Perceptions of Preservice and Inservice Teachers Regarding Test-Taking Procedures and Test-Wiseness Programs. Literacy Research Report No. 4.

Northern Illinois Univ., DeKalb. Curriculum and Instruction Reading Clinic.

A study was conducted to address the ethical issues inherent in the teaching of test-taking and test-wiseness skills. A survey, consisting of 11 items was developed and given to 62 preservice and 133 inservice teachers. Questions were classified into 3 categories: (1) general test-taking considerations; (2) standardized test-taking procedures; and (3) test-wiseness. The general pattern of responses for inservice and preservice teachers was similar for both general test-taking considerations and some aspects of teaching test-wiseness. The two groups did not agree with the general literature on standardized test-taking procedures nor with appropriate, ethical aspects of test-wiseness programs. Implications are that both preservice and inservice teachers could profit from more knowledge about standardized test administration procedures. It is recommended that preservice reading methods courses, diagnostic reading courses, and other courses where standardized tests are considered give ample attention to the importance of following standardized test administration procedures. Inservice teachers need to review the standardization procedures given in test manuals; and both groups need a better understanding of the differences between test-taking strategies and teaching to the test. (LL)
PERCEPTIONS OF PRESERVICE AND INSERVICE TEACHERS REGARDING TEST-TAKING PROCEDURES AND TEST-WISENESS PROGRAMS

Jerry L. Johns
Northern Illinois University

Susan J. Davis
Queen Bee Elementary School

Literacy Research Report No. 4

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Jerry L. Johns
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Queen Bee Elementary School

April 1991

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Curriculum and Instruction and the College of Education at Northern Illinois
University.
PERCEPTIONS OF PRESERVICE AND INSERVICE TEACHERS REGARDING TEST-TAKING PROCEDURES AND TEST-WISENESS PROGRAMS

With the increase of testing in schools today, educators have become more interested in teaching test-taking skills to students. Test-taking strategies are taught so that students can become test-wise and use their knowledge of the characteristics and formats of the test and the testing situation to receive a higher score (Millman, Bishop, & Ebel, 1965). Increasing the test-wiseness of students avoids bias against students who do poorly on tests and thus improves the validity of the test results by equalizing the differences in test-taking experiences (McPhail, 1981). Teaching test-wiseness, therefore, seems to be an accepted method of giving every student a fair chance at achieving the best possible test score. Before beginning a test-wiseness program, however, there are several ethical questions which should be considered.

Some of the ethical considerations of test-wiseness have been addressed by the American Personnel and Guidance Association (APGA) in their Ethical Standards (1981):

The meaningfulness of test results used in personnel, guidance, and counseling functions generally depends on the examinee’s unfamiliarity with the specific items on the test. Any prior coaching or dissemination of the test material can invalidate the test results. Therefore, test security is one of the professional obligations of the member. Conditions that produce most favorable test results should be made known to the examinee (Subsection 6, Section C).
Brown (1982) drew two important inferences from this statement: 1) no material from actual tests should be used in test-wiseness programs; and 2) test givers have an ethical obligation to share information that would optimize test performance.

One aspect of test-wiseness programs not addressed by the APGA is following standardized administration procedures. Tests are standardized so that the scores obtained by different individuals can be compared. According to Anastasi (1988), standardization implies uniformity of procedures in administering the test. Administration of the test includes the exact materials to be used, time limits, oral instructions, and preliminary demonstrations as well as other aspects unique to a particular test.

Ethical considerations are integral in the development and use of test-wiseness programs, but what do preservice and inservice teachers think about various aspects of test-wiseness? A survey that dealt with test taking and some of the ethical issues inherent in test-wiseness programs was developed and given to preservice and inservice teachers.

Method

Subjects

A total of 133 subjects participated in the study: 62 preservice teachers and 71 inservice teachers. The 62 preservice teachers were enrolled at a large midwestern university. None of these individuals had teaching experience on a contractual basis. With two exceptions, all preservice teachers were sophomores or juniors who were pursuing a bachelor’s degree in education.

