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AUTHOR Naccarato, Richard W.
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ABSTRACT

The current status of banks of test items existing across the United States was determined through a survey conducted between September and December 1987. Item "bank" in this context does not imply that the test items are available in computerized form, but simply that "deposited" test items can be withdrawn for use. Emphasis was on documenting the sources of test items in the various subject areas that respondents considered to measure higher order thinking skills. Complete copies of the 41 Item Bank Data Sheets that were returned are included to describe item banks maintained by state or regional agencies (46% of the respondents), commercial ventures (33%), and school districts (20%). Most item collections contain basic skills items for reading, language arts, and math, but many are branching into science and the social sciences. Progress made in item banking in the last few years appears likely to increase with the development of better hardware and software. (SLD)

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A Guide to Item Banking in Education
(Third Edition)
Item Bank Data Sheets

Richard W. Naccarato

Test Center
Northwest Regional Educational Laboratory
101 S.W. Main, Suite 500
Portland, Oregon 97204

January 1988

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1. INTRODUCTION

This document contains the results of a survey conducted between September and December, 1987 which was intended to describe the current status of existing item banks across the U.S. In addition to describing the banks of test items that exist, there are several questions concerning the computer software and data management systems which accompany these item collections. This survey is an update of a previous one conducted by Estes and Arter (1984).

In addition to compiling more recent information on existing item banks, one of the primary purposes of this update was to document, in particular, the sources of test items in the various subject areas which respondents considered to measure "higher order thinking skills." For this reason Higher Order Thinking Skills was added as a special content area within each of the requested subject areas. Also, question number 8 requested particular information on the cognitive level categorizations of test items within the various item collections. Several other specific questions were asked concerning the types and capabilities of computer software used.

The survey respondents are categorized into three mutually exclusive sections:

- 1) those organizations which stated that they had collections of test items and pre-constructed tests available for sale or free, or the acquisition of which could be arranged with the organization;
- 2) those organizations which stated that they had only pre-developed tests available for sale or free, or would construct tests from their item collections;
- 3) remaining organizations which have collections of test items or tests that are proprietary to their organizations but who may be willing to share information or experiences concerning their testing programs.

Within each of these three sections the surveys are organized in alphabetical order by *name of organization*.

For this report the term "item bank" is to be thought of as being synonymous with "item collection" or "item pool." We use the term "bank" to mean that individual items have been "deposited" and can be "withdrawn" at some later date. This definition does not imply that the items be available in computerized form (which is still in a rather developmental stage for the most part) or that there are any particular kinds of statistics associated with the items.

2. THE SAMPLE

Having had substantial prior experience at surveying the existence of item banks nationally, this sample would have to be typified as purposive in nature. Each state in the nation did receive *Item Bank Data Sheets* with a request to send the forms to relevant sources within their state whether or not the state itself maintained an item bank. In addition to these 50 surveys another 60-70 were distributed to:

- 1) sources who had responded to the survey in 1984;
- 2) sources who we knew through the literature maintained item banks; and
- 3) sources who we found by "word of mouth" to have been maintaining banks of test items.

It is most probable that any omissions from this survey were due to a lack of response of those surveyed. At this time the percentage of non-respondents who we suspect *actually do have* item banks is somewhere between 10-20% of those surveyed. About 15% of those respondents who claimed to have item banks in 1984 said that the banks no longer existed or were active in 1987.

3. CAUTIONS TOWARD USING THIS GUIDE

Even though organizations have voluntarily submitted the Item Bank Data Sheets and information to us, many of the organizations are hesitant to share the item banks with other agencies, or will do so with some negotiation or cost involved. Even if the item banks are said to be free of cost, the duplication costs themselves can sometimes be considerable, so a requestor should offer to cover these costs. We would suggest that an interested party should contact the item bank source by phone first in order to assess the necessary procedures for obtaining the bank(s) and any costs involved. Please assess your own precise needs for items in advance of contacting the source, rather than simply asking for copies of "everything they've got."

4. CATEGORICAL CLASSIFICATIONS

As mentioned previously, the three sections within this document were based upon whether the responding organization claimed to have available test items, intact tests, computer software or combinations of these three items. Additionally, we were keenly interested in whether the organization responded as having items measuring "higher order thinking skills" -- a categorization whose definition was left to the respondent. The table below lists alphabetically all survey respondents (across all three sections), the type of organization responding, and the general categorical responses to the availability of test items, intact tests or item banking computer software.

TABLE. SUMMARY DATA ON ITEM BANK SURVEY RESPONDENTS

NAME OF ORGANIZATION	BANK TITLE	ORG ^v		ITEMS	HOTS	TESTS	SOFTWARE
		TYPE					
Academic Hallmarks	KnowledgeMaster	C		X		X	X
Alabama State DOE	AHSGE	S				X	
Alaska State DOE	AOIB	S		X		X	
American Guidance Services		C		X		X	
Assurance, Inc	Assure I	C		X	X	X	X
California DOE	Sample Asses. Exer.	S		X			
Clark County, NV S D		S			X		X
Connecticut DOE	Conn Mastery Tests	S		X		X	X
CTB-McGraw Hill	CTB Item Bank	C		X	X	X	X
Dallas Indep. S.D	Survey Essen. Elem.	D		X	X	X	X
Detroit Pub. Schools	DET Assess. Basic	D			X	X	
Dist of Columbia Schools	End-of-Course	D				X	X
Florida State DOE		S				X	
Instit for Educ Research	IER CRTs	C		X	X	X	X
Maryland State DOE	Mary.Funct.Tests	S				X	X
Michigan State DOE	MEAP	S		X	X		
Minnesota State DOE	Minn. Item Bank	S		X	X		X
Mississippi State U	PREPS, Inc.	S			X		
Missouri State DOE		S				X	
Multnomah ESD, Portland, OR		S		X			X
Nat. Assess. Educ Progress	NAEP/ETS Bank	C		X	X		
North Carolina DPI		S		X			X
Northwest Eval. Assoc.	NWEA Basic Skills	C		X	X	X	X
Northwest Eval. Assoc	NWEA Science Bank	C		X	X		
Northwest Reg. Educ Lab	NWREL Item Bank	C		X			
Pennsylvania DOE	Penn Ed Qual Assess	S				X	
Psychological Corps, Inc.	AIMS Bank	C		X	X		X
Richardson Indep S D., TX	RAM Item Bank	D		X	X		X
Riverside Pub. Co	MultiScore	C			X	X	
Saginaw, MI S.D	Essen. Skills Test	D		X		X	X
Santa Clara Cnty, CA	ACF	S		X	X	X	
Scholastic Testing		C			X	X	
Science Research Assoc	SRA Item Bank	C		X	X	X	
South Carolina DOE		S			X	X	
TESCOR, Inc.	FNIB	C		X	X		X
Univ of Kansas	Kan.Min.Comp Test	S		X		X	X
Wash Township, Indy, IN		D			X		
West Palm Beach, FL		D		X			X
Wisconsin DPI	DPI Item Bank	S			X	X	X
Wyoming State DOE	WY Clrnghae Basic	S			X		
Yakima, WA S.D.		D		X	X		

* S = state or county department C = commercial organization D = school district

An organization has an "X" in the table under Items?, Tests?, or Software? only if they stated that these were available from them either for a price, upon negotiation or for free; in some cases, the computer software was said to be available, but through an outside vendor. The "HOTS" category will have an "X" if the organization specifically stated that items measuring "higher order thinking skills" were part of their collection, whether or not these items were available from the organization. We were specifically interested in the proportion of item collections which were purported to contain HOTS items.

5. OVERVIEW OF FINDINGS

Since complete copies of the surveys are included in this document we will not elaborate upon their content; however we will attempt to give some generalized impressions of the summarized findings. In reflecting upon the table displayed in the previous section of this report, it appears that the following observations can be made:

- 1) the type of organizations that responded as having item collections break out as:
 - * about 46% being state or regional agencies;
 - * about 33% being commercial ventures; and
 - * about 20% being school districts
- 2) around 60% of the respondents claimed to have items measuring higher order thinking skills (HOTS) within their item collections or as part of their intact tests.
- 3) about 50% of the respondents also had item banking software of some sort available either from them or from an outside vendor; much of this software is the commonly available packages (Wordstar, dBase III, etc.) and is not specifically designed for item banking, test construction, scoring and the like.

Computer software for the "banking" of test items, building of tests and data management of item and student data is very much in the developmental stages as of this time, though considerable gains seem to have been made since the previous report in 1984. Software which will handle the entire spectrum of test development, scoring, etc. is quite rare and usually resides within commercial testing ventures. Software which can handle the integration of test item graphics with the item text and generate the complete test pages via computer are extremely rare. Some packages that seem to be approaching this standard are those reported by TESCOR, AIMS, Assure I, CT 3, Multiscore, and the Minnesota Item Bank as examples. Note that nearly all such examples are in the commercial testing business.

Nearly all respondents stated that they had their items classified by content and general objective category; a vast majority of these respondents had provided a content review and validity matching of the items to objectives. About 80-90% of those responding also kept item statistics for the test items in their bank -- at least difficulty indices (p-values) and, in a *majority* of cases, latent trait or item response data as well.

Though a vast majority of the item banks had the items classified by objectives to be measured, and were able to retrieve items from the bank by objective, only about 25% of the respondents indicated that they could retrieve items by *cognitive level*.

Most of the item collections available contain basic skills items (reading, language arts and math), however a growing number are branching into other subject areas as well. A usual progression after the basic skills seems to be branching into the science areas next and social sciences shortly thereafter. Between 25-30% of our respondents said that they had items in Science and/or Social Studies as well as in the basic skills areas previously mentioned. Other subject areas in which two or more respondents had test items are: consumer/life skills, fine arts, citizenship and health/career -related areas.

6. FUTURES OF ITEM BANKING

Many of the survey respondents indicated that the development of their item banks was ongoing, especially the development of software materials. As mentioned earlier, few organizations stated that they had complete test development and banking software -- primarily the commercial test companies. And as we have tested and observed the operation of several of these (complete) systems, there seems to always be room for improvement and further development. The problem of generating and integrating graphics for test items seems to be getting nearer to being solved with the sophistication of software packages (such as desktop publishing packages). However, the ever-evolving hardware situation, especially in the microcomputer arena, will need to keep pace and be coordinated with the appropriate software if there is to be any universal or standardized use of item banking packages.

It is clear that the "banking" of test items and computer generation of tests is not a useful (or cost-effective) endeavor for all test users. However, anyone who has attended regional or national educational research conferences knows that this issue ranks toward the top in current interest for many users, and will be here to stay over the next few years. It also seems that the progress made over the past three years or so is bound to be quadrupled over the next few years with hard- and software development. We would predict that there should be several fine, complete item banking, test development packages available to choose from in just a very few years to come.

7. BIBLIOGRAPHY

Deck, D.D., Nickel, P. & Estes, Gary. Reviews of microcomputer item banking software. Northwest Regional Educational Laboratory, November, 1985.

Millman, Jason & Arter, Judith A. Issues in item banking. Journal of Educational Measurement, 21, No. 4, Winter, 1984.

Estes, Gary D. and Arter, Judith A. A Guide to Item Banking in Education (2nd Edition). Northwest Regional Educational Laboratory, 100 S.W. Main, Suite 500, Portland, Oregon 97204, 1984.

Estes, Gary D. & Arter, Judith A. Item banking for state and local test-development and use -- Specific guidelines for local practitioners. Northwest Regional Educational Laboratory, 1983.

SECTION 4

ITEMS AND/OR TAILORED TESTS AVAILABLE

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Knowledge Master

For information about the bank contact

Name Robert Sauer

Title Vice President

Organization Academic Hallmarks

Street P.O. Box 99R, #5 Woodland(Suite B)

City Durango State CO Zip 81301

Phone: Area code 800 Number 321-9218

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data

Intent of bank is primarily as study and for students and general resource for schools

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	ITEMS	GRADE LEVEL (AGE)						
			Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____								
	Vocabulary _____								
	Comprehension _____								
	Reading Readiness _____								
	Reference (Study) Skills _____								
	Higher Order Thinking Skills _____								
MATHEMATICS	Computational skills _____								
	Concepts _____					X	X		
	Problem Solving (Application) _____	2000				X	X		
	Geometry _____					X	X		
	Calculator Math _____								
	Higher Order Thinking Skills _____								
LANGUAGE ARTS	Grammar _____					X	X		
	Usage _____	4800				X	X		
	Mechanics _____					X	X		
	Shakespeare _____								
	Foreign Language (specify: _____)								
	Mythology _____								
	Composition _____								
OTHER	Higher Order Thinking Skills _____								
	Literature _____					X	X		
	Fine Arts 800					X	X		
	Economics and Law 800					X	X		
	Sports & PE 800								
	Vocational 800								
	Current events 400					X	X		
	American History 2000					X	X		
	World History 1600					X	X		
	Geography 1600					X	X		
Health 800					X	X			
Physical Sciences 2000	15				X	X			
Earth Science 2400									
Biology 2000					X	X			

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other discipline
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
APPLE II + IIe disks				

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by
Academic Hallmarks
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

- d If your software handles test development, indicate its capabilities below:
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e If your software handles scoring, please indicate its capabilities below:
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f If your software handles reporting, please indicate its capabilities below:
- subtest profiles-- student
 - subtest profiles--class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g If your software handles student recordkeeping, please indicate its capabilities below:
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h If your software has graphics capabilities, please indicate these below:
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

- i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)
- Apple II + IIe

- l. What is the approximate cost of your testing software?
- 27/disk of 400 questions
- Discounts for series purchases

- j. What is the name of your item banking/test scoring software package?
- In-house developed

- k Is your software?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- m. Technical assistance in running the software is:
- available from us
 - available through vendor
 - not available
- Very infrequently necessary

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

Catalog sent upon request.

*\$27 for 400 Questions
 \$21 when Series purchased/Per Disk
 \$16 per disk when library purchased

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Alaska Objective and Item Bank AO1B
 This bank will not be maintained beyond this year

For information about the bank contact: also
 Mike Hiscox
 Interwest Applied Research
 4875 S.W. Griffith Dr.
 Beaverton, OR
 (503) 641-2100

Name Alexander B. Hazelton
 Title Educational Administrator
 Organization Alaska Department of Education
 Street P.O. Box F, 801 W. 10th Street
 City Juneau State Alaska Zip 99811
 Phone: Area code 907 Number 465-2841

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____	33	210		x	x	x				
	12	120		x	x	x				
	17	164		x	x	x				
	38	360		x	x	x				
	44	200		x	x	x				
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____	100	400		x	x	x				
	89	330		x	x	x				
	13	660		x	x	x				
				These are the items that are already in text format. There is about another 4000 items that are in a Diagnostic format.						
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____										
SCIENCE _____ Higher Order Thinking Skills _____										
OTHER _____ Higher Order Thinking Skills _____										

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.) Not any more

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

- d. If your software handles test development, indicate its capabilities below:**
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e. If your software handles scoring, please indicate its capabilities below:**
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f. If your software handles reporting, please indicate its capabilities below:**
- subject profiles-- student
 - subject profiles-- class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g. If your software handles student recordkeeping, please indicate its capabilities below:**
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h. If your software has graphics capabilities, please indicate these below:**
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

- i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)**
- _____
- _____
- _____

- j. What is the name of your item banking/test scoring software package?**
- _____
- _____
- _____
- _____
- _____

- k. Is your software:?**
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- l. What is the approximate cost of your testing software?**
- _____
- _____

- m. Technical assistance in running the software is**
- available from us
 - available through vendor
 - not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.



ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Assure I Test Item Bank

For information about the bank contact

Name Robert O. Armstrong
 Title President
 Organization Assurance, Inc.
 Street 2455 E. Speedway, Suite 203
 City Tucson State AZ Zip 85719
 Phone: Area code 602 Number _____

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

Refer to letter and enclosed materials

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization (with some local district assistance)
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____	33	330		x	x	x	x		
	Structural Analysis _____	62	620		x	x	x	x		
	Vocabulary (word meaning and Recog.) _____	60	600		x	x	x	x		
	Comprehension _____	178	1780		x	x	x	x		
	Reading Readiness _____	34	340	x	x					
	Reference (Study) Skills _____	88	880		x	x	x	x		
	Higher Order Thinking Skills _____									

MATHEMATICS	Computational skills _____	127	1270		x	x	x			
	Numeration Concepts/Numbers _____	143	1430		x	x	x			
	Problem Solving (Application) _____	56	560		x	x	x			
	Geometry _____	48	780		x	x	x			
	Measurement _____	51	510		x	x	x			
	Probability/Statistics _____	10	100				x			
	Higher Order Thinking Skills _____									
	Algebra _____	138	552							
LANGUAGE ARTS	Grammar Skill lists breakdown _____	366	3660		x	x	x	x		
	Usage into domains of _____									
	Mechanics punctuation, sentence parts of speech, capitalization _____									
	Foreign Language (specify: _____) structure and usage _____									
	Composition _____									
	Higher Order Thinking Skills _____									
SCIENCE	Grades 1 - 8 _____	530	4615		x	x	x			
	Physics/Chemistry/Biology _____	300	1500					x		
	Higher Order Thinking Skills _____									
OTHER	Social Studies _____	473	4730			x	x	x		
	Higher Order Thinking Skills _____									



- 7 Which of the following can be used to retrieve items? (Check all that apply)
- objective to be tested
 - item difficulty
 - item type (e.g., multiple-choice)
 - cognitive level (e.g., recall, inference)
 - key words
 - other _____
 - none

- 8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)
- Bloom's Taxonomy
 - other well-known cognitive taxonomy, please list _____
 - modified an existing taxonomy, please list _____
 - developed our own cognitive taxonomy
 - other _____

- 9 In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> See letter

- 10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

- a What function(s) does this software perform?
- item management
 - test development
 - scoring
 - reporting
 - student recordkeeping
 - cross-reference to materials
 - on-line test administration
 - other _____

- b From where did you obtain this software?
- adapted from existing spreadsheets, databases, etc
 - If you checked the above box, please list the programs you are using
Only to a small extent
using Word Star
 - specially designed for our system by _____
 - purchased from test or research organization

- c If your software handles item management, indicate its capabilities below:
- stores items
 - full-screen editing
 - can add/delete/change items
 - can add/delete/change item classifications
 - will handle user history
 - will handle test analysis
 - other _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below.

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other Has built in reliability package as well as optional item analysis

f If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____
- open system --
- user adds own
- prescriptions

g If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

IBM XT/AT or compatible
(Compaq, Tandy, etc)
Rec 640 K, 10-20
Meg. Harddisk

j. What is the name of your item banking/test scoring software package?

ASSURE I Test Item Bank
ASSURE II Test Scoring
ASSURE III Test Reliability
ASSURE III Longitudinal Student Rec.
ASSURE III Open Instructional
Prescription Data Base

k Is your software?

- available on exchange agreement
 - available for purchase from vendor (Commercial programs used)
 - available for purchase from you
 - not available for others
- *Word Star, etc.

l What is the approximate cost of your testing software?

See enclosed price structure

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

Note: List of item bank objectives scoring feedback reports, etc., available upon request.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Sample Assessment Exercises Manual (2 Volume): Elementary and Secondary

For information about the bank contact.

Name William L. Padia
 Title Administrator, Special Studies
 Organization California Dept of Education
 Street 721 Capitol Mall
 City Sacramento State CA Zip 95814
 Phone: Area code 916 Number 445-0297

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____	6	19				x	x	
	Vocabulary _____	6	90				x	x	
	Comprehension _____	10	183				x	x	
	Reading Readiness _____								
	Reference (Study) Skills _____								
	Higher Order Thinking Skills _____								
MATHEMATICS	Computational skills _____	21	84				x	x	
	Concepts _____	15	60				x	x	
	Problem Solving (Application) _____	15	60				x	x	
	Geometry _____	7	28				x	x	
	Calculator Math <u>None</u> _____								
	Expressions, Equations & Formulas _____	12	60				x	x	
	Measurement _____	9	36				x	x	
Interpreting Tables & Graphs _____	8	36				x	x		
LANGUAGE ARTS	Grammar <u>(word forms)</u> _____	2	81				x	x	
	Usage <u>(sub/verb & pronoun agrmt.)</u> _____	2	21				x	x	
	Mechanics <u>(punct./capit.)</u> _____	5	52				x	x	
	Foreign Language (specify: _____) _____								
	Composition <u>(sentences; paragraphs)</u> _____	7	95				x	x	
	Higher Order Thinking Skills <u>spelling</u> _____	10	17				x	x	
	Direct Assessment of Writing: _____								
Holistic Scoring Guides _____	3	3				x	x		
SCIENCE	Consumer/Basic Life Skills _____	5	362				x	x	
	(Functional Transfer) _____								
Higher Order Thinking Skills _____									
OTHER	_____								

Higher Order Thinking Skills _____		27							

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____
- _____

- d If your software handles test development, indicate its capabilities below:
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e If your software handles scoring, please indicate its capabilities below:
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f. If your software handles reporting, please indicate its capabilities below:
- subtest profiles-- student
 - subtest profiles-- class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g If your software handles student recordkeeping, please indicate its capabilities below.
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h If your software has graphics capabilities, please indicate these below:
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

j. What is the name of your item banking/test scoring software package?

- k Is your software?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

l. What is the approximate cost of your testing software?

- m. Technical assistance in running the software is
- available from us
 - available through vendor
 - not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems



ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) CTB/McGraw-Hill Item Bank

For information about the bank contact

Name Arnold W. Seibel
 Title Item Bank Manager
 Organization CTB/McGraw-Hill
 Street 2500 Garden Road
 City Monterey State CA Zip 93940
 Phone: Area code 408 Number 649-7762

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities (some objective sets)
- cross references between objectives and appropriate instructional materials " " "
- content review or other validity information (some item pools)
- reliability estimates " " "
- p-values " " "
- IRT (latent trait) calibrations " " "
- other item analysis data " " "
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias (some item pools)
- review for cultural and ethnic bias (some item pools)
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results) (some item pools)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration) (some item pools)

4. Which of these statements are correct for this bank?

	YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

	YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
				other <u>Matching sets of objectives</u>

- 6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
- A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

** Item totals are approximate as of early 1988. New items are added continually. **

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)								
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult		
READING	Phonetic Analysis _____	PLEASE SEE	700	X	X	X	X				
	Structural Analysis _____	NARRATIVE	400		X	X	X	X			
	Vocabulary _____	REGARDING	2800	X	X	X	X	X			
	Comprehension _____	OBJECTIVES	3100	X	X	X	X	X			
	Reading Readiness (vis. discrim., word ID)		200	X	X	X					
	Reference (Study) Skills _____		1100		X	X	X	X			
	Higher Order Thinking Skills _____	PLEASE SEE NARRATIVE									
	Oral (Listening) Comprehension _____		100	X	X						
	** Spanish to be added in 1988.										
	MATHEMATICS	Computational skills _____		3200	X	X	X	X	X		
Concepts (not geometry) _____			1600	X	X	X	X	X			
Problem Solving (Application) (not geom.) _____			2200	X	X	X	X	X			
Geometry (concepts & application) _____			800	X	X	X	X	X			
Calculator Math (none so specified) _____											
Higher Order Thinking Skills _____		PLEASE SEE NARRATIVE									
Problem Solving (Methods) _____			300	X	X	X	X	X			
** Spanish to be added in 1988.											
LANGUAGE ARTS	Grammar _____		1100	X	X	X	X	X			
	Usage _____		1700	X	X	X	X	X			
	Mechanics _____		2000	X	X	X	X	X			
	Foreign Language (specify: _____)										
	Composition (not writing prompts) _____		700		X	X	X	X			
	Higher Order Thinking Skills _____	PLEASE SEE NARRATIVE									
** Spanish to be added in 1988.											
SCIENCE	General, Life, Earth, Physical _____		600		X	X	X	X			
	Higher Order Thinking Skills _____	PLEASE SEE NARRATIVE									
HISTORY	Social Studies _____		800	X	X	X	X	X			
	Higher Order Thinking Skills _____	PLEASE SEE NARRATIVE									

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other Please see narrative
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other Please see narrative

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by
Data Guide Systems
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below.

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below.

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

AT 286 compatibles

l. What is the approximate cost of your testing software?

TestBuilder \$1600
TestMate \$2600 (CRT)

j. What is the name of your item banking/test scoring software package?

TEST BUILDER
- item management
- test development
TEST MATE
- scoring
- reporting

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

CTB/McGraw-Hill Item Banking Products and Services

CTB/McGraw-Hill's Item Bank provides both centralized, mainframe-computer based and distributed, microcomputer-based products and services. These are described separately below. Specific information is available through CTB's nationwide staff of professional evaluation consultants.

Mainframe Item Bank

The Item Bank consists of a relational data base of item characteristics and objective definitions. The data base is linked to other systems that store the text, graphics, and statistics needed to use the items.

The Item Bank does not categorize items according to a single, arbitrary list of objectives. Rather, it describes both items and objectives in terms of a uniquely flexible and expandable internal language. Any set of objectives defined in this language becomes an integral part of the Item Bank. The objectives are then used to retrieve items directly, in their own terms, without first having to be matched to a set of generic objectives. They can also be matched to other sets of Item Bank objectives for purposes of comparison, prescription, product evaluation, and so on.

The Item Bank retrieval system makes items accessible not only in terms of any set of objectives, but also in terms of:

- specific elements of the internal content-descriptive language
- item format characteristics, such as (depending on content area):
 - ▣ number of responses
 - ▣ question vs. incomplete-sentence item stem
 - ▣ word vs. phrase vs. sentence item responses
- item administration characteristics
 - ▣ oral vs. written item stem
 - ▣ pictorial vs. verbal item responses
- item calibration history
- reading passage characteristics
 - ▣ content
 - ▣ format
 - ▣ readability
 - ▣ focus on female, ethnic, or disabled characters
- graphic display characteristics
 - ▣ content
 - ▣ format
 - ▣ focus on female, ethnic, or disabled characters
- item vocabulary level (data in preparation for selected content areas)
- item usage history (data in preparation)
- cognitive process level (data in preparation)

It is possible to use the Item Bank's internal item-description language to define levels of cognitive processing in terms appropriate to each content area. Elements of the internal language can thus be used to retrieve items for one or more cognitive levels as defined by the user for the purpose at hand; the Item Bank does not enforce a predefined concept of "higher-order thinking skills."

The mainframe Item Bank is used by the professional research and development staff of CTB/McGraw-Hill to create tests and microcomputer-based item banks and to match sets of objectives.

Microcomputer Item Banks

CTB/McGraw-Hill offers item banks for use on microcomputer-based item banking systems. Three types of item banks are available.

1. CTB distributes item banks developed by outside agencies and usable on a variety of microcomputer item banking systems. These item banks retain the content structures provided for them by their originators, which are not necessarily included in the mainframe Item Bank.
2. CTB provides an item bank organized according to a detailed, generic set of objectives that reflects the internal content structure of the mainframe Item Bank. These objectives are defined in sufficiently specific terms to allow easy selection by teachers and evaluators constructing tests according to either classroom instructional objectives or state- or district-mandated test objectives.

The initial release of this item bank, scheduled for early 1988, includes a comprehensive objective structure and approximately 5,000 items in reading, language, and mathematics. Subsequent updates will expand the objective structure into other content areas and will add items in all content areas.

3. CTB offers microcomputer item banks organized according to the user's objectives. Such item banks offer the greatest possible ease of use, since they make items accessible directly in the user's terms, without the need to translate the user's objectives into the item bank's objectives.

This service includes definition of the user's objectives in the mainframe Item Bank, where they remain available for subsequent uses, including the expansion of the microcomputer item bank, matching with other sets of Item Bank objectives, and creation of customized tests.

The latter two products -- microcomputer item banks organized according to CTB's or the user's objectives -- are designed to be used with the TestMate series of programs for item bank maintenance, test construction, and scoring, created by Data Guide Systems and distributed by CTB/McGraw-Hill. These software systems are available in a variety of formats, all of which provide automatic generation of scoring keys for use with the Data Guide test building and scoring system. They provide the capabilities to expand or alter the initial objective structure; to add, edit, and delete items; and to add descriptive attributes to items. They run on IBM PC and compatible computers with hard disks. With the addition of graphics scanning and editing hardware and software and the use of a laser printer, they include the capability to store, edit, and print graphic displays and pictorial item responses.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Connecticut Mastery Test (in development)

For information about the bank contact

Name Peter Behuniak
 Title Director CT Mastery Test Program
 Organization CT Department of Education
 Street 165 Capital Ave
 City Hartford State CT Zip 06145
 Phone: Area code 203 Number 566-4008

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by staff & contractors

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below:

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphic capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM XT

l. What is the approximate cost of your testing software?

