

Housing Knowledge of Prospective Teachers: A National Study

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Introduction

The importance of literacy in consumer housing concepts is evidenced by the specialized treatment given such concepts in leading textbooks used at the secondary level. Housing is included in most consumer oriented courses, and students are expected to acquire some competence and knowledge pertaining to appropriate housing concepts in consumer education classes.

The concern for the consumer education literacy of secondary school students is one result of the interest in the consumer movement during the 1960's and early 1970's. Voices have been raised

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within the public school systems with the conclusion that consumer education literacy should be a structural part of any secondary education.

Thus the past decade has witnessed increased inclusion of consumer concepts in secondary school curricula. These concepts have been introduced into curricula both through integration into established courses (e.g., home economics) and through the creation of specialized, unique courses. In some instances state legislatures have mandated consumer education in secondary schools, frequently establishing guidelines which usually include housing concepts.

Consequently, a concern to curriculum planners and other educators is, "How competent are secondary level teachers who have the responsibility of student instruction in consumer skills, concepts, and understanding?" and "How well-prepared are prospective teachers who may be charged with teaching housing concepts?"

A recent national study which tested over 4,000 prospective teachers from all academic disciplines indicated these individuals may be ill-prepared as consumer educators (Garman, 1977). On the standardized *Test of Consumer Competencies (TCC)*, (Stanley, 1975) which was normed with over 7,500 secondary school students, the overall average score of the prospective teachers was just under 60 percent. Test scores on the fourteen subject areas within the test ranged from 76 percent correct to 45 percent correct. In the area of housing, prospective teachers achieved an average score of only 51 percent (Garman, 1977).

Research Procedures

Since more than three-fourths of all teachers complete their education from institutions accredited by the National Council for Accreditation of Teacher Education (NCATE), for the purposes of this research it was logically assumed that graduates certified by NCATE schools represented prospective teachers as a whole. A sample of 130 institutions was drawn from the 540 accredited by NCATE, and through the application of a variety of criteria, the sample institutions were then stratified according to the number of certifiable students who were expected to graduate by the end of the 1977 summer term.

Testing was completed at 84 of the 130 selected institutions between February 15 and April 29, 1977. About one-sixth (15.5 percent) of all NCATE institutions were thus represented in the study, and about 3 percent of all certifiable graduates in the country were tested. Regarding regional location and the number of certifiable graduates, the final sample was notable in its representativeness of the total population of NCATE institutions. A total of 4,309 usable tests were completed and available for analysis.

The TCC And Housing

As a standardized test instrument, *The Test of Consumer Competencies* was designed to mea-

sure cognitive concepts in fourteen areas related to consumer skills and understanding. The fourteen subject areas were derived from curriculum guidelines and textbooks currently in use. Four of the 55 items on both test Form A and Form B were designed to measure consumer competencies related to housing.

It should be noted that test developers design questions to measure representative "bits" of the general knowledge in specific subject areas. One's general knowledge of the subject can then be inferred from performance on the representative questions. Since extensive effort was made in the development of the *TCC* to maximize its validity as a testing instrument (it received two national awards for excellence in research), it is assumed that generalizations can be drawn from the performances by prospective teachers on the items specifically involving housing concepts.

The Housing Questions

Each of the two forms of the *TCC* contain parallel questions. Below are shown the housing questions, placed in pairs and numbered as in the respective test forms (an asterisk indicates the correct choice).

Form A, Item 31: The fees which cover property appraisal, title transfer, legal fees, and title search when purchasing a house are called (a) mortgage assumption. (b) escrow. (c)* closing costs. (d) equity.

Form B, Item 47: When the Federal Housing Administration sets an interest rate for mortgages which is below the market rate, the rate can be raised by (a) requiring larger down payments. (b) increasing mortgage insurance. (c)* Charging points to the seller. (d) decreasing real estate commissions.

Form A, Item 39: Which statement about rental housing is true? (a) A landlord may always enter the premises of a tenant. (b)* Normal repairs are the responsibility of

the tenant unless an agreement is made with the landlord. (c) Any improvements to rental property can be removed by the tenants. (d) If a lease is for a specified period of time, the tenant is required to give notice when he moves.