The 71 inservice teachers were either graduate students at a large midwestern university or attendees at a reading conference in the Chicago area. Two-thirds of this group was approximately evenly distributed among primary, intermediate, and reading or learning disabilities teachers. About one third of the
group was composed of secondary teachers. Approximately 60% of the teachers
held a master's degree or a master's degree plus additional hours. In terms of
teaching experience, all had taught more than one year. Over half of the group
had more than 10 years experience.

Survey

An eleven-item survey was developed and given to the preservice and
inservice teachers. The survey included statements about various aspects of test
taking and test-wiseness. Subjects were asked to circle the response which most
closely matched their feelings about each statement. The choices of responses were
strongly agree, agree, undecided or uncertain, disagree, and strongly disagree.
Total percentages for each item may vary between 99 and 101 due to rounding.

Results and Relationship to Literature

The questions in the survey were classified into three broad categories:

- General test-taking considerations
- Standardized test-taking procedures
- Test-wiseness

The results of the survey are presented within each category.

General Test-taking Considerations

Table 1 contains the results to questionnaire items that sought to determine
whether or not preservice and inservice teachers agreed that students should be
informed that they would be taking a test and whether or not test purposes should
be explained.
Table 1

Questionnaire Results for General Test-Taking Considerations

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Group</th>
<th>Percentage of Responses*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>1. Students should be informed a few days in advance that they will be taking a test.</td>
<td>Inservice</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>73</td>
</tr>
<tr>
<td>2. Test purposes or intents should be explained to students before the testing date.</td>
<td>Inservice</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>66</td>
</tr>
</tbody>
</table>

* strongly agree, agree, undecided, disagree, strongly disagree

Over 90% of both groups responded with strongly agree or agree on these two survey items. Such answers coincide with Anderson and Armbruster's (1984) work on studying which suggests that students be informed of the criterion task they are to perform. In order to study for a test, students need to be informed that they will be taking a test and the purpose of the test. Some testing situations, such as psychological testing, in fact, require informed consent: the test-taker must be made aware of the purposes of the test, the kind of data that is being sought, and the use that will be made of the test scores (Anastasi, 1988). When classroom tests or standardized tests are given, informed consent is not required, but the American Psychological Association (1985) recommends that students be informed about the testing process. The participants in this study agreed that they should inform their students in advance that they would be taking a test and should explain the test's purposes or intent.

Standardized Test-taking Procedures

Three statements were used to determine the degree to which the two groups sampled understood standardized testing procedures (see Table 2). In
general, responses to these survey items indicate that the two groups had diverse opinions about what standardization means.

Table 2

Questionnaire Results for Standardized Test-taking Procedures

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Group</th>
<th>Percentage of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Standardized tests should be given in the same manner as teacher-made tests.</td>
<td>Inservice</td>
<td>14 24 28 24 7 3</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>8 31 37 24 0 0</td>
</tr>
<tr>
<td>4. Teachers should read the directions of standardized tests directly out of the teacher's manual.</td>
<td>Inservice</td>
<td>46 32 10 10 1 0</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>15 40 18 26 2 0</td>
</tr>
<tr>
<td>5. Teachers should give special assistance to poor readers by reading the standardized test items aloud.</td>
<td>Inservice</td>
<td>11 24 24 21 18 1</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>19 35 26 16 3 0</td>
</tr>
</tbody>
</table>

* omit

There was a wide variety of responses to survey item 3. Approximately 40% of the inservice and preservice teachers either strongly agreed or agreed that teacher-made and standardized tests should be given in the same manner. Approximately one third of each group was undecided, and 31% of the inservice teachers and 24% of the inservice teachers disagreed or strongly disagreed.

For survey item 4, there was also considerable variance of responses. Over 75% of the inservice teachers and over 50% of the preservice teachers agreed or strongly agreed that directions for standardized tests should be read directly out of the teacher's manual. Over 20% of the inservice teachers and nearly half of the preservice teachers were undecided or disagreed.