In development

j. What is the name of your item banking/test scoring software package?

could be customized

k Is your software:?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others currently

m. Technical assistance in running the software is:

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

The first phases of providing computer support have been in the administrative area. Attached material indicates the MTIS software. Also the CT mastery test student scores are provided to each district on floppy disks (Apple APREDOS and IBM MS DOS). The next stage is the development at the item banks to support the wider student applications.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Survey Test of Essential Elements/Learner Standards

For information about the bank contact:

Name Robert P. Grobe and Daniel S. Sheehan
 Title Executive Evaluator
 Organization Dallas Independent School District
 Street 3801 Herschel Dr.
 City Dallas State Texas Zip 75219
 Phone: Area code 214 Number 522-8220

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	some or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____								
	Vocabulary _____	45	500		X	X	X	X	
	Comprehension _____	50	600		X	X	X	X	
	Reading Readiness _____								
	Reference (Study) Skills _____	50	550		X	X	X	X	
	Higher Order Thinking Skills (Analysis) _____	38	458		X	X	X	X	
	Literature _____	35	380		X	X	X	X	
Listening Comprehension _____	12	150		X	X	X	X		
MATHEMATICS	Computational skills _____	80	900		X	X	X	X	
	Concepts Numeration _____	20	250		X	X	X	X	
	Problem Solving (Application, _____)	50	570		X	X	X	X	
	Geometry _____	55	600		X	X	X	X	
	Calculator Math & Computer Literacy _____	88	1100		X	X	X	X	
	Higher Order Thinking Skills (Logic) _____	12	150		X	X	X	X	
	Math Sentences _____	30	320		X	X	X	X	
	Charts, Graphs & Tables _____	30	350		X	X	X	X	
LANGUAGE ARTS	Grammar _____	20	100		X	X	X	X	
	Usage _____	20	100		X	X	X	X	
	Mechanics _____	20	100		X	X	X	X	
	Foreign Language (specify: _____)								
	Composition _____	24	320		X	X	X	X	
	Higher Order Thinking Skills <small>sentence logic</small> _____	30	360		X	X	X	X	
	Editing _____	24	300		X	X	X	X	
	Speaking _____	24	300		X	X	X	X	
SCIENCE	Science _____	126	1600		X	X	X		
	Health _____	81	1000		X	X	X		
	Higher Order Thinking Skills _____								
Social Studies _____	135	1700		X	X	X			
Higher Order Thinking Skills _____	41	38							

6. (cont')

<u>Content Area</u>	<u>No.</u> <u>Objectives</u>	<u>No.</u> <u>Items</u>	<u>Grade Level</u>			
			<u>K-2</u>	<u>3-5</u>	<u>6-8</u>	<u>9-12</u>
Chemistry	14	200				X
Biology	22	300				X
Physical Science	12	200				X
Physics	10	200				X
U.S. History	16	200				X
American Government	12	200				X
Economics	20	200				X
World History	20	200				X
World Geography	20	200				X
Psychology	15	100				X
Sociology	15	100				X

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by
own staff _____
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below:

- subtest profiles--student
- subtest profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM Compatible
XT level
10 MB hard disk

j. What is the approximate cost of your testing software?

k. What is the name of your item banking/test scoring software package?

MONITOR
GRADEBOOK

l. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is:

- available from us on a limited basis
- available through vendor
- not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) IER Criterion-Reference Mathematics Objective and Item Bank
IER Criterion-Reference Language Arts Objective and Item Bank
 For information about the IER Writing Skills Bank
 bank contact: Name Sandra Cunningham
 Title Research Coordinator
 Organization Institute for Educational Research
 Street 793 N. Main Street
 City Glen Ellyn State IL Zip 60137
 Phone: Area code 312 Number 858-8060

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____	25	135		X	X	X			
	Structural Analysis _____	20	120		X	X	X			
	Vocabulary _____	12	60		X	X	X			
	Comprehension _____	30	170		X	X	X			
	Reading Readiness _____									
	Reference (Study) Skills _____	20	110		X	X	X			
	Higher Order Thinking Skills _____									
MATHEMATICS	Computational skills _____	60	300		X	X	X			
	Concepts _____	30	150		X	X	X			
	Problem Solving (Application) _____	20	100		X	X	X			
	Geometry _____	40	150		X	X	X			
	Calculator Math _____									
	Higher Order Thinking Skills _____									
LANGUAGE ARTS	_____ Measurement	10	50		X	X	X			
	Grammar _____	40	170							
	Usage _____									
	Mechanics _____	15	74		X	X	X			
	Foreign Language (specify: _____)									
	Composition Multiple choice	8	40		X	X	X			
	Higher Order Thinking Skills _____									
SCIENCE	Direct writing samples	80	~140		X	X	X			
	Literature	4	prompts 20			X	X			

OTHER	_____									
	Higher Order Thinking Skills _____									

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using
Apple Software by
Dr. John McConnell,
Glenview, IL
- specially designed for our system by _____
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below:

- subtest profiles--student
- subtest profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Apple IIe
McConnell \$200
(from author)

l. What is the approximate cost of your testing software?

j. What is the name of your item banking/test scoring software package?

Wordstar -- to produce
tests
McConnell Test
Scoring for scoring

k. Is your software:?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others (From author)

m. Technical assistance in running the software is:

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Michigan Educational Assessment Program

For information about the bank contact

Name Edward D. Roeber
 Title Supervisor, Michigan Educational Assessment Program
 Organization Michigan Department of Education
 Street P.O. Box 30008
 City Lansing State Michigan Zip 48973
 Phone: Area code 517 Number 373-9395

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
 classification of items by content
 general objectives or topic statements
 item specifications, detailed content descriptions, etc. (in Math and Reading only)
 suggested instructional activities
 cross references between objectives and appropriate instructional materials
 content review or other validity information
 reliability estimates
 p-values
 IRT (latent trait) calibrations
 other item analysis data
 technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
 developed by state or local central office staff
 developed by test development personnel within your organization
 developed by an outside organization
 collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
 content review to match items to objectives
 content review to establish appropriate grade levels or age levels
 editing for clarity
 editing based on reviews by technical personnel
 editing based on technical data
 review for sex bias
 review for cultural and ethnic bias
 informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
 formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

- | YES | CAN BE ARRANGED | NO | |
|-------------------------------------|--------------------------|-------------------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | all or most of the bank is available for sale |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | all or most of the bank is available free (or for cost of reproduction) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | pre-developed tests are constructed from the item bank for State of Michigan use |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | tests are constructed based on objectives in the item bank selected by the user |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | items are used to construct tests based on objectives developed by the user |

5. What additional services related to the bank can be provided? (check all that apply)

- | YES | CAN BE ARRANGED | NO | |
|--------------------------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | printing of test materials |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | test scoring services |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | development of individual student profiles |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | development of class and school profiles |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | training on test administration procedures |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | training on writing or selecting objectives and item specifications |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | training on writing test items |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | assistance in interpreting test data |

Answers are "yes" for State of Michigan

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____								
	Vocabulary _____								
	Comprehension _____	75	225		X	X	X	X	
	Reading Readiness _____								
	Reference (Study) Skills _____								
	Higher Order Thinking Skills _____								
New Definition of Reading _____	Not Approp.	500	(Available in 1989)						
MATHEMATICS	Computational skills _____	100	500						
	Concepts _____	100	500						
	Problem Solving (Application) _____	50	250						
	Geometry _____	20	100			Available in 1989			
	Calculator Math _____	40	200						
	Higher Order Thinking Skills _____	50	250						
	Current Pool _____	250	1250		X	X	X	X	
LANGUAGE ARTS	Grammar _____								
	Usage _____								
	Mechanics _____								
	Foreign Language (specify: _____)								
	Composition _____								
	Higher Order Thinking Skills _____								
SCIENCE	Content _____	60	200		X	X	X	X	
	Process _____	30	100		X	X	X	X	
	Higher Order Thinking Skills _____								
OTHER	Health _____	100	300		X	X	X	X	
	Career Development _____	100	300		X	X	X	X	
	Higher Order Thinking Skills _____								
		50							

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference) in Mathematics
- key words
- other _____
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

for microfiche

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using
Idea Ware
- specially designed for our system by _____
- purchased from test or research organization

c If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below.

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints test
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM Clone

l What is the approximate cost of your testing software?

\$200

j What is the name of your item banking/test scoring software package?

k Is your software ?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor ??
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Minnesota Test Item Bank

For information about the bank contact

Name James R. Olson or Daniel F. Bryan
 Title Assessment Specialist
 Organization Minnesota Department of Education
 Street 550 Cedar Street, 730 Capitol Square Building
 City St. Paul State Minnesota Zip 55101
 Phone: Area code 612 Number 296-2970

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____									
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____									
			PLEASE SEE ATTACHED INDICES						
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____									
SCIENCE _____ Higher Order Thinking Skills _____									
OTHER Social Studies _____ Higher Order Thinking Skills _____									

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list Bloom's Taxonomy, 3 categories
Knowing, Applying, Integrating
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	CD/ROM MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- if you checked the above box, please list the programs you are using

- specially designed for our system by
MN Dept. of Education
- purchased from test or research organization

c If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below.

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

j. What is the name of your item banking/test scoring software package?
Minnesota Test Item Bank

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

f. If your software handles reporting, please indicate its capabilities below

- subtest profiles—student
- subtest profiles—class
- summary reports
- cross reference to materials/methods
- other _____

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM XT, AT, PS
Model 30

l. What is the approximate cost of your testing software?

\$3,000.00 including
CD-ROM Disk and Software

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

THE MINNESOTA ITEM BANK FACT SHEET

1986 - 87 SCHOOL YEAR

COST: Each school district may create six tests free and have them scored free of charge.

Each additional test master costs \$20. Scoring costs \$.60 per student.

ACCESS: An interactive computerized system is available to school districts utilizing a 300 or 1200 BAUD rate modem. Toll free 800 telephone number is available to districts outside the metropolitan calling area. Metro phone number available to metro districts. Time may be reserved by calling (612) 296-2970.

A paper order form is also available to districts that do not have the necessary computer hardware to access the interactive system.

SCOPE: Currently the bank includes four curricular areas. They are: 1.) Mathematics; 2.) Social Studies; 3.) Science; and 4.) Language Arts including Reading. Grade levels are K - 12, however K - 3 are very short of items because of the nature of the items. We will add two curricular areas each year.

ITEMS: Currently there are over 90 000 items coded to content outlines or indices and coded to one of three cognitive levels. They are all machine scoreable items and primarily multiple choice. They have been acquired from a variety of respected sources across the country, including Minnesota school districts. Some items have been written specifically for our item bank.

FUTURE: Stand alone systems in school districts utilizing CD-ROM. Interactive testing utilizing CD/I or equivalent technology.

COURSES BY CURRICULAR AREA

<u>MATHEMATICS</u>	<u>SCIENCE</u>	<u>*SOCIAL STUDIES</u>	<u>*LANGUAGE ARTS</u>
Primary Elem.	Elem. Life	American History	Language Comp & Exp.
Inter. Elem.	Elem. Earth	Geography	Mechanics of Lang.
7th & 8th Grade	Elem. Physical	Political Science	Literature
General Math	Jr Hi Life	Economics	Speech/Communications
Algebra I	Jr Hi Earth	Sociology	Mass Media
Geometry	Jr Hi Physical	Anthropology	Reading
Algebra II	Sr Hi Biology	Psychology	
Advanced Topics	Sr Hi Chemistry	World Area Studies	
	Sr Hi Physics		

*Each course is repeated three times in Social Studies and Language Arts and coded Elementary, Junior High or Senior High.

MINNESOTA TEST ITEM BANK WHAT IS IT, HOW IS IT USED?

The Minnesota Test Item Bank is a computerized collection of a large number of test items in Language Arts, Mathematics, Science and Social Studies. It is organized and indexed so that test items can be easily matched with local district curriculum and instruction. The Bank is designed to allow teachers, departments and school districts to choose test items and develop tests that will measure the extent to which students have learned what has been taught and to use that information to improve instruction.

The organizing structures of the Bank have been designed and developed by discipline committees of teachers and other educators from throughout Minnesota. Paying particular attention to what is now being taught throughout the state, while, at the same time, remaining aware of the probable future instructional trends in the discipline, they have developed comprehensive course outlines which function as indices for the Item Bank. These indices allow users to identify test items appropriate to local curriculum and instruction.

Test items have been collected from a wide variety of sources such as National Assessment, assessment instruments developed by various public and private organizations, and other existing item banks. A number of items have also been developed by Minnesota educators to fulfill the specific needs of the Minnesota Bank. These test items are matched to the appropriate course outlines and entered into a computerized data base.

HOW IS THE ITEM BANK USED?

Because of the Bank's flexibility, it can be used in many ways. While its primary purpose is to help educators to create test instruments to measure student progress toward mastery of locally developed curriculum and instruction, and to improve that curriculum and instruction as appropriate, its possible uses are as wide as the creative imagination of the user.

During this, its first year of operation, it is expected that school districts will primarily use the Bank for PER evaluation and for the development of district-wide department examinations. In the future, as access is more broadly available, we believe that it will be used in many other ways.

HOW DOES ONE GAIN ACCESS TO THE ITEM BANK?

At present, direct access is gained through a personal computer and a modem. It is also possible to gain access by paper and pencil requests to the Assessment Section of the Department of Education. To create a test, one reviews the local districts desired instructional outcomes and the specific curriculum, teaching methodology and instructional materials used to teach those outcomes. Utilizing a built-in, interactive program, the technology will allow one to choose a randomly selected group of test items, or to pre-select specific items. The user can then view and edit

these items, adding and subtracting from the group so as to create the most appropriate test for the specific instruction that will occur.

When one has selected an appropriate number and range of test items, the computer can be directed to print a master copy of the test instrument. This master can then be reproduced and be made into student test booklets. After the test is administered, the Assessment Section will machine score it and, if requested, the results will be recorded and a series of useful reports generated for analysis by the test builder.

The Item Bank is in the process of continuing development. It will be generally available to Minnesota school districts in September of 1986. However, refinements will be made both in the test items available and in the access systems for schools. Over time, more academic disciplines will also be added to the Bank. If you are interested in learning more about the Item Bank, please contact us through:

Assessment Section
Department of Education
Capitol Square Building
550 Cedar Street
St. Paul, MN 55101

A SHORT GUIDE FOR USE OF THE MINNESOTA TEST ITEM BANK

The Minnesota Test Item Bank is designed to help school districts measure the degree of success that their students achieve in mastering locally developed outcomes as reflected in curriculum and instruction. The results of this measurement indicate if and where that curriculum and instruction needs to be improved to increase the degree of student success. Experience indicates that this objective can best be realized through the use of a rather specific process. Hopefully, this short guide will provide the reader with an outline of that process so that the item bank can be used to your district's best advantage.

KNOWING WHAT TO MEASURE

The primary strength of the item bank is its potential for creating a match between curriculum, instruction and measurement. If a match is to be achieved, it is necessary for test builders to know what is taught. It is appropriate, before tests are created, to review the curriculum and instruction to be measured. In many districts, department curriculum committees regularly perform this function. It is also appropriate to use the work of the district's PER committee for this part of the process. If the district has been using piggyback testing, this function has probably been a regular part of that testing process. If help is needed in this review, it would be appropriate to call on the concerned discipline specialist from the Division of Instructional Effectiveness for that help.

DEVELOPING MEASUREMENT INSTRUMENTS

When the student expectations for a course are known, one may plan the test or tests to measure the extent to which those expectations are being met. Using the appropriate Item Bank Index and the Test Planning Form, the test builder may fill out and mail the Test Planning Form to the Assessment Section and receive a test developed from that form. Or, one may use a personal computer equipped with a modem to interactively create a test. It is also possible that one might find that an already developed instrument such as a piggyback test will measure those expectations, and that use of such a test would be most appropriate.

SETTING STANDARDS

It's important, in any case, that local performance criteria for the test be developed, so that criteria for evaluation are available. Processes for local standard setting have been developed by the Assessment Section, and used successfully since 1975. Again, if your district has been using piggyback testing, this process will be familiar to you. Standards should be set before the test is administered. If help in standard setting is needed, the Assessment Section is able to provide it.

TESTING

Standard methods such as those used in piggyback testing are appropriate for use when administering tests developed from the item bank. However, it's important that one consider the way in which one wishes to analyze and evaluate the results before administering the test. For example, if one wishes to separate test results by building, appropriate notation must be made on answer sheets, and the answer sheets must be batched correctly. Help with this part of the process is available from the Assessment Section.

