three groups; in the questionnaire cover sheet, NCME members were asked to respond as they thought teachers and students would either in Grades K-4, in Grades 5or in Grades 9-12. Assignment to grade range was done systematically.

Materials sent to each NCME member sampled included a cover letter, the questionnaire, and a postpaid return envelope. Approximately two

weeks later, a followup letter was sent to each sample member, urging their cooperation.

To control for response bias due to knowledge of the results of the original teacher and student study, the questionnaire was mayled well in advance of the 1979 NCME/AERA annual meetings. The deciline date was also prior to the annual meetings.

## Results

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Table 1 summarizes the number of respondents to the two surveys. The student and teacher counts represent a return rate of over 90% of those sampled; the response rate for NCME members was 59% of those contacted.

One of the questionnaire items asked about the amount of standardized testing that takes place in the teachers' own school system. Table 2 summarizes the results. Respondents indicated "too great," "about right," or "too little." NCME respondents thought many more teachers than was actually the case would feel there was too much testing in their system. Almost 60 percent of the NCME members thought teachers would reply "too much," while less than 20 percent actually did so.

A further question concerned teachers' personal use of standardized achievement test results. Respondents indicated whether they made "little," "some," or "considerable" use of such data. As opposed to the above results, the perceptions of NCME members were close to the teachers' ratings on this question. Slightly over half of each group indicated that "some" use was made, while just under 10 percent of both groups indicated "considerable" teacher use.

Total Number of NCME Members, Teachers and Students Responding by Grade

Grades	NCME Members	Teachers	Students
<b>K-</b> 4	103	1516	37,956
5-8	95	1210	28,246
9-12	. 86	580	11,561
Total	284	330E	71,763

# Table 2 .

Comparisons Between NCME Members' Impressions and Teachers' Opinions of the Amount of Standardized Testing in the Teachers' School Systems'

Amount of Testing in Your System:	NCME Members	dpinions	Teachers	Opinions
	K-8	9-12	<u>K-8</u>	9-12
Too Great	60	57	20	16
About Right	39	38	70	64
Too Little	Ī	<u>.</u> 5	6	13
No Answer	Ö	τÖ	7 4	7
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Numbers expressed in percents.

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Table 3 provides a comparison of teachers' personal feelings toward standardized achievement tes+- with the NCME members' expectation of teachers' feelings. Teachers are actually more interested in, calm, comfortable, and knowledgeable about, and supportive of standardized achievement tests than NCME respondents expected them to be. For most items, NCME members' impressions of teachers' attitudes were more negative than reality.

Another set of semantic differential scales provided additional comparisons of opinions concerning such tests. Teachers generally consider such tests more helpful, fair, and useful, less biased, but harder than NCME members expected them to.

Table 4 indicates the two groups' responses to four questions concerning moratoriums on various tests. Differences between the groups here are inconsistent. Overall, NCME members expected more teachers to favor moratoriums than was actually found. However, the differences between groups were small for reactions to moratoriums on <u>all</u> standardized tests and on standardized achievement tests. In contrast, about half as many teachers as expected by NCME respondents favor moratoriums on standardized intelligence and state-mandated tests. NCME members appear to consider teachers far more negative toward these two types of instruments than is actually the case.

Teachers' opinions concerning various other test-related practices are summarized in Table 5. NCME members' expectations and teachers' attitudes were somewhat discrepant in the use of tests for accountability,

Compariso Teachers' Personal	ns Between NCME Members' Impr Feelings Toward Standardized (Grades_K-12)	essions and Achievement Tests <sup>1</sup>
Dimensions <sup>2</sup>	NCME Members' Impressions of Teachers' Feelings	Teachers' Feelings
Calm 1-2 3-5 6-7 Anxious	10 73 17	42 51 7
Comfortable 1-2 3-5 6-7 Uncomfortable	2 _6 80 14	38 55 7
Interested 1-2 3-5 6-7 Uninterested	16 76 8	37 55 8
Knowledgeable 1-2 3-5 6-7 Not Knowledgeable	9 78 13	34 64 2
Supportive 1-2 3-5 6-7 Antagonistic	83 9	32 63 5

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<sup>1</sup>Numbers are expressed in percents.