On item 5, 35% of the inservice teachers and 54% of the preservice teachers agreed or strongly agreed that they should assist poor readers by reading
the standardized test items aloud. Approximately a quarter of each group was undecided. About 40% of the inservice teachers and 20% of the preservice teachers disagreed or strongly disagreed.

According to standardization procedures, standardized tests should not be given in the same manner as teacher-made tests; teachers should read the directions out of the teacher's manual, and teachers should not give special assistance to poor readers. Standardized tests are normed so that an individual score on the test can be interpreted according to the test's norms. A test's validity depends, in part, on administration procedures that follow the standardization procedure.

Standardization procedures include time limits, oral instructions, preliminary demonstrations, ways of handling questions from test-takers, and other details of the testing situation (Anastasi, 1988). That is the reason teachers should read all testing directions from the manual and should not give poor readers extra help on the test. The reading of the directions is an important part of the standardization process which should be followed to the minutest detail (Anastasi, 1988).

Test-wiseness

Table 3 contains the results to questionnaire items related to test-wiseness. Survey item 6 and 7 were designed to determine the degree to which the participants agreed with teaching test-taking skills and the last four items were designed to determine if the two groups understood the difference between aspects of teaching test-wiseness and teaching to the test, or coaching.

Over 90 percent of the inservice teachers agreed or strongly agreed that it is ethical to teach test-wiseness; moreover, teaching it can be a productive use of class time for students. Preservice teachers were a bit less certain about teaching test-wiseness skills (22% were uncertain or disagreed). According to the Ethical Standards (1981) of the American Personnel and Guidance Association cited
earlier, it is indeed ethical to teach test-wiseness. As Brown (1982) interpreted the APGA Ethical Standards, teaching test-wiseness is not merely accepted by ethical standards, it is an ethical obligation for teachers to teach students how they can perform most favorably on a test.
Test-wiseness programs have been productive for students. In a meta-analysis of 24 studies conducted in natural settings, Samson (1985) found that, on average, students who participated in training for test-taking skills showed signs of improvements on achievement tests. Test-wiseness skills, therefore, are beneficial. How did the sample of inservice and preservice teachers react to various ethical aspects of test-wiseness programs?

Survey items 8 and 9 were concerned with practice exercises for standardized tests and teaching students how test questions are constructed. Over 90% of both inservice and preservice teachers agreed or strongly agreed with practice items to promote familiarization with standardized test format.

### Table 3
Questionnaire Results for Test-Wiseness

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Group</th>
<th>Percentage of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>6. It is ethical to teach test-wiseness skills in order to improve test scores.</td>
<td>Inservice</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>29</td>
</tr>
<tr>
<td>7. Using class time to teach test-taking skills can be productive for students.</td>
<td>Inservice</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>29</td>
</tr>
<tr>
<td>8. Students should become familiar with the mechanics of a standardized test before actual testing begins through the use of practice exercises.</td>
<td>Inservice</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>45</td>
</tr>
<tr>
<td>9. Teaching students how test questions are constructed is a legitimate role of the teacher.</td>
<td>Inservice</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>22</td>
</tr>
<tr>
<td>10. Test-wiseness programs should include material from the actual tests to be taken by students.</td>
<td>Inservice</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>13</td>
</tr>
<tr>
<td>11. Students should be instructed in the subject matter of specific standardized tests.</td>
<td>Inservice</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Preservice</td>
<td>24</td>
</tr>
</tbody>
</table>
Approximately two-thirds of the preservice teachers and 84% of the inservice teachers agreed or strongly agreed that teachers have a legitimate role in teaching students how test questions are constructed. About a quarter of the preservice teachers were uncertain and less than 10% of both groups disagreed with teaching students how test questions are constructed.

The responses to item 10 varied considerably between the two groups. Over two-thirds (67%) of the inservice teachers disagreed or strongly disagreed that material from the actual tests to be taken by students should be included in test-wiseness programs. Over 20% of the inservice teachers and nearly 40% of the preservice teachers, however, agreed with including actual test material in test-wiseness programs. Slightly more than a quarter of the preservice teachers were undecided.