Form B, Item 22: A buyer acquires *no* equity in the property or title to a house while paying off its purchase price. This practice is called (a) first mortgage. (b)* contract for deed. (c) second mortgage. (d) joint ownership.

Form A, Item 42: Single persons and young married couples should strongly consider renting because of the need for (a) cash flow. (b) tax relief. (c)* easy mobility. (d) proper location.

Form B, Item 35: The major reason most newly married couples do *not* buy a house is the (a) rising costs of household maintenance. (b) low cost of rental housing. (c)* lack of money for a down payment. (d) high cost of moving.

Form A, Item 45: Approximately three-fourths of all loans for family housing are provided through (a) contract for deed. (b) second mortgages. (c) credit unions. (d)* savings and loan associations.

Performance on the Housing Questions

The composite score for all prospective teachers on the eight housing questions was 51 percent. As shown in Table 1, the prospective teachers scored somewhat better on Form B items, and some variation occurred among the parallel questions from each form. (Forms A and B of the TCC are statistically equivalent.)

Table 1 Correct Responses on the Housing Questions
(Composite Housing Score: 51%)

Item No.	Form A		Item No.	Form B	
	No. & percent correct responses (out of 2,162)			No. & percent correct responses (out of 2,147)	
31	1,180	55%	47	376	18%
39	459	21%	22	1,006	47%
42	1,126	52%	35	1,890	88%
45	1,174	54%	15	1,524	71%
	3,939	46%		4,796	56%

An item analysis for the housing-related questions is shown in Table 2. It contains, for each housing question, the correctly keyed choice, the number and proportion of omissions of that question, the number and proportion of persons marking each choice, and a point biserial correlation (a special case of product moment correlation) between each choice and total scores. The latter aspect of item analysis indicates the discrimination power of each choice for every question, so that the correlations between choices and total scores should be positive (preferably 0.20 or higher) for the right choice and negative for the wrong choices. Such an outcome means that those prospective teachers who did better on the entire test tended to make the right choice on an individual question.

Performance on the Housing Questions and Other Factors

Prospective teachers were asked to indicate, from 15 choices, their major area of study and the subject areas in which they were most specialized to teach. Highest performances on the housing questions were obtained from prospective teachers majoring in Home Economics (59 percent), Industrial Arts (58 percent), and Social Studies, History, and Geography (55 percent). Lowest performances were obtained by majors from Physical Education and Health (45 percent), Mathematics (47 percent), and Art (47 percent).

Performance by sex of prospective teacher was not found to be statistically significant ($p > .05$). Males ($N=1,231$), however, averaged 53 percent on the housing questions while females ($N=3,051$) averaged 50 percent.

A statistically significant ($p < .05$) difference was found between average scores of prospective teachers who had no college level consumer education courses and those who had one or more such courses. The prospective teachers without a consumer education course ($N=3,801$) averaged 50 percent while those with one or more consumer education courses ($N=508$) averaged 56 percent.

Implications of the Research

Performance by prospective teachers on the questions pertaining to housing was quite weak relative to their performances in the thirteen other subject areas. Average scores on housing questions ranked 11th, only just better than performances on questions concerned with Savings and Investments, Food, and Taxes. Apparently concepts related to housing were more vague or unfamiliar to many of the prospective teachers who participated in the study than were concepts from other consumer-related subject areas. While it may be possible to attribute the rather unimpressive performance by the prospective teachers on the housing questions to lack of exposure to appropriate concepts and information (contrasted to questions on Recreation or Clothing for example), educators and curriculum planners must be concerned with the quality of secondary level consumer education involving housing which these prospective teachers are capable of conducting.

A further concern is that those prospective teachers majoring in subject areas frequently encompassing various aspects of consumer housing (e.g., Home Economics, Business) did not perform much better than those individuals majoring in certain other subjects (e.g., English, Foreign Languages). Art, English, or Foreign Language teachers at the secondary level may have little occasion to need or to use housing concepts in their teaching, but the same cannot be said of Home Economics, Business, and Social Studies teachers. Prospective teachers majoring in the latter group of subjects *should* know more about concepts involved in consumer housing. Who, then, is better qualified to teach housing concepts at the secondary level?