INTERPRETING RESULTS

If tests are scored by the Assessment Section, the district will receive seven reports for district analysis. They are: an Item Analysis, an Item Report, a Report by Cluster, a Report by Subcluster, a Raw Score Distribution, an Item Response by Student, and an Individual Summary by Student. Along with locally developed standards, these reports will allow district staff members to evaluate curriculum and instruction as it relates to student performance. These reports are specific enough to permit evaluators to pinpoint strengths and weaknesses within the instructional program, especially when cross-referenced with local standards. You may also choose to score your tests locally. Again, if help in this part of the process is needed, it can be provided by the Assessment Section and by the appropriate curriculum specialist.

REVISING CURRICULUM AND INSTRUCTION

The evaluation outlined above will allow district staff members to revise existing curriculum and instruction so as to reinforce areas of strength and to remediate areas of weakness. In other words, this process will permit the normal and regular process of curriculum improvement to become more rational, and as a result, more effective. It is obvious that this is a continuing and circular process that can be regularized within the district. Help with this process, of course, can be provided by the appropriate curriculum specialist.

The process suggested above is not a revolutionary one. The only change from the traditional approach to improvement of curriculum and instruction is the availability of a simple, economical and readily available way to match curriculum and assessment. One may now test what is taught, and use the results of that testing to diagnose and treat curricular and instructional problems with a greater degree of accuracy. The suggested processes are simple in concept. They are treated in more detail in the Item Bank Handbook and individual help is available from the Department of Education in all cases. We hope that the individual school districts will find that the item bank is a useful service that helps in our collective effort to improve education in the State of Minnesota.

		-----NUMBER OF ITEMS-----			
		UNC	KNOW	APPLY	INTGR VALUE
COURSE: E1	ELEMENTARY MATH (PRIMARY)	21	3706	952	86
OUTCOME: 1	ADDING WHOLE NUMBERS	10	591	111	
CLUSTER: 1	ADDING 2-DIGIT NUMBERS	2	50	10	
SUBCLUST: 1	2 Addends Without Regrouping	2	16	6	
SUBCLUST: 2	2 Addends With Regrouping		24	1	
SUBCLUST: 3	3 Or More Addends		10	3	
CLUSTER: 2	ADDING 3-DIGIT NUMBERS		34	17	
SUBCLUST: 1	2 Addends Without Regrouping		11	1	
SUBCLUST: 2	2 Addends With Regrouping		18	5	
SUBCLUST: 3	3 Or More Addends		5	11	
CLUSTER: 3	ADDING 4- OR MORE DIGIT #'S (ADDING 4- OR MORE DIGIT NUMBERS)		13	5	
SUBCLUST: 1	2 Addends Without Regrouping		1		
SUBCLUST: 2	2 Addends With Regrouping		12	5	
CLUSTER: 4	ADDING DIGIT NUMBERS (ADDING 1, 2, 3-OR MORE DIGIT NUMBERS (2 ADDENDS))		52	22	
SUBCLUST: 1	1-Digit Numbers to 1-Digit #'s (1-Digit Numbers to 1-Digit Numbers (3 or More Addends))		16	6	
SUBCLUST: 2	1-Digit Numbers ot 2-or More (1-Digit Numbers to 2-or More Digit Numbers)		16	3	
SUBCLUST: 3	2-Or More Digit Numbers to 3 (2-Or More Digit Numbers to 3-or More Digit Numbers)		10	13	
SUBCLUST: 4	3-Digit Numbers to 4-or More (3-Digit Numbers to 4-or More Digit Numbers)		2		
SUBCLUST: 5	1 or 2-Digit Numbers		8		
ITEM BANK DESCRIPTION MAINTENANCE					
CLUSTER: 5	ADDITION PROBLEMS (ADDITION PROBLEM, MIXED (2 Addends))		124	21	
SUBCLUST: 1	Adding Digit Numbers (Adding 1- Or More Digit Numbers To 1- Or More Digit Numbers)		124	21	
CLUSTER: 6	ALGORITHMS		107	9	
SUBCLUST: 1	Computational Form		15		
SUBCLUST: 2	Missing Addends		79		
SUBCLUST: 3	Number Sentence (Equation)		4		
SUBCLUST: 4	Rounding To Estimate Sum		3		
SUBCLUST: 5	Using A Table				
SUBCLUST: 6	Checking By Reverse Addition		6	9	
CLUSTER: 7	BASIC FACTS		86	12	
SUBCLUST: 1	Fact Families		16	2	
SUBCLUST: 2	Sums Through 10		29	3	
SUBCLUST: 3	Sums 10 Through 18		41	7	
CLUSTER: 8	CONCEPTS	1	31	6	
SUBCLUST: 1	Open Subcluster				
SUBCLUST: 2	Connecting Symbols To Concepts (Connecting Symbols To Concepts (+, =, Vertical Form Equal Sign (_)))		9		
SUBCLUST: 3	Equality, Same Sum for Addends (Equality, Same Sum For Different Addends)	1	6	6	
SUBCLUST: 4	Meaning Of Addition, Joining (Meaning Of Addition, Joining Groups)		16		
CLUSTER: 9	MENTAL ADDITION		5		

MINNESOTA STATE DEPARTMENT OF EDUCATION
 EDUCATIONAL ASSESSMENT PROGRAM - ITEM BANKING
 INDEX FOR MATH

		-----NUMBER OF ITEMS-----		
		UNC	KNOW	APPLY INTGR VALUE
SUBCLUST:	1 Adding Doubles		3	
SUBCLUST:	2 One, Ten, Hundred More			
SUBCLUST:	3 Other Short Cuts			
SUBCLUST:	4 Using Combinations Of 10		2	
CLUSTER:	10 PROPERTIES	6	66	9
SUBCLUST:	1 Grouping (Associative)	3	14	6
SUBCLUST:	2 Identity Element (? ro)		23	
SUBCLUST:	3 Ordering (Commutative)	3	29	3
CLUSTER:	11 READINESS	1	23	
SUBCLUST:	1 Counting And Joining Groups			
SUBCLUST:	2 Horizontal And Vertical Forms		5	
SUBCLUST:	3 More Than			
SUBCLUST:	4 Symbols		2	
	(Symbols (+, =, Vertical Form Equal Sign (_)))			
SUBCLUST:	5 Terminology	1	16	
	(Terminology (Addend, Sum, Plus, Equals, Addition, Equation))			
OUTCOME:	2 CLASSIFICATION		125	17
CLUSTER:	1 CLASSIFYING BY ATTRIBUTES		11	8
SUBCLUST:	1 Completing A Matrix			
SUBCLUST:	2 Describing			
SUBCLUST:	3 Observing		1	
SUBCLUST:	4 Predicting			
SUBCLUST:	5 Selection Of Objects		10	8
	(Selection Of Objects With Particular Attributes)			
SUBCLUST:	6 Sorting			
CLUSTER:	2 RECORDING CLASSIFICATIONS		19	
SUBCLUST:	1 Graphs			
SUBCLUST:	2 Numerical		7	
SUBCLUST:	3 Sets		6	
SUBCLUST:	4 Tables (Matrix)			
SUBCLUST:	5 Words			
SUBCLUST:	6 Pictorial		6	
CLUSTER:	3 SETS		83	9
SUBCLUST:	1 Identifying		50	7
SUBCLUST:	2 Inclusion Relationship		21	2
	(Inclusion Relationship (Set Within A Set))			
SUBCLUST:	3 Intersection		6	
SUBCLUST:	4 Union		6	
CLUSTER:	4 TYPES OF CLASSIFICATIONS		12	
SUBCLUST:	1 Single		10	
SUBCLUST:	2 Multiple		2	
OUTCOME:	3 COMPARISON	1	4	
CLUSTER:	1 ATTRIBUTES			
SUBCLUST:	1 Color			
SUBCLUST:	2 Design			
SUBCLUST:	3 Quantity			
SUBCLUST:	4 Shape, Plane Figures			
	(Shape, Plane Figures (2-Dimensional))			
SUBCLUST:	5 Shape, Space Figures			
	(Shape, Space Figures (3-Dimensional))			
SUBCLUST:	6 Size			

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Multnomah ESD Computerized Item Bank

For information about the bank contact Leon Paulson, Specialist Program Asst. (technical)
 Name or Peter Wolmut
 Title Director, School Support Services (administrative)
 Organization Multnomah ESD
 Street P.O. Box 16657
 City Portland State OR Zip 97211
 Phone: Area code 503 Number 255-1841

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____								
	Vocabulary _____								
	Comprehension _____								
	Reading Readiness _____								
	Reference (Study) Skills _____								
	Higher Order Thinking Skills _____								
	All reading areas	100	400		X	X	X		
MATHEMATICS	Computational skills _____								
	Concepts _____								
	Problem Solving (Application) _____								
	Geometry _____								
	Calculator Math _____								
	Higher Order Thinking Skills _____								
	All math areas	300	4264		X	X	X	X	
Computer Education	50	147			X	X	X		
LANGUAGE ARTS	Grammar _____								
	Usage _____								
	Mechanics _____								
	Foreign Language (specify: <u>French</u>)	50	300		X	X	X	X	
	Composition _____								
	Higher Order Thinking Skills _____								
All language usage	200	996			X	X	X		
SCIENCE	Bio & Physical Science	200	5000			X	X	X	
	Higher Order Thinking Skills _____								
HER	Art & Music	40	263					X	
	Health & PE	75	245		X	X	X	X	
	Social Science	150	1105		X	X	X	X	
	Higher Order Thinking Skills _____								
		65							

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using _____
- specially designed for our system by Leon Paulson, Greg Thomas
- purchased from test or research organization _____

c If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

d If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item test
- can generate graphics and merge them in with item test
- can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

HP 3000
 IBM-PC compatible

l What is the approximate cost of your testing software?

\$3500

j What is the name of your item banking/test scoring software package?

HP Software (Query:Image)

k Is your software ?

- available or exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) National Assessment of Educational Progress (NAEP)

For information about the bank contact:

Name Ina Mullis
 Title Deputy Director
 Organization NAEP/ETS
 Street Rosedale Road
 City Princeton State NJ Zip 08541
 Phone: Area code 609 Number 734-5205
 800 223-0267

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

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- classification of items by content
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- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

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5. What additional services related to the bank can be provided? (check all that apply)

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			other _____

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C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____									
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____									
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Languages (specify: _____) Composition _____ Higher Order Thinking Skills _____									
SCIENCE _____ _____ Higher Order Thinking Skills _____									
OTHER _____ Higher Order Thinking Skills _____									

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7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

Will be able to answer as the products are developed.

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

d. If your software handles test development, indicate its capabilities below.

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

j. What is the name of your item banking/test scoring software package?

e. If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for either

f. If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized system

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS ITEM RELEASE POLICY

Since 1969, the National Assessment of Educational Progress (NAEP) has surveyed and reported the knowledge, skills, understanding, and attitudes of young Americans throughout the country. National Assessment is an education project mandated by Congress that gathers information to help educators at all levels improve the learner's educational experience. NAEP is a major ongoing effort to obtain comprehensive and dependable achievement data on a national basis. National Assessment results and related assessment materials have been used by the education community for general information, training and instruction, curriculum and program development, assessment and testing, evaluation, policy implications, and research.

The history of National Assessment and its methodology, findings, and implications for "educational progress" are discussed by NAEP and non-NAEP authors in literally hundreds of publications. These reports and journal articles can be accessed fairly easily by interested readers and can be obtained from National Assessment, the Superintendent of Documents or the Educational Resources Information Center (ERIC).

During the 14-year period from 1969 to 1983, NAEP assessed nearly 1.1 million young Americans. All regular assessments included national samples of students at age 9, 13, and 17. Most assessments also included samples of 17-year-olds no longer enrolled in school. Some of the earlier assessments included a young adult household sample (26-35 years of age). A few of the assessments were "special interest" assessments, sometimes referred to as probes, and these special assessments typically included only one or two age groups.

The original assessment plan called for 10 major learning areas to be assessed periodically: Art, Career and Occupational Development, Citizenship, Literature, Mathematics, Music, Reading, Science, Social Studies, and Writing. However, on the recommendation of consultants and subject-matter specialists, Citizenship and Social Studies were combined beginning with the 1975-1976 assessment, and Reading and Literature were integrated during the 1979-1980 assessment.

Special probe assessments have been conducted in Fundamental or Basic Mathematics (Age 13 and 17), Basic Life Skills (Age 17), Health-Energy-Reading-Science (Adults), Consumer Skills (Age 17) and Science (Ages 9, 13, and 17).

In 1983, NAEP began sampling students by grade as well as by age. The subject areas recently assessed have included reading, writing, mathematics, science, computer understanding and literacy.

Separately funded special assessments since 1983 have included a literature and U.S. history knowledge survey and a higher order thinking skills assessment. In the 1987-1988 school year, NAEP will assess reading, writing, civics, U.S. history and geography.

Public Use Data Tapes, layouts and codebooks are available to researchers. These tapes represent a significant advance in public-use data tape technology. Data files are rectangular with one record per respondent, while data fields are all numeric with consistent missing data and nonresponse codes. All original item response and background variable data fields are included. Derived (transformed) item variables and

subregional identifiers (school, district, county, state, etc) that violate Privacy Act provisions and/or confidentiality agreements are not included.

Documentation has been rewritten and reformatted for maximum usability and included on the tapes. In addition, program-readable documentation is included for SAS, SPSS and OSIRIS IV.

For the National Assessment of Educational Progress to measure change over time, it is necessary to maintain the security of certain assessment items. Yet, to allow for states and school districts to conduct assessments and to make certain comparisons to National Assessment data, they need to administer some of the items used by NAEP to measure change. NAEP is working with an increasing number of states in the design and analysis of state assessments.

c:release

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) _____

For information about the bank contact

Name William J. Brown
 Title Assistant Superintendent for Research & Testing
 Organization N.C. State Dept. Public Instruction
 Street Salisbury Street
 City Raleigh State N.C. Zip 27611
 Phone: Area code 919 Number 733-3809

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other <u>Item data in magnetic form</u>

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____									
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____ Algebra I & II _____									
								X	
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____									
SCIENCE Biology _____ Higher Order Thinking Skills _____								X	
OTHER U.S. History _____ Higher Order Thinking Skills _____								X	

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10 If computer software is used to support item banking, please answer the following questions (in each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below:

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

McIntosh/Item Devel.
XT, AT for scoring

l. What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

NCDPI Test Screen

k Is your software ?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) NWEA BASIC SKILLS AND SCIENCE TEST ITEM BANKS

For information about the bank contact

Name Ray Miller
 Title Executive Secretary/Director Development
 Organization Northwest Evaluation Association
 Street 30633 11th Ave So.
 City Federal Way State WA Zip 98003
 Phone: Area code 206 Number 839-3932

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications; detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____				X	X	X		
	Vocabulary _____				X	X	X		
	Comprehension _____	22	2000		X	X	X		
	Reading Readiness _____					X	X	X	
	Reference (Study) Skills _____								
	Higher Order Thinking Skills _____								
MATHEMATICS	Computational skills _____				X	X	X		
	Concepts _____				X	X	X		
	Problem Solving (Application) _____				X	X	X		
	Geometry _____	289	3800		X	X	X		
	Calculator Math _____								
	Higher Order Thinking Skills _____								
LANGUAGE ARTS	Grammar _____				X	X	X		
	Usage _____				X	X	X		
	Mechanics _____				X	X	X		
	Foreign Language (specify: _____)	354	3600						
	Compositor: _____				X	X	X		
	Higher Order Thinking Skills _____								
SCIENCE	Concepts/Processes _____				X	X	X		
	5 Subject Matter Content Areas Life, Earth, Physical-----	400	8000		X	X	X		
	Higher Order Thinking Skills _____								
OTHER	*See Below _____								

	Higher Order Thinking Skills _____					*	*	*	

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list Pri-County Course Goal Inquiry-Problem Solving Processes-Taxonomy
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
Under development
- * scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using
*Scale P Bas (IBM, TRS-80 Apple versions)
- specially designed for our system by
Dr. Ronald Houser
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features Plotter
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

l What is the approximate cost of your testing software?