<sup>2</sup>Although the questionnaire used a seven-point scale, data were collapsed into a three-point scale range for summary purposes.

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Table 3

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## Comparisons Between NCME Members' Impressions and Teachers Favoring Various Moratoriums on Standardized Tests<sup>1</sup> (Grades K-12)

Percent of Teachers Personally Favoring a Moratorium on:	NCME Members' Impressions of Teachers Favoring	Teachers Favoring	
All Standardized Tests	19	ĪĒ	
Standardized Intelligence Tests	58 - 7	- 26	
Standardized Achievement Tests	20	19	
State-Mandated Achievement Tests	62	31	

Numbers expressed in percents.

## Table 5

Comparisons Between NCME Members' Impressions and Teachers Favoring Various Test-Related Policies (Grades K-12)

NCME Members' Impressions of Teachers Favoring	Teachers Favoring
42	ō2
77	61
12	26
80	38
	Impressions of Teachers Favoring 42 . 77 12

Numbers expressed in percents.

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and additional training of school personnel in test interpretation and use. Their views were not greatly discrepant (42% vs. 62%) for using competency tests to determine high school graduation. Finally, more than twice as many NCME members expected teachers to favor increased criterion-referenced test use than was true.

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The questionnaire listed a variety of purposes for which standardized achievement tests are used. Respondents indicated whether such tests were useful for these purposes. Table 6 summarizes the results. Arbitrarily using a difference of 10% as indicating "significance," the results indicate NCME members overestimate teachers' dispositions toward test use for reporting to newspapers, boards of education, and parents; for screening for special education; and for comparing students and systems with national reference groups. On the other hand, teachers react more positively then expected by NCME members to using test data for measuring "growth," planning instruction for individuals or classes, evaluating teaching methods and materials, and evaluating teacher performance:

Table 7 compares Grades K-4 <u>students</u>' impressions of standardized achievement tests with the reactions expected of them by NCME members. Overall, students' attitudes were far more positive--both before and after testing--than expected by NCME members.

Finally, Table 8 compares Grades 5-12 students' impressions of standardized achievement and teacher-made tests with the reactions expected of them by NCME members. NCME members greatly overestimate the difficulty of standardized tests and underestimate the difficulty of teachermade tests. NCME members also overestimate students' negative percep-;



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## Comparisons Between NCME Members' Impressions and Teachers Who Consider Standardized Achievement Test Results Useful for Various Purposes (Grades K-12)

	· · · · · · · · · · · · · · · · · · ·	
Standardized Test Results are Useful to:	NCME Member Impressions of Teachers' Opinions	Teachers' Opinions
Report to newspapers		10
Report to boards of education	17	52
Report to parents	82	67
Report progress to students	59	56
Measure educational status of individuals	65	<u>6</u> 1
Measure educational "growth" ofindividuals	56	
Screen special education students	73	56
Help plan instruction for individuals	32	63
Help plan instruction for class groups	47	65 -
Detect system-wide general strengths/weaknesses	<u>8</u> ]	75
Help evaluate teaching pro- cedures or methods	<u> </u>	<u> </u>
Help evaluate instructional materials	23	41
Help evaluate teacher per- formance	5	21
Compare students with national peer groups	91	58
Compare classes in a school	36	. ; 30
Compare schools within a*	41	36
Compare a system with systems across the country	75	56

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<sup>1</sup>Numbers are expressed in percents.