Prospective teachers who had completed one or more consumer education courses (e.g., Money Management, Consumer Problems, Consumer Economics, and Personal or Family Finance) averaged only six percentage points higher than those graduates who had no consumer edu-

Table 2 Item Analysis of the Housing Questions
(2,147 responses on Form A and 2,162 on Form B)

		Form A				
Item #	Responses	Omit	1	2	3	4
31	Responses	8	334	369	1180*	271
	Percentage	0.00	0.15	0.17	0.55	0.13
	Point biserial	-0.12	-0.27	-0.05	0.40	-0.23
39	Responses	8	210	459*	104	1381
	Percentage	0.00	0.10	0.21	0.05	0.64
	Point biserial	-0.12	-0.04	0.01	0.00	0.03
42	Responses	10	297	635	1126*	94
	Percentage	0.00	0.14	0.29	0.52	0.04
	Point biserial	-0.12	-0.10	-0.20	0.31	-0.14
45	Responses	15	204	391	378	1174*
	Percentage	0.01	0.09	0.18	0.17	0.54
	Point biserial	-0.14	-0.03	-0.13	-0.23	0.32
		Form B				
47	Responses	46	813	784	376*	128
	Percentage	0.02	0.38	0.37	0.18	0.06
	Point biserial	-0.15	-0.04	-0.06	0.23	-0.08
22	Responses	33	577	1006*	377	154
	Percentage	0.02	0.27	0.47	0.18	0.07
	Point biserial	-0.10	-0.10	0.14	0.04	-0.11
35	Responses	4	161	55	1890*	37
	Percentage	0.00	0.07	0.03	0.88	0.02
	Point biserial	-0.11	-0.18	-0.09	-0.24	-0.10
15	Responses	10	89	173	351	1524*
	Percentage	0.00	0.04	0.08	0.16	0.71
	Point biserial	-0.16	-0.12	-0.12	0.03	0.12

cation courses at all! Apparently housing concepts were insufficiently covered in the courses completed by the prospective teachers, or the acquired cognitive skills were not retained to any substantial degree. It seems important to ascertain why these prospective teachers benefitted so little from their experiences in consumer education-related courses. If housing concepts received less emphasis in the college consumer education courses, the priorities of college consumer education instructors need to be investigated and the reasons for the under-emphasis on housing concepts discovered.

An examination of the item analysis (Table 2) yields further insights into the performance of the prospective teachers on the housing questions. For example, in Form A, Item 42, the tendency for choice "B" (i.e., tax relief) to be selected as a reason for single persons and young marrieds to rent suggests that many examinees had an inadequate understanding of the concepts pertaining to family life cycle and the tax system as they relate to consumer housing decision. In Form B, Items 47 and 22, involving somewhat technical housing concepts, the propensity for the prospective teachers to select incorrect choices implies that the concepts were totally foreign and that the examinees had completed their college education with virtually no exposure to these concepts. In Item 39, on Form A, the popularity of choice "D" suggests that most of the examinees felt they knew the correct answer when in fact they did not. This points to either exposure to incorrect information or confusion of rental housing concepts.

Another consideration involves teaching methodology associated with cognitive understanding of housing concepts. With most graduates having neither textbook learning nor, presumably, many life experiences with housing, it may not be too surprising to see the poor showing on the housing-related questions. It is there-

fore imperative for curriculum developers to address how best to prepare prospective teachers with the breadth of knowledge expected of many who will be charged with the task of teaching secondary level students housing and other consumer concepts and skills.

Conclusions

Findings in the national assessment of the consumer education literacy of prospective teachers revealed that these individuals have a relatively poor cognitive grasp of housing-related concepts. Since many of these graduates will be teaching aspects of consumer education either in existing or in new secondary level courses, their qualifications may be suspect. Of particular concern is the apparent lack of exposure given these graduates to concepts pertaining to housing even though many will be expected to teach such concepts in this rapidly growing field of study. As consumer education is adopted by more school systems at the secondary level, appropriate measures must be taken to ensure adequate teacher preparation at the college level. Requiring at least one college level consumer education course of prospective teachers and instituting more through implementation of housing concepts in such courses to maximize teacher effectiveness are actions that can be taken.

References

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