Price components by
Inquiry _____

j. What is the name of your item banking/test scoring software package?

Micro-C.A.T. (modified)

Test Director

Super-C.A.T.

INFORMIX - SQL

MEB software

k Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

Language Usage Item Bank covers 354 goals with over 3600 items; Mathematics Item Bank covers 289 Goals with over 3800 items; Reading Item Bank covers 22 major subject matter headings with over 2000 items. Test items are filed by goal and difficulty level in a hard copy card file. The Science Item Bank has over 8000 items covering wide range of grade levels and objectives up through high school. Excellent manuals are provided and locator index cards make retrieval and refiling of items convenient.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) NWEA Science Test Item Collection

For information about the bank contact

Name Susan Smoyer
 Title Project Manager
 Organization NWEA Science Curriculum & Assessment Project
 Street 700 Pringle Parkway SE
 City Salem State OR Zip 97310
 Phone: Area code 503 Number 378-4157

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
 - classification of items by content
 - general objectives or topic statements
 - item specifications, detailed content descriptions, etc.
 - suggested instructional activities
 - cross references between objectives and appropriate instructional materials
 - content review or other validity information
 - reliability estimates
 - p-values
 - IRT (latent trait) calibrations
 - other item analysis data
 - technical reports
- } Under development

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives/topics
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration) partial -- additional development underway.

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____									
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____									
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____									
SCIENCE See attached lists Higher Order Thinking Skills _____									
OTHER Higher Order Thinking Skills _____									

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7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice) All are
- cognitive level (e.g., recall, inference)
- key words
- other grade level
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9 In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping (CAT)
- cross-reference to materials
- on-line test administration
- other _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by
Portland Public Schools
- purchased from test or research organization
Assessment Systems Corp.
(Minnesota)

c If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features (plotter)
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other CAT

f If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

IBM PC XT or AT

l What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

- 1) Micro CAT Testing System
- 2) Item Bank data bases
(Informex - SQL)
- 3) Test Director
- 4) SuperCAT

k Is your software ?

- available on exchange agreement
- avail or purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

NWEA SCIENCE TEST ITEM COLLECTION
GOAL INVENTORY
(1986-87)

GOAL CATEGORY	Number of Items			
	K-3	4-6	7-9	10-12
LIFE SCIENCES				
The Cell	-	15	50	98
Zoology	46	138	209	166
Botany	51	58	117	97
Simple Life Forms	1	6	28	42
Ecology	2	52	102	63
EARTH/SPACE SCIENCES				
Geology	13	108	275	20
Oceanography	-	21	188	72
Meteorology	20	66	104	3
Space and Astronomy	15	65	135	14
PHYSICAL SCIENCES				
Measurement	-	6	36	52
Matter: Properties	6	16	41	25
Matter: States of	15	17	17	28
Matter: Changes	7	29	71	74
Matter: Structure	-	22	105	218
Periodic Law/Table	-	-	21	20
Acids, Bases, and Salts	-	-	17	25
Chemical Kinetics	-	-	4	42
Chemical Equilibrium	-	-	-	14
Oxidation	-	-	1	12
Electrochemistry	-	-	2	21
Organic Chemistry	-	-	-	20
Nuclear Chemistry	-	-	23	65
Photochemistry	-	-	-	1
Spectroscopy	-	-	-	1
Chemistry and Society	-	-	1	-
Biochemistry	-	-	3	15
Motion	7	20	62	353
Gravity	1	5	14	13
Electricity and Magnetism	4	29	113	164
Energy	31	67	135	113
Energy Resources	2	37	44	7
Light	5	17	63	111
Modern Physics	-	-	-	1
HISTORY OF SCIENCE	-	1	4	3
LABORATORY	1	2	11	7

GOAL CATEGORY	Number of Items			
	K-3	4-6	7-9	10-12
VOCABULARY	-	2	8	2
CONCEPTS				
Cause-Effect	-	4	7	11
Change	-	3	11	3
Cycle	-	4	13	5
Energy-Matter	3	23	15	11
Entropy	-	-	-	-
Equilibrium	-	1	13	-
Evolution	2	4	7	7
Field	1	1	9	4
Force	-	10	7	4
Fundamental Entities	8	8	12	6
Gradient	19	3	25	6
Interaction	-	6	9	3
Invariance	-	-	-	-
Model	-	2	13	14
Order	8	15	17	3
Organism	-	1	-	-
Perception	-	1	1	1
Probability	1	3	20	17
Population	3	13	19	12
Quantification	-	-	-	-
Replication	-	-	-	-
Resonance	-	-	-	-
Scale	1	8	21	14
Significance	-	-	-	-
Symmetry	-	-	-	-
System	2	13	20	11
Theory	-	1	-	6
Time-Space	-	-	-	1
Validation	-	-	-	-
PROCESSES				
Classifying	5	12	7	1
Communicating	-	1	3	-
Controlling Variables	-	6	22	2
Defining Operationally	-	1	6	-
Designing Experiments	-	7	14	7
Formulating Models	-	2	2	5
Hypothesizing	-	-	11	4
Inferring	-	9	30	11
Interpreting Data	1	45	58	89
Measuring	2	29	15	1
Observing	1	23	4	3
Predicting	-	6	11	2
Questioning	-	1	-	-
Using Numbers	-	7	9	7
Relating Time-Space	-	4	3	-

GOAL CATEGORY	Number of Items			
	K-3	4-6	7-9	10-12
SKILLS	-	1	3	1
INTERESTS	-	-	1	-
VALUES	-	1	4	1
INTERACTIONS	-	-	-	-
CHARACTERISTICS	-	1	1	3

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- SUMMARY -

INVENTORY OF ITEMS BY GRADE LEVEL AND GOAL
(1986-87)

	<u>K-3</u>	<u>4-6</u>	<u>7-9</u>	<u>10-12</u>		
Life Science	100	269	506	466	=	1,341
Earth Science	54	260	702	109	=	1,125
Physical Science	78	265	773	1,395	=	2,511
Concepts	48	124	238	139	=	549
Processes	9	156	195	132	=	492
Miscellaneous	1	8	32	17	=	58
Miscellaneous (not on list)	<u>--</u>	<u>5</u>	<u>6</u>	<u>1</u>	=	<u>12</u>
	290	1,087	2,452	2,259	=	6,088

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3/4/87

NWEA SCIENCE TEST ITEM COLLECTION INDEX

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
LIFE SCIENCES	A
<u>The Cell</u>	A.A
Types of Cells	A.A.A
Cell Structure	A.A.B
Cell Metabolism/Function	A.A.C
Reproduction—Mitosis - Meiosis	A.A.D
Genetics/Cells	A.A.E
Evolution/Cells	A.A.F
<u>Zoology</u>	A.B
Classification/Animals	A.B.A
Mammals	A.B.A.A
Birds	A.B.A.B
Reptiles/Dinosaurs	A.B.A.C
Amphibians	A.B.A.D
Fish	A.B.A.E
Insects/Spiders/Shell Fish	A.B.A.F
Other Invertebrates	A.B.A.G
Structure/Animals	A.B.B
Functions/Animals	A.B.C
Metabolic Processes/Animals	A.B.D
Reproduction/Animals	A.B.E
Adaptation, Behavior, Habitat	A.B.F
Human Structure	A.B.G
Human Function/Development	A.B.H
Evolution/Animals	A.B.I
Genetics/Animals	A.B.J
<u>Botany</u>	A.C
Classification/Plants	A.C.A
Seed Plants/Flowers/Cones	A.C.A.A
Lower Plants	A.C.A.B
Structures/Plants	A.C.B
Functions/Plants	A.C.C
Metabolic Processes/Plants	A.C.C.A
Photosynthesis/Respiration	A.C.C.B
Reproduction/Life Cycles	A.C.C.C
Adaptations/Responses/Habitat	A.C.D
Evolution/Plants	A.C.E
Genetics/Plants	A.C.F

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
<u>Simple Life Forms/Diseases/Functions</u>	A.D
Viruses	A.D.A
Bacteria	A.D.B
Monerans	A.D.C
Fungi	A.D.D
Protists	A.D.E
<u>Ecology</u>	A.E
Populations/Communities	A.E.A
Ecosystem/Food Chains/Webs	A.E.B
Biomes/Biosphere	A.E.C
Aquatic	A.E.C.A
Land	A.E.C.B
Urban Environments	A.E.D
Succession/Natural Changes	A.E.E
Pollution/Man-Made Changes	A.E.F
Conservation/Natural Resources	A.E.G
Limiting Factors	A.E.H
 EARTH/SPACE SCIENCES	 B
<u>Geology</u>	B.A
Earth Structures	B.A.A
Surface Features	B.A.A.A
Soil Composition	B.A.A.B
Subsurface Features	B.A.A.C
Mapping	B.A.A.D
Rocks and Minerals	B.A.B
Types of Rocks/Composition	B.A.B.A
Formation of Rocks/Processes	B.A.B.B
Relationship of Rocks to Minerals	B.A.B.C
Types, Properties of Minerals	B.A.B.D
Geologic Processes	B.A.C
Vulcanism	B.A.C.A
Crustal Movement/Earthquake	B.A.C.B
Weathering—Erosion—Deposition	B.A.C.C
Glaciation	B.A.C.D
Natural Changes	B.A.D
Evolution and Variation	B.A.D.A
Formation of Organic Fuels	B.A.D.B
Fossils as Evidence of Change	B.A.D.C
Geologic Time Scale	B.A.D.D
Forces Changing Surfaces	B.A.D.E
Forces Changing Subsurfaces	B.A.D.F
People Interactions	B.A.E
Surface Effects on People	B.A.E.A
Climate Effects on People	B.A.E.B

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
Earth Environments	B.A.F
Soil	B.A.F.A
Water	B.A.F.B
Air/Layers	B.A.F.C
Historical Geology	B.A.G
Methods of Dating	B.A.H
Geologic Instruments	B.A.I
Application of Geologic Science	B.A.J
Related Sciences	B.A.J.A
Economic Uses	B.A.J.B
 <u>Oceanography</u>	 B.B
Ocean Topography	B.B.A
Ocean Waters	B.B.B
Composition/Properties of Sea Water	B.B.B.A
Ocean Layers and Zones	B.B.B.B
Ocean Movements	B.B.C
Ocean Circulation/Currents	B.B.C.A
Tides	B.B.C.B
Ocean Waves	B.B.C.C
Shorelines	B.B.D
Shoreline Types	B.B.D.A
Shoreline Processes	B.B.D.B
Estuaries and Bays	B.B.D.C
Life in the Oceans	B.B.E
Distribution of Ocean Life	B.B.E.A
Marine Organisms	B.B.E.B
Marine Ecosystems and Processes	B.B.E.C
Ocean/Human Interactions	B.B.E.D
Tools of Oceanography	B.B.F
Applications of Oceanography	B.B.G
Oceanography—Related Sciences	B.B.G.A
Economic Uses of Oceanography	B.B.G.B
History of Oceanography	B.B.H
 <u>Meteorology</u>	 B.C
Origin/Structure of Atmosphere	B.C.A
Weather Conditions and Causes	B.C.B
Causes of Temperature Differences	B.C.B.A
Role of Sun in Weather	B.C.B.B
Effect of Temperature on Climate	B.C.B.C
Humidity and Clouds	B.C.C
Cloud Formation Factors	B.C.C.A
Types of Clouds	B.C.C.B
Humidity Factors	B.C.C.C
Fog	B.C.C.D

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
Wind and Storms	B.C.D
Temperature and Air Currents	B.C.D.A
Atmospheric Pressure	B.C.D.B
Earth's Rotation/Storms	B.C.D.C
Causes of Storms	B.C.D.D
Wind as an Energy Source	B.C.D.E
Weather Forecasting	B.C.E
Factors Used in Forecasting	B.C.E.A
Weather Measuring Instruments	B.C.E.B
Weather Control	B.C.F
Weather Cycle	B.C.G
Components of Water Cycle	B.C.G.A
Relationship to Moving Air Masses	B.C.G.B
Effects of Water Cycle on Plants	B.C.G.C
Forms of Precipitation	B.C.G.D
Air Masses and Fronts	B.C.H
Types/Properties/Layers of Air	B.C.H.A
Classification of Air Masses	B.C.H.B
Relationship of Air Masses	B.C.H.C
Relationship of Air Pressure	B.C.H.D
Climate	B.C.I
Factors Determining Climate	B.C.I.A
Effect of Climate on Water/Soil	B.C.I.B
Effect of Human Activity on Climate	B.C.I.C
Effect of Climate on Organisms	B.C.I.D
History of Meteorology	B.C.J
 <u>Space and Astronomy</u>	 3.D
Earth and Moon	B.D.A
Theories of Origin	B.D.A.A
Effects of Earth's Rotation	B.D.A.B
Relationship of Earth's Rotation/Seasons	B.D.A.C
Forces Causing Earth's Movement	B.D.A.D
Characteristics of Moon	B.D.A.E
Earth, Moon and Sun	B.D.A.F
Sun and Stars	B.D.B
Theories of Origin	B.D.B.A
Solar System	B.D.B.B
Planets	B.D.B.C
Conditions/Life on Planets	B.D.B.D
Effects of Gravity	B.D.B.E
Constellations	B.D.B.F
Place of Sun/Solar System	B.D.B.G
Features of the Sun	B.D.B.H
Nebulae	B.D.B.I
Other Space Phenomena	B.D.C
Dynamics (Space/Astronomy)	B.D.C.A
Types of Space Phenomena	B.D.C.B
Comets	B.D.C.C
Meteoroids and Asteroids	B.D.C.D
Characteristics of Galaxy	B.D.C.E