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## Comparisons Between NCME Members' Impressions and Students' Opinions Toward an Administration of a Standardized Achievement Test (Grades K-4)

	•		· ·	
Dimensions	NCME Members' of Students' C	Impressions pinions	Student 0	pinions <sup>2</sup>
FEELINGS TOWARD TEST:	% Before Test	After Test	Before	Z After
	<u> </u>	12	37	58
		23;	19	14
	• 	33	22	10
	30	21	<u> </u>	- 7
	16	ī	13-	11
PERCENT NERVOUS JUST BEFORE TEST	67			6
WOULD YOU WANT TO TAKE ANOTHER SUCH TEST NEXT YEAR?	ς ζ			•
PERCENT ANSWERING: YES NO DON'T KNOW/NOT SURE	<u> </u>	·	3	8 8 4
	•			

The first percent represents NCME members' impressions of students' opinions just before the test administration; the second percent represents NCME members' impressions of student opinions just after the test administration.

<sup>2</sup>The first percent represents students' feelings just <u>before</u> the test administration; the second percent represents students' feelings just <u>after</u> the test administration.

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### Comparisons Between NCME Members' Impressions and Students' Opinions Toward an Administration of a Standardized Achievement Test (Grades 5-12)

				· .
		•		*
-	NCME Member	s' impressions	<u> </u>	
Questions	of Student	Opinions	Students	Opinions
•	Gr. 5-8	- Gr. 9-12	Gr. 5-8	Gr. 9-12
	5		5	<b>x</b>
"Which type of test do you			1	
think is usually harder: type	-		t	
of test you just took or the	1			· ·
type of test your teachers	·			
make up?"			-	-
	i i i			16
-Standardized Tests,	60	65	36	
-Teacher-made tests		26	54	73
-Don't know	8	6	10	11
			1	
"The test you just took is sup-	1			
posed to show what you already	· ·			
have learned and what you do not know yet. Do you think the				
test questions were generally	ł		1	
fair?"	l		ł	
-Yes	56	49	74	
-No	33		16	11
-Don't Know	· 11,	13	10	- <u>ij</u> {
	<u>'₩</u>			
"How do you feel you did on		. ·	.]	ŀ
this test?"		1		
		10	ar	ŕ
_We!l	17	16	25	31
-OK/A11_Right	49	45	48	48
-Poorly	20	21	8	5
-Don't Know	-14	18	19	16
"In general, how do you feel	1	]		
about the type of test you			· · ·	-
just took?"	· · ·	l		•
-Positive	- 39	36	29	÷ 18
	27	36	27	29
-Regative				
-Neutral/Unsure	33	28	44	53
	•	^	1	•
"Would you be interested in		· .		•
finding out your scores on the		. <u>.</u>	1	
CESC JUL JUSC LUUKI	<b>-</b> _	·	I	
-Yes	76	76	90	84
-110	16	15	6	10
	8	9	Ā	6
-Not Sure	<u> </u>	3	<u> </u> −	
"Would you like the chance to			1	
discuss with your teacher the	<u> </u>			
correct answers to the test	•	- N	وبالمنعل	
you just took?"				-
-Yes	67	60	48	
<u>-No</u>	22	26	39	55
-Not Sure	11	<u></u>	13	14
•				t :
"How many of you get nervous			1 . 1	N.
just before you take a test	<u></u> 67	62	· 37 ·	13
like the one you just took?"	0/			
"How many of you get nervous			100 m	-
just before you take the kind	_			
of test your teachers make up?"	59	56	61	71

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tions of the fairness of the questions on standardized achievement tests. In general, NCME members' views and students' feelings on how students did on the test and students' general perceptions of such tests were similar. NCME members overestimated the number of students who would like the chance to discuss the correct answers to the test. Finally, NCME members overestimated the number of students who get nervous prior to taking standardized achievement tests.

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## Educational -Significance

NCME is a professional association of measurement specialists that is, by design, practitioner-oriented. As such, it is important that its members be sensitive to the attitudes of test users toward assessment devices. This study highlights areas in which perceptions of specialists about user attitudes vary markedly from reality. It is important to monitor the relationship between perceived and actual attitudes if NCME is to be successful in assisting non-specialist test users in making better use of educational assessment. This study provides data for such a process and may help to direct the organization's resources toward shrinking the gap between perception and reality.

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