Survey item 11 also resulted in a wide variety of responses regarding instruction in the subject matter of a specific standardized test. Among the inservice teachers, 57% agreed, 15% were undecided, and 25% disagreed. Of the preservice teachers, 58% agreed, 29% were undecided, and 13% disagreed.

According to the Ethical Standards (1981) of the American Personnel and Guidance Association, any dissemination of test materials can invalidate the results of the test. Anastasi (1988) agrees that material from the actual tests should not be given to students before the test. However, becoming familiar with the mechanics of the test does not constitute giving test questions. Increasing an understanding of test mechanics is usually considered a type of test-wiseness. A larger ethical issue, however, is whether or not students should be instructed in the subject matter of standardized tests that is not included in the curriculum.

Ritter and Idol-Maestras (1986) differentiate between test-wiseness and coaching. Coaching is instruction in the domain being measured, whereas test-
wiseness is applicable across many content areas. Tests are intended to assess a broad domain of knowledge. Test questions are merely samples of this domain. If students are given instruction in the areas sampled by the test, they may increase their test score, but their score would not accurately reflect their achievement. When students are taught material from a test, their broad domain of knowledge is not increased, and the test score is not valid.

To summarize, the general pattern of the responses on the survey for inservice teachers and preservice teachers was similar for 1) general test-taking considerations and 2) some aspects of teaching test-wiseness. The two groups did not agree, however, with the 1) general literature on standardized test-taking procedures and 2) appropriate, ethical aspects of test-wiseness programs.

Discussion and Recommendations

Based upon the results reported in Table 2, it appears that both preservice and inservice teachers could profit from more knowledge about standardized administration procedures and the differences between standardized tests and teacher-made tests. To be more specific, we are concerned that over 20% of the inservice teachers and nearly 50% of the preservice teachers were not certain that directions for standardized tests should be read directly out of the teacher's manual. We were also surprised to learn that over a third of the inservice teachers and over half of the preservice teachers apparently thought it was appropriate to assist poor readers by reading standardized test items aloud. Based on these findings, we recommend that reading methods courses, diagnostic reading courses, and other courses where standardized tests are considered:

1. Give ample attention to the importance of following standardized administration procedures.
2. Devote time to a discussion of differences between standardized
tests and teacher-made tests.

3. Discuss why it is inappropriate to assist poor readers by reading
standardized test items aloud unless such directions are stated in the
manual.

Inservice teachers also need to strengthen their knowledge in the above
areas. We therefore recommend staff development sessions to review the
standardization procedures given in the test manuals that are part of the school's
regular assessment program. Such sessions might be best conducted near the time
the tests are to be given.

Both inservice teachers and preservice teachers agree that it is ethical to
teach test-wiseness strategies and to use class time for this purpose. We believe
that both groups of teachers in our survey, nevertheless, need to better understand
the differences between teaching test-taking strategies and teaching to the test. We
are dismayed that about one-third of the inservice teachers and nearly two-thirds
of the preservice teachers (see item 10 in Table 3) either agreed or were uncertain
about including actual material from actual tests to be taken by students in test-
wiseness programs. Item 11 from Table 3 also raises a concern; however, it is
possible that the item was not stated clearly. Our intent was to distinguish between
teaching to the test and teaching the ongoing curriculum. Teaching test items is a
clear violation of ethical standards, as is teaching the subject matter of
standardized tests, unless the subject matter is part of the ongoing curriculum.
These differences need to be explained in preservice and inservice programs.

Test-wiseness programs are intended to increase the validity of tests. Since
the degree of test-wiseness differs among students, tests can become more valid if
all students are taught general and specific test-wiseness strategies. Test-wiseness
is generally considered to include the following strategies: use of time, error avoidance, guessing, deductive reasoning, answering analogies, and answering multiple-choice questions (Ritter & Idol-Maestras, 1986).

Since our survey indicated some confusion about what constitutes a test-wiseness program, educators should consider the ethical implications of a test-wiseness program before beginning one. Finally, to the extent that our findings can be generalized, there is also a need for some basic knowledge about standardized testing procedures and ethical considerations in test-wiseness programs for both preservice teachers and inservice teachers.
References


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