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
Astronomical Studies	B.D.D
Astronomical Instruments	B.D.D.A
Astronomical Measurements	B.D.D.B
Space Travel	B.D.E
Artificial Satellites	B.D.F
PHYSICAL SCIENCES	C
<u>Measurement</u>	C.A
Metric System/SI	C.A.A
Factor Labeling	C.A.B
Scientific Notation	C.A.C
Significant Figures	C.A.D
Uncertainty in Measurement	C.A.E
Graphing	C.A.F
Constructing Graphs	C.A.F.A
Reading Graphs	C.A.F.B
Analyzing Graphs	C.A.F.C
<u>Matter: Properties</u>	C.B
Mass	C.B.A
Length	C.B.B
Area	C.B.B.A
Volume	C.B.B.B
Density/Pressure	C.B.C
<u>Matter: States of</u>	C.C
Gases	C.C.A
Liquids	C.C.B
Solids	C.C.C
Plasmas	C.C.D
<u>Matter: Changes</u>	C.D
Physical	C.D.A
Chemical	C.D.B
Chemical Equations	C.D.C
Quantitative Relationships	C.D.D
Rates of Change	C.D.E
Atomic and Nuclear	C.D.F
Nuclear Equations	C.D.G
<u>Matter: Structure</u>	C.E
Elements and Symbols	C.E.A
Compounds and Formulas	C.E.B
Mixtures	C.E.C

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
Atoms	C.E.D
Molecules	C.E.E
Subatomic Particles	C.E.F
Ions	C.E.G
Bonding	C.E.H
Solutions	C.E.I
Polar Molecules	C.E.J
Models	C.E.K
Nuclear Models	C.E.K.A
Atomic Models	C.E.K.B
Molecular Models	C.E.K.C
Kinetic Molecular Theory	C.E.K.D
Gas Laws	C.E.L
 <u>Periodic Law/Table</u>	 C.F
Metals	C.F.A
Nonmetals	C.F.B
Transition Elements	C.F.C
 <u>Acids, Bases and Salts</u>	 C.G
Properties of Acids—pH	C.G.A
Properties of Bases—pOH	C.G.B
Properties of Salts	C.G.C
Titration	C.G.D
Hydrolysis	C.G.E
Normality	C.G.F
 <u>Chemical Kinetics</u>	 C.H
Nature of Reactants	C.H.A
Catalysts	C.H.B
Rates of Reaction	C.H.C
Enthalpy	C.H.D
Entropy	C.H.E
 <u>Chemical Equilibrium</u>	 C.I
Characteristics of Equilibrium	C.I.A
Factors Affecting Equilibrium	C.I.B
 <u>Oxidation - Reduction</u>	 C.J
Oxidation Numbers	C.J.A
Rules of Oxidation Numbers	C.J.B
 <u>Electrochemistry</u>	 C.K
Electrolysis	C.K.A
Galvanic Cells	C.K.B

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
<u>Organic Chemistry</u>	C.L
Nomenclature of Organic Compounds	C.L.A
Properties of Organic Compounds	C.L.B
Bonding of Organic Compounds	C.L.C
Hydrocarbons	C.L.D
Organic Reactions	C.L.E
<u>Nuclear Chemistry</u>	C.M
Radioactivity	C.M.A
Induced Radioactivity	C.M.B
Fission	C.M.C
Fusion	C.M.D
<u>Photochemistry</u>	C.N
<u>Spectroscopy</u>	C.P
<u>Chemistry and Society</u>	C.Q
Hazardous Wastes	C.Q.A
Environmental Chemistry	C.Q.B
Industrial Chemistry	C.Q.C
<u>Biochemistry</u>	C.R
<u>Motion</u>	C.S
Kinematics	C.S.A
Distance/Displacement	C.S.A.A
Vectors and Scalars	C.S.A.B
Speed and Velocity	C.S.A.C
Acceleration	C.S.A.D
Forces/Dynamics	C.S.B
Types of Forces	C.S.B.A
Measurement of Force	C.S.B.B
Net Force	C.S.B.C
Friction	C.S.B.D
Laws of Motion	C.S.C
Inertia	C.S.C.A
Newton's Laws of Motion	C.S.C.B
Impulse/Conservation of Momentum	C.S.C.C
Frames of Reference	C.S.C.D
Harmonic/Circular Motion	C.S.C.E
Center of Mass	C.S.C.F

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
<u>Gravity</u>	C.T
Gravitational Force	C.T.A
Gravitational Field Strength	C.T.B
Weight	C.T.C
Newton's Laws of Universal Gravitation	C.T.D
Kepler's Laws of Planetary Motion	C.T.E
<u>Electricity and Magnetism</u>	C.U
Static Electricity/Induction	C.U.A
Electric Force	C.U.B
Electric Field	C.U.C
Electric Circuits	C.U.D
Magnetic Objects	C.U.E
Magnetic Force	C.U.F
Magnetic Field	C.U.G
Electromagnetism/Induced Current	C.U.H
Electronics	C.U.I
<u>Energy/Transformations</u>	C.V
Kinetic Energy	C.V.A
Potential Energy	C.V.B
Work/Simple Machines	C.V.C
Power	C.V.D
Heat/Thermodynamics	C.V.E
Conservation of Mass/Energy	C.V.F
Sound	C.V.G
Waves	C.V.H
<u>Energy Resources</u>	C.W
Sources	C.W.A
Uses	C.W.B
Distribution/Availability	C.W.C
Renewable	C.W.D
Conservation	C.W.E
Environment Impact	C.W.F
Energy Economics	C.W.G
New Technologies	C.W.H
<u>Light</u>	C.X
Reflection/Mirrors	C.X.A
Refraction/Lenses	C.X.B
Diffraction	C.X.C
Electromagnetic Spectrum	C.X.D
Particle/Wave Theory	C.X.E
Interference	C.X.F
Polarization	C.X.G
Optical Instruments	C.X.H
Lasers	C.X.I

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
<u>Modern Physics</u>	C.Y
Quantum Theory	C.Y.A
Relativity/ $E = mc^2$	C.Y.B
Uncertainty Principle	C.Y.C
Space-Time Continuum	C.Y.D
Subatomic Particles and Forces	C.Y.E
HISTORY OF SCIENCE	D
CAREERS IN SCIENCE	E
LABORATORY	F
Safety	F.A
Techniques	F.B
VOCABULARY	G
Life Science Vocabulary	G.A
Earth/Space Vocabulary	G.B
Physical Science Vocabulary	G.C
CONCEPTS	H
Cause-Effect	H.A
Change	H.B
Cycle	H.C
Energy-Matter	H.D
Entropy	H.E
Equilibrium	H.F
Evolution	H.G
Field	H.H
Force	H.I
Fundamental Entities	H.J
Gradient	H.K
Interaction	H.L
Invariance	H.M
Model	H.N
Order	H.O
Organism	H.P
Perception	H.Q
Probability	H.R
Population	H.S
Quantification	H.T
Replication	H.U
Resonance	H.V
Scale	H.W
Significance	H.X
Symmetry	H.Y
System	H.Z
Theory	H.AA
Time-Space	H.BA
Validation	H.CA

<u>GOAL CATEGORY</u>	<u>GOAL CODE</u>
PROCESSES	I
Classifying	I.A
Communicating	I.B
Controlling Variables	I.C
Defining Operationally	I.D
Designing Experiments	I.E
Formulating Models	I.F
Hypothesizing	I.G
Inferring	I.H
Interpreting Data	I.I
Measuring	I.J
Observing	I.K
Predicting	I.L
Questioning	I.M
Using Numbers	I.N
Relating Time-Space	I.O
SKILLS	J
Measuring	J.A
Constructing	J.B
Handling Materials	J.C
Maintaining Materials	J.D
Using Career Materials	J.E
Equipping for Avocations	J.F
INTERESTS	K
Getting Confidence	K.A
Learning From Many Sources	K.B
Wanting and Giving Scientific Explanations	K.C
Finding Avocations	K.D
Exploring Vocations	K.E
Perceiving Heroines and Heroes	K.F
VALUES	L
Knowing and Understanding	L.A
Questioning All Things	L.B
Searching for Data and Meaning	L.C
Demanding Verification	L.D
Respecting Logic	L.E
Considering Consequences	L.F
INTERACTIONS	M
Society's Influence	M.A
Science's Influence	M.B
Mutual Understanding	M.C
Limitations of Science	M.D

GOAL CATEGORY

GOAL
CODE

CHARACTERISTICS N

Tentative	N.A
Public	N.B
Replicable	N.C
Probabilistic	N.D
Humanistic	N.E
Historic	N.F
Empirical	N.G
Holistic	N.H

dc 0142p
12/16/85

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) NWREL Item Bank

For information about the bank contact:

Name Richard W. Naccarato
 Title Item Bank Manager
 Organization Northwest Regional Educational Laboratory
 Street 101 S.W. Main St, Suite 500
 City Portland State Oregon Zip 97204
 Phone: Area code 503 Number 275-9571

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- MRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____	25	1923							
	Structural Analysis _____	14	576							
	Vocabulary _____	11	895							
	Comprehension _____	38	1559							
	Reading Readiness _____	9	135							
	Reference (Study) Skills _____	19	400							
	Higher Order Thinking Skills _____									
	Oral Reading _____	4	14							
Total	120	5,502								
MATHEMATICS	Computational skills _____	12	859							
	Concepts _____	16	325							
	Problem Solving (Application) _____	9	234							
	Geometry _____	5	212							
	Calculator Math _____	6	42							
	Higher Order Thinking Skills _____									
Measurement _____	29	598								
Total	77	2270								
LANGUAGE ARTS	Grammar _____									
	Usage _____	30	1290							
	Mechanics _____	53	1148							
	Foreign Language (specify: Listening) _____	9	202							
	Composition _____	10	305							
Higher Order Thinking Skills Spelling _____	4	258								
Total	160	3,203								
SCIENCE	_____									
	Higher Order Thinking Skills _____									
OTHER	_____									
	Higher Order Thinking Skills _____									
		102								

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other Grade Level
(in some cases)
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-references to materials
- on-line test administration
- other _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

- d. If your software handles test development, indicate its capabilities below:
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____
- * In development _____

- e. If your software handles scoring, please indicate its capabilities below:
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f. If your software handles reporting, please indicate its capabilities below:
- subtest profiles -- student
 - subtest profiles -- class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g. If your software handles student recordkeeping, please indicate its capabilities below:
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h. If your software has graphics capabilities, please indicate these below:
- can generate most graphics
 - can attach external graphics to item test
 - can generate graphics and merge them in with item test
 - can produce the entire test

- i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)
- Wang Mini

- l. What is the approximate cost of your testing software?
- appr. \$2,500 - \$4,500

- j. What is the name of your item banking/test scoring software package?
- _____
- _____
- _____
- _____
- _____

- k. Is your software:?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- m. Technical assistance in running the software is
- available from us
 - available through vendor
 - not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Northwest
Regional
Educational
Laboratory



101 S W Main Street, Suite 500 • Portland, Oregon 97204 • (503) 275-9500
TELEX 701716 CABLE NWREL SOURCE STLC58

Writers Direct Dial Number

Thank you for your request regarding available test items.

We have approximately 7300 test items in reading and language arts available either in hard copy or on tape. We have another 4000 items in math available only in hard copy. The classification scheme for these items and samples are attached. Our current pricing structure is:

Complete (7,300) hard copy on card stock	\$6,300
Complete (7,300) on tape	4,500
1,000 selected items on card stock	2,700
1,000 selected items on tape	2,300

We would, of course, be happy to negotiate other arrangements to meet your individual needs. In addition to these items, we have others that have been developed for individual school districts. These may be available to trade or for fee. Here are some more sources of items, if you have not already tried them:

Mr. Kay Miller
Northwest Evaluation Association
30633 11th Ave. South
Federal Way, WA
(206) 839-3932

(NWEA has reading,
math, language arts,
and science items)

Dr. John S. Martois
Los Angeles County Schools
9300 Imperial Highway
Downey, CA 90242
(213) 922-6304

(L.A. County has
reading, language
arts, math and
life skills items)

I have included a copy of the report "Item Banking for Local Test Development: Practitioner's Handbook" by Arter and Estes (1985). Rich Naccarato is currently assembling a list of item banks which classify test items according to cognitive level (i.e. Bloom's taxonomy). You may reach him by calling (503) 275-9571.

Sincerely,

Encl.

AN EQUAL OPPORTUNITY EMPLOYER

NWREL Item Bank Hard Copy Format

Each item is printed on a separate 8-1/2" x 11" card stock page. At the top of the page is the filing guide (e.g. RE.A.1) which is made up of codes for Area (Reading or Language Arts); Cluster (e.g. A = Comprehension); and Descriptor (e.g. 1 = Main Idea). Items are then filed by Item Number. The next lines list the actual descriptor in words, response format and answer as well as a code for the source of the item.

Directions, passages, visuals and item text are printed for each item at the bottom of the card. All information is included with each item to minimize the need to merge instructions, etc. from other files. If all the information is not needed (e.g. several items in a row use the same instructions or reading passage), the test constructor may cover the unused portion of one item with the text of the item which precedes it. The constructed page is then photocopied. All that needs to be added are question numbers and group directions, such as "Use the following passage to answer questions 5 to 8."

Graphics are not included on the computer tape of the database but are provided in hard copy. They must be manually inserted into spaces left for them.

ITEM BANK ASSIGNMENT CARD--Computer Version

Description of Fields

<u>Item Number</u>	All items are assigned a number as they are reviewed and placed into the item bank. These numbers are sequential. Thus, items testing the same skill may be located in many different areas of the bank depending on when they were processed into the system.
<u>Function</u>	Is an indication of the request command used.
<u>Area</u>	The major subject area of the item: R -- Reading M -- Mathematics LA -- Language Arts FT -- Functional Transfer
<u>Cluster</u>	The skill measured by the item. These are lettered corresponding to the attached classification scheme. For example, in the area of reading the skill areas are: A. Comprehension and Analysis B. Oral Reading C. Phonics D. Readiness E. Study and Research Skills F. Vocabulary G. Word Structure
<u>Descriptor</u>	The subskill measured by the item. These are numbered as shown on the attached classification scheme. For example, in the area of readiness the subskills are: 01 Identify PICTURES, WORDS OR LETTERS BY VISUAL DISCRIMINATION 02 Identify the WORD THAT SOUNDS THE SAME OR DIFFERENT in a group of dictated words 03 Identify the LOWERCASE LETTERS 04 Identify the UPPERCASE LETTERS 05 CLASSIFY related/unrelated OBJECTS 06 Demonstrate ability in LEFT TO RIGHT PROGRESSION 07 DISTINGUISH SOUND varying in intensity, rhythm and source 08 ORDER pictures or oral sentences IN PROPER SEQUENCE 09 ORALLY DESCRIBE AN ILLUSTRATION

Response Format Response formats include:

- MC -- Multiple-choice
- TF -- True/false
- M -- Matching
- OB -- Observation
- FR -- Free response
- E -- Essay
- P -- Performance
- O -- Other

Source This describes where the item came from.

Grade The grade level of the item.

Correct Answer If multiple choice, this indicates the letter of the correct answer, etc. If the item is of the free response type, this would indicate where to go for samples of acceptable responses.

Passage No. If the item is associated with a reading passage, this gives you its access code. Passages are not stored with individual items since more than one item can be written on a single passage.

Directions No. Items are often associated with special types of instructions. This number is the access code for the appropriate instructions.

Graphics No. If the item is associated with a visual display of some sort (e.g., a graph, form, or picture), this number is the access code. Graphics are stored separately from items in hard-copy form.

Limiters A brief English description of the item to assist the test developer in limiting the search for the items desired.

Item Attributes These are one or two word English descriptor of the major emphasis in the item.

RE.A.1

Item 45437

Passage 04511

Descriptor: Main Idea
Source: E

Response format: Multiple Choice
Answer: C

Read the story below, then answer the question.

If you cook, you know how much herbs can add to the flavor of food. Dill, parsley, rosemary, basil and thyme are just a few of the most popular herbs used by cooks all over the world. Besides adding flavor, herbs add color and nutrition to food. Parsley, for instance, is a rich source of Vitamin A. Did you know you could grow your own herbs? If you have a vegetable garden already, that's an ideal spot, but if not, a sunny kitchen window will do. Herbs are fun and easy to grow and of course, fresh herbs taste best. Whether growing or simmering atop the stove, they can fill the house with a delightful aroma. So, next time you're cooking up your favorite dish add some herbs!

What is the main idea in this passage?

- A. It's cheaper to grow your own food.
- B. Spicy cooking is the best.
- C. Herbs add a lot to food.
- D. Plants need sun to grow well.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Academic Instructional Measurement System (AIMS)

For information about the bank contact:

Name _____
 Title _____
 Organization The Psychological Corporation
 Street 555 Academic Court
 City San Antonio State Texas Zip 78204-2498
 Phone: Area code 512 Number 270-0453

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data

other _____

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
- A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE)							
			Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____									
	Structural Analysis _____									
	Vocabulary _____									
	Comprehension (See attached) _____				X	X	X	X		
	Reading Readiness _____									
	Reference (Study) Skills _____									
	Higher Order Thinking Skills _____									
MATHEMATICS	Computational skills _____									
	Concepts (See Attached) _____				X	X	X	X		
	Problem Solving (Application) _____									
	Geometry _____									
	Calculator Math _____									
	Higher Order Thinking Skills _____									

LANGUAGE ARTS	Grammar _____									
	Usage (See Attached) _____				X	X	X	X		
	Mechanics _____									
	Foreign Language (specify: _____) _____									
	Composition _____									
	Higher Order Thinking Skills _____									
SCIENCE	_____									

	Higher Order Thinking Skills _____									
ER	_____									
	Higher Order Thinking Skills _____									

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (if you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by
In house

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

- d. If your software handles test development, indicate its capabilities below:
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e. If your software handles scoring, please indicate its capabilities below:
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f. If your software handles reporting, please indicate its capabilities below:
- subtest profiles -- student
 - subtest profiles -- class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g. If your software handles student recordkeeping, please indicate its capabilities below:
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h. If your software has graphics capabilities, please indicate these below:
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

- i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)
- _____
- XT, AT
- _____

- j. What is the name of your item banking/test scoring software package?
- _____
- AIMS
- _____
- _____
- _____

- k. Is your software:?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- l. What is the approximate cost of your testing software?
- _____
- _____

- m. Technical assistance in running the software is:
- available from us
 - available through vendor
 - not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

AIMS Scope and Sequence

The 989 AIMS objectives and over 7,000 items and sample items are divided into two domains: Reading/Language Arts and Mathematics. Each domain is subdivided into Content Categories, shown below, which are divided into Content Subcategories, or objectives. Some Content Categories are tested at every grade level; others are tested only at the grades where they are appropriate. The Scope and Sequence Chart below shows the grade level where each Content Category is tested, the number of objectives tested at each grade level, and the number of items used to test those objectives.

Reading/Language Arts	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grades 9-12		Total			
	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items		
Phonic Analysis	7	51	10	72	3	21														20	144	
Structural Analysis	2	14	3	21	9	71	9	67	7	51	7	51	3	21	3	21	3	21	3	21	46	338
Vocabulary	8	60	10	74	12	86	9	65	6	42	6	42	4	28	3	21	4	28	4	28	62	446
Life/Study and Reference	3	23	3	21	8	58	11	79	12	86	12	86	9	65	12	86	7	51	7	51	77	555
Literal Comprehension	6	42	5	35	4	28	3	21	3	21	3	21	3	21	3	21	2	14	2	14	32	224
Inferential Comprehension	5	35	6	42	6	42	9	63	10	70	8	56	9	63	8	56	13	91	13	91	74	518
Critical Comprehension	1	9	1	7	3	25	5	51	4	32	4	32	6	44	6	44	4	28	4	28	34	272
Understanding Literature			4	28	3	21	5	35	5	35	8	58	8	58	7	49					40	284
Listening	4	30	5	37	6	44	6	44	4	28			5	35							30	218
Spelling	1	9	2	18	4	28	9	65	5	35	4	28	4	28	2	14	5	35	5	35	66	280
Mechanics	2	16	3	23	3	23	4	28	3	21	3	21	2	14	2	14	4	28	4	28	26	188
Usage	2	18	2	16	2	16	2	18	2	18	1	9	5	45	4	34	9	81	9	81	29	255
Grammar/Syntax	1	9	4	32	2	18	2	14	2	14	2	14	4	28	5	37	21	144	21	144	43	310
Proofreading					1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	7	49
Composition																	3	21	3	21	3	21
Total Reading/LA by grade	42	316	58	426	66	488	75	557	64	460	69	425	63	457	56	404	76	549	559	4062		
Mathematics																						
Numeration	5	37	4	30	3	23	4	28	3	21	2	14	1	7					1	7	23	167
Whole Numbers +	4	28	3	21	2	14	1	7	1	7									2	14	13	91
Whole Numbers -	3	21	3	21	2	14	1	7	1	7									1	7	11	77
Whole Numbers ×			1	7	2	14	3	21	4	28	3	21	2	14					2	14	17	119
Whole Numbers ÷					2	14	3	21	2	14	2	14							3	21	12	84
Decimals							3	21	7	49	5	35	5	35	5	35	16	108	16	108	41	283
Fractions	1	7	1	7	3	23	5	37	9	63	13	91	11	77	10	70	17	119	17	119	70	494
Ratio/Proportion/Percent											5	35	6	42	7	49	5	35	5	35	23	161
Measurement	3	21	3	21	6	42	5	35	6	42	5	35	5	35	5	35	11	77	11	77	49	343
Geometry	1	7	1	7	2	14	3	21	8	56	5	35	5	35	8	56	7	49	7	49	40	280
Problem Solving	4	28	3	21	6	46	4	32	7	53	7	53	4	28	5	35	21	149	21	149	61	445
Graphing/Statistics/Probability			1	7	2	14	2	14	5	35	5	35	6	42	6	42	7	49	7	49	64	238
Pre-Algebra											1	7	4	30	9	71	11	81	11	81	25	189
Essential Life Skills																	11	77	11	77	11	77
Total Mathematics by grade	21	149	20	142	30	218	34	244	53	375	53	375	49	345	55	393	115	807	115	807	630	3048
Total Mathematics, Reading/LA by grade	63	465	78	568	96	706	109	801	117	835	112	800	112	802	111	797	191	1356	191	1356	889	7130

AIMS Scope and Sequence

The 989 AIMS objectives and over 7,000 items and sample items are divided into two domains: Reading/Language Arts and Mathematics. Each domain is subdivided into Content Categories, shown below, which are divided into Content Subcategories, or objectives. Some Content Categories are tested at every grade level; others are tested only at the grades where they are appropriate. The Scope and Sequence Chart below shows the grade level where each Content Category is tested, the number of objectives tested at each grade level, and the number of items used to test those objectives.

Reading/Language Arts	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grade 9		Grades 10-12		Total		
	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	
Phonic Analysis	7	51	10	72	9	21															20	144	
Structural Analysis	2	14	3	21	9	71	9	67	7	51	7	51	3	21	3	21	3	21	3	21	48	338	
Vocabulary	8	60	10	74	12	86	9	65	6	42	6	42	4	28	3	21	4	28	2	14	82	446	
Life/Study and Reference	3	23	3	21	6	58	11	79	12	86	12	86	9	65	12	86	7	51	77	51	77	565	
Literal Comprehension	6	42	5	35	4	28	3	21	3	21	3	21	3	21	3	21	2	14	2	14	22	224	
Inferential Comprehension	5	35	6	42	6	42	9	63	10	70	6	56	9	63	6	56	19	91	74	91	74	518	
Critical Comprehension	1	9	1	7	3	25	5	51	4	32	4	32	6	44	6	44	4	28	34	28	34	272	
Understanding Literature			4	28	3	21	5	35	5	35	6	56	8	56	7	49					48	284	
Listening	4	30	5	37	6	44	6	44	4	28			5	35							30	218	
Spelling	1	9	2	18	4	28	9	65	5	35	4	28	4	28	2	14	5	35	38	35	38	280	
Mechanics	2	16	3	23	3	23	4	28	3	21	3	21	2	14	2	14	4	28	28	28	28	188	
Usage	2	18	2	16	2	16	2	18	2	18	1	9	5	45	4	34	9	81	29	81	29	255	
Grammar/Syntax	1	9	4	32	2	18	2	14	2	14	2	14	4	28	5	37	21	144	43	144	43	310	
Proofreading					1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	7	7	49
Composition																					3	21	21
Total Reading/LA by grade	42	316	58	426	66	488	76	557	64	480	69	425	63	457	56	404	78	549	88	608	88	4082	
Mathematics																							
Numeration	5	37	4	30	3	23	4	28	3	21	2	14	1	7						1	7	28	167
Whole Numbers +	4	28	3	21	2	14	1	7	1	7										2	14	19	91
Whole Numbers -	3	21	3	21	2	14	1	7	1	7										1	7	11	77
Whole Numbers x			1	7	2	14	3	21	4	28	3	21	2	14						2	14	17	119
Whole Numbers ÷					2	14	3	21	2	14	2	14								3	21	12	84
Decimals							3	21	7	49	5	35	5	35	5	35	10	108	41	108	41	283	
Fractions	1	7	1	7	3	23	5	37	9	63	13	91	11	77	10	70	17	119	79	119	79	484	
Ratio/Proportion/Percent											6	42	6	42	7	49	6	42	23	161	35	245	
Measurement	3	21	3	21	6	42	5	35	6	42	5	35	5	35	5	35	11	77	49	77	49	343	
Geometry	1	7	1	7	2	14	3	21	6	42	5	35	5	35	6	42	7	49	7	49	49	280	
Problem Solving	4	28	3	21	6	42	4	28	7	49	7	49	4	28	5	35	21	147	81	147	81	445	
Graphing/Statistics/Probability			1	7	2	14	2	14	5	35	5	35	6	42	6	42	7	49	34	238	48	336	
Pre-Algebra											1	7	4	30	9	63	11	77	28	196	81	567	
Essential Life Skills																				11	77	11	77
Total Mathematics by grade	21	149	20	142	30	218	34	244	22	155	23	161	20	140	25	175	33	231	118	807	488	3048	
Total Mathematics, Reading/LA by grade	63	465	78	568	96	706	100	801	117	635	112	800	112	802	111	797	109	1356	988	7130	988	7130	

Content Categories

Reading/Language Arts

- A = Phonic Analysis
- B = Structural Analysis
- C = Vocabulary

- E = Literal Comprehension
- F = Inferential Comprehension
- G = Critical Comprehension
- H = Understanding Literature
- J = Listening
- K = Spelling
- M = Mechanics
- N = Usage
- P, Q = Grammar and Syntax
- R = Proofreading

Mathematics

- A = Numeration
- B = Whole Numbers Addition
- C = Whole Numbers Subtraction
- D = Whole Numbers Multiplication
- E = Whole Numbers Division
- F = Decimals
- G = Fractions
- H = Ratio/Proportion/Percent
- K = Measurement
- L = Geometry
- M = Problem Solving
- N = Graphing/Statistics/Probability
- O = Pre-Algebra
- P = Essential Life Skills

AIMS Objectives Structure

A close look at this chart reveals the organization behind AIMS objectives and items. In the inset at left, the Content Category "Life/Study and Reference" falls beneath the domain of Reading/Language Arts. In the first column at left, it is classified into Content Subcategories, such as "Using an Index," which cover a specific range of skills and abilities in the general Content Category. In the second column, the subcategories, or objectives, are organized by grade, and in the third column, each objective is described in more detail. Notice that alphabetizing, for example, is tested at different levels over a range of grades—students are expected to alphabetize to the first letter in first grade, but to the third letter by third grade. Finally, the fourth column provides a pair of sample items for two of the objectives. Remember that there are six to eight items for each objective.

AIMS objectives are also classified by three Cognitive Levels in each domain, representing low, moderate, and high cognitive demands. In Reading/Language Arts, the Cognitive Levels are Recognizing, Reasoning, and Understanding; in Mathematics, they are Computation, Concepts, and Problem Solving.

Life/Study and Reference

GRADE		CLASS. CODE
1	Alphabetize: letter sequence	B11DA
1	Alphabetize: to first letter	B11DB
2	Alphabetize: to second letter	B21DB
3	Alphabetize: to third letter	B31DB
4	Alphabetize: to fourth letter	B41DB
3	Using a table of contents	B36DC
4	Using a table of contents	B46DC
5	Using a table of contents	B56DC
6	Using a table of contents	B66DC
7	Using a table of contents	B76DC
8	Using a table of contents	B86DC
1	Following written directions	B15DD
2	Following written directions	B25DD
3	Following written directions	B36DD
4	Following written directions	B46DD
3	Reading tables or charts	B33DE
5	Reading tables or charts	B56DE
6	Reading tables or charts	B66DE
7	Reading tables or charts	B76DE
8	Reading tables or charts	B86DE
8	Reading schedules	B86DF
3	Using combined dict skills	B36DG
4	Using combined dict skills	B46DG
5	Using combined dict skills	B56DG
6	Using combined dict skills	B66DG
7	Using combined dict skills	B76DG
8	Using combined dict skills	B86DG
3	Using guide words	B31DH
4	Using guide words	B41DH
5	Using guide words	B51DH
6	Using guide words	B61DH
3	Using a pronunciation key	B33DJ
4	Using a pronunciation key	B43DJ
5	Using a pronunciation key	B53DJ
6	Using a pronunciation key	B63DJ
4	Using an index	B46DK
5	Using an index	B56DK
6	Using an index	B66DK
7	Using an index	B76DK
8	Using an index	B86DK
4	Encyclo: using volume nos	B42DM
5	Encyclo: using volume nos	B52DM
8	Encyclo: using volume nos	B85DM
6	Encyclo: using subheadings	B66DN
7	Encyclo: using subheadings	B76DN
2	Reading maps	B22DP
3	Reading maps	B32DP

Grade 1

Multiple meanings _____

Life/Study and Reference

- Alphabetize: letter sequence _____ B11DA
- Alphabetize: to first letter _____ B11DB
- Following written directions _____ B15DD

Literal Comprehension, Non Passage-Dependent

Recognize picture clues _____ B12EA

Inferential Comprehension, Passage-Dependent

Grade 2

Multiple meanings _____ B24CC

Word meaning from context _____ B24CR

Life/Study and Reference

- Alphabetize: to second letter _____ B21DB
- Following written directions _____ B25DD
- Reading maps _____ B22DP

Literal Comprehension, Non Passage-Dependent

Recognize picture clues _____ B22EA

Grade 3

Fig lang: metaphor and simile _____ B34CU

Fig lang: Idioms _____ B34CU

Life/Study and Reference

- Alphabetize: to third letter _____ B31DB
- Using a table of contents _____ B36DC
- Following written directions _____ B36DD
- Reading tables or charts _____ B33DE
- Using combined dict skills _____ B36DG
- Using guide words _____ B31DH
- Using a pronunciation key _____ B33DJ
- Reading maps _____ B32DP

Inferential Comprehension



- 1 **Alphabetize: letter sequence** Given three rows of the same three capital letters arranged in different order, the student will identify the row of letters arranged in alphabetical order
Recognizing Level B11DA
- 1 **Alphabetize: to first letter** Given a word, the student will identify the word that follows it in alphabetical order
Recognizing Level B11DB
- 1 **Following written directions** Given a written one-step direction and an example of how one student followed the direction, the student will indicate whether the direction was followed.
Understanding Level B15DD

- 2 **Alphabetize: to second letter** Given three rows of the same four words arranged in different order, the student will identify the row of words arranged in alphabetical order.
Recognizing Level B21DB
- 2 **Following written directions** Given written two-step directions and three pictures, the student will select the picture that shows the directions have been followed
Understanding Level B25DD
- 2 **Reading maps** Given a labeled picture map, the student will identify information on the map.
Recognizing Level B22DP
- 3 **Alphabetize: to third letter** Given four rows of the same four words arranged in different order, the student will identify the row of words arranged in alphabetical order.
Recognizing Level B31DB
- 3 **Using a table of contents** Given a table of contents, the student will select stated and implied chapter and page information
Understanding Level B36DC
- 3 **Following written directions** Given written directions describing a procedure with four major steps, the student will use the directions to select the best answer to a question.
Understanding Level B36DD
- 3 **Reading tables or charts** Given a pictured calendar month, the student will identify information about dates and days of the week
Recognizing Level B33DE
- 3 **Using combined dict skills** Given a pronunciation key and two dictionary entries of homographs, the student will
 1. Select the meaning of the word used in context
 2. Select the pronunciation which shows the stressed syllable of the word used in context.
 3. Match a vowel sound in the word with a pronunciation key word.
 4. Identify appropriate guide words for the word.*Understanding Level* B36DG
- 3 **Using guide words** Given a pair of guide words from a dictionary page, the student will identify the word that appears on the same page as the guide words.
Recognizing Level B31DH
- 3 **Using a pronunciation key** Given a pronunciation key, an unfamiliar word with one sound printed in boldface type, and the word's phonetic spelling, the student will identify the pronunciation key entry that represents the sound printed in boldface type
Recognizing Level B33DJ
- 3 **Reading maps** Given a picture map with an arrowed path and a picture symbol key, the student will identify information on the map.
Understanding Level B32DP

Sample Items

Find the row of words in alphabetical (abc) order.

- ① finger filling first fear
- ② fear finger filling first
- ③ fear filling finger first
- ④ filling finger first fear

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
First Week			1	2	3	4	5
Second Week	6	7	8	9	10	11	12
Third Week	13	14	15	16	17	18	19
Fourth Week	20	21	22	23	24	25	26
Fifth Week	27	28	29	30	31		

On what date is the first Sunday of the month?

- ① May 1
- ② May 5
- ③ May 6
- ④ May 7

The AIMS Software Option

AIMS tests can be constructed by computer with the AIMS Software System. Objectives, items, item statistics, reading passages, and student and teacher directions are included on microcomputer diskettes, programmed to allow you to retrieve text from the item bank for tests, administration manuals, and scoring keys and to delete items and perform other

maintenance functions. You can also use the software to integrate locally written items and objectives into the bank.

Camera-ready copy of all graphics in the bank is included with the diskettes; when your test is ready, graphics can be inserted manually into the spaces that the computer is programmed to leave in the text.

The AIMS Software Maintenance Contract

When you subscribe to the AIMS Software Maintenance Contract, you receive special benefits which make the implementation of the AIMS Software System easy and effective:

- You receive unlimited phone consultation to answer questions that might arise as you begin to use AIMS.
- You receive a substantial discount on all upgraded editions of AIMS, including new objectives and items and the latest technological advancements in software.

A Demonstration Disk with Tutorial Booklet is available to show you how AIMS Software can make local test construction efficient and easy.

Scoring

AIMS can be scored locally, using answer keys created as the test is developed. Machine-scannable answer sheets may be used, and local scoring may be done with a microcomputer, a scanner, a printer, and a test scoring program.

For more information about AIMS local scoring, please call The Psychological Corporation collect, station-to-station, at (512) 270-0540.

The AIMS Components

The *Academic Instructional Measurement System* includes 989 objectives and over 7,000 test items and sample items, organized by grade for Reading/Language Arts and Mathematics. All test materials are camera-ready and printed on high quality paper. All test materials are shipped in three-ring binders and are ready for quick test construction.

The AIMS Manual System Includes:

- 1 Test Development and Production Guide, designed to lead you through the steps of effective test development. It explains the structure of the bank and the coding system, and it provides suggestions for constructing tests to meet specific needs.
 - 8 Reading/Language Arts Item/Directions/Art Binders Grades 1-8
 - 8 Mathematics Item/Directions/Art Binders Grades 1-8
 - 1 Reading/Language Arts Item/Directions/Art Binder Grades 9-12
 - 1 Mathematics Item/Directions/Art Binder Grades 9-12
- } *The binders contain high-quality, camera-ready items and graphics.*
- An Objectives and Sample Item Catalog, which lists objectives and gives examples of representative items and also serves as an examination kit for AIMS.

The AIMS Software Option Includes:

- 9 Diskettes containing Reading/Language Arts Items, Objectives, Directions, Statistics (1 per grade for grades 1-8; 1 for grades 9-12)
- 9 Diskettes containing Mathematics Items, Objectives, Directions, Statistics (1 per grade for grades 1-8; 1 for grades 9-12)
- 2 Word Processing Diskettes, software programs which enable you to print AIMS tests.
- 2 Bank Management Diskettes, software programs which let you add, delete, retrieve, and sort items and objectives as you build your tests.
- A Demo Disk with Tutorial, which may be purchased separately to show you how the AIMS system works.
- A Test Development and Production Guide
- An Objectives and Sample Item Catalog
- 1 Binder of Art Prints
- An AIMS Software User's Guide, which explains how to install the bank, how to retrieve items, how to print generated tests, how to change, add, and delete objectives, and how to maintain files.

ITEM BANK DATA SHEET

Richardson Indep S.D.
Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Richardson Assessment of Mastery (RAM)

For information about the bank contact.

Name N. Blyth Riegel, PH.D.
 Title Director - Research and Evaluation
 Organization Richardson Indept. School District
 Street 400 South Greenville Ave.
 City Richardson State TX Zip 75081
 Phone: Area code 214 Number 2388111

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities Some
- cross references between objectives and Some appropriate instructional materials
- content review or other validity information
- reliability estimates Some? merge all
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/> Maybe	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

"Tests" are grouped by semester only

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input checked="" type="checkbox"/> *	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input checked="" type="checkbox"/> *	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/> *	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

* We have a database which _____
 incorporates score _____
 results from all "tests" _____
 installs data. Reports for individual students and for class.

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____	48	224		X	X				
	Structural Analysis _____	64	448		X	X	X	X		
	Vocabulary _____	69	504		X	X	X	X		
	Comprehension _____	82	544		X	X	X	X		
	Reading Readiness _____	74	504		X					
	Reference (Study) Skills _____	31	200		X	X	X	X		
	Higher Order Thinking Skills _____	72	352			X	X	X		

MATHEMATICS	Computational skills _____	145	1016		X	X	X	X		
	Concepts _____	172	1240		X	X	X	X		
	Problem Solving (Application) _____	228	1524		X	X	X	X		
	Geometry _____	84	628		X	X	X	X		
	Calculator Math _____	2	16					X		
	Higher Order Thinking Skills _____	48	324			X	X	X		
	Measurement _____	32	248		X	X	X	X		

LANGUAGE ARTS	Grammar _____	27	192		X	X	X	X		
	Usage _____	142	1040		X	X	X	X		
	Mechanics _____	119	624		X	X	X	X		
	Foreign Language (specify: _____)									
	Composition _____	173	192		X	X	X	X		
	Higher Order Thinking Skills _____	48	336			X	X	X		

SCIENCE	_____									
	Higher Order Thinking Skills _____									
OTHER	_____									
	Higher Order Thinking Skills _____									

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

database system

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by
Contracted programmers
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below:

- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____
- * Score by objective and total test

f If your software handles reporting, please indicate its capabilities below:

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores by student only
- other _____

h If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

for database and scoring
ONLY -- T1990/12 and T1 PCs

l What is the approximate cost of your testing software?

? never thought of

 selling it

j What is the name of your item banking/test scoring software package?

Richardson Testing

System

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others
- Don't know--we were never asked before.

m. Technical assistance in running the software is.

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

Our database is probably more interesting than the item bank -- would prefer to tell someone on phone -- too much to cover here.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) MULTISCORE

For information about the bank contact:

Name MULTISCORE Editor
 Title _____
 Organization The Riverside Publishing Company
 Street 8420 Bryn Mawr Avenue
 City Chicago State IL Zip 60631
 Phone: Area code 312 Number 693-0040

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____



Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (9-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____	52	168		X	X				
Structural Analysis _____	65	190		X	X	X	X		
Vocabulary _____	27	97		X	X	X	X		
Comprehension and Interpretation _____	114	601		X	X	X	X		
Reading Readiness _____	10	51		X					
Reference (Study) Skills _____	50	140		X	X	X	X		
Higher Order Thinking Skills Yes _____									
Analysis and Classification of Written Materials _____	49	135			X	X	X		
MATHEMATICS Computational skills _____	122	366		X	X	X	X		
Concepts Numbers and Number Theory _____	226	680		X	X	X	X		
Problem Solving (Application) _____	28	86		X	X	X	X		
Geometry _____	165	495		X	X	X	X		
Measurement _____	143	430		X	X	X	X		
Higher Order Thinking Skills Yes _____									
Fractions, Decimals, Percent _____	163	489		X	X	X	X		
Graphs, Probability, Exponents _____	59	177		X	X	X	X		
LANGUAGE ARTS Grammar _____	83	239		X	X	X	X		
Usage _____	62	186			X	X	X		
Mechanics Cap., Punc., Spelling _____	73	268		X	X	X	X		
Oral Communication _____	22	66		X	X	X	X		
Foreign Language (Specify: _____) _____									
Composition Writing Skills _____	25	82			X	X	X		
Higher Order Thinking Skills Yes _____									
Sentence Patterns, Types _____	88	265			X	X	X		
Transformational Grammar _____	22	66			X	X	X		
_____	76	228		X	X	X	X		

Higher Order Thinking Skills Yes _____									
SCIENCE _____									

Higher Order Thinking Skills Yes _____									
OTHER Social Studies _____	86	258		X	X	X	X		
Life Skills _____	21	63				X	X		X
Higher Order Thinking Skills Yes _____									

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using
Symphony, Wordstar-
SSPC, Dbase III
- specially designed for our system by _____
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

AT 286
 Interleaf
 McIntosh

l. What is the approximate cost of your testing software?

j. What is the name of your item banking/test scoring software package?

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

MULTISCORE provides the opportunity to assemble professionally-developed tests that measure specific educational objectives of a local classroom, school, school district, or state, with the advantages of automated record-keeping. The MULTISCORE system consists of:

1. A list of over 1800 educational objectives in reading, language arts, mathematics, science, social studies, and life skills
2. A bank of over 5800 multiple-choice test questions corresponding to the objectives
3. A method for quickly and efficiently producing customized tests and support materials based on unique project specifications
4. A reporting system which provides individual and summary data

From lists of objectives, a district can select the performance objectives to be tested and specify the number of test questions to measure each objective. Riverside then prepares customized test booklets from its bank of multiple-choice test items to match the selected objectives. After the tests have been administered, they will be scored and the results reported in a variety of criterion-referenced formats.

ITEM BANK DATA SHEET

Saginaw, MI S.D.
Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) ESSENTIAL SKILLS TESTS

For information about the bank contact:

Name BARRY E. QUIMPER
 Title DIRECTOR, EVALUATION, TESTING & RESEARCH
 Organization SCHOOL DISTRICT OF THE CITY OF SAGINAW
 Street 550 MILLARD STREET
 City SAGINAW State MICHIGAN Zip 48607
 Phone: Area code 517 Number 776-0257

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

* Further studies are planned as the project proceeds toward completion.

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided
- A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____										
	MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____	64	200				X	X		
							X	X		
							X	X		
							X	X		
	LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____						X	X		
						X	X			
						X	X			
						X	X			
SCIENCE Earth Science (7,10-12), Health Life (8th) Physical Science (9th), Biology (10-12), Chemistry and Physics (10-12). Higher Order Thinking Skills _____						X	X			
						X	X			
						X	X			
SOCIAL STUDIES Higher Order Thinking Skills _____						X	X			

13

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other Subject, skill, and objective.
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other Subject, skill, and objective.

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using
Micro Cast Computer
Managed Instruction
- specially designed for our system by _____
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis (traditional)
- other _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other Supports Laser Printing

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other By skill

h If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

UNISYS B-25

j What is the approximate cost of your testing software?

\$3,600.00 stand alone
\$5,400.00 network environment

k What is the name of your item banking/test scoring software package?

Micro Cast Computer
Managed Instruction

l Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is:

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) ACE

For information about the bank contact

Name _____
 Title _____
 Organization Santa Clara County Office of Education
 Street 100 Skyport Drive, #236
 City San Jose State Ca Zip 95115
 Phone: Area code 408 Number 947-6889

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications; detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
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- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

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	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING		at each level							
	Phonetic Analysis _____								
	Structural Analysis _____	7	70			x	x	x	
	Vocabulary _____	5	60			x	x	x	
	Comprehension _____	7	80			x	x	x	
	Reading Readiness _____								
	Reference (Study) Skills _____	12	150			x	x	x	
	Higher Order Thinking Skills _____	3	30			x	x	x	
		at each level							
MATHEMATICS	Computational skills _____	20	100			x	x	x	
	Concepts _____	5	25						
	Problem Solving (Application) _____	15	75						
	Geometry _____	3	20						
	Calculator Math _____								
	Higher Order Thinking Skills _____								
LANGUAGE ARTS	Grammar _____	8	50			x	x	x	
	Usage _____	6	40			x	x	x	
	Mechanics _____	6	35			x	x	x	
	Foreign Language (specify: _____)								
	Composition _____	8	40			x	x	x	
	Higher Order Thinking Skills _____								
	Writing sample _____	4	25			x	x	x	
SCIENCE	_____								

	Higher Order Thinking Skills _____								
OTHER	_____								
	Higher Order Thinking Skills _____								
		135							

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

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- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
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9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____
- _____

d If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
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e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

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- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
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- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

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- can generate most graphics
- can attach external graphics to item text
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i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

l What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

k Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is:

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) SRA Objective/Item Bank

For information about the bank contact

Name Margaret Hill
 Title Manager, Editorial Test Development
 Organization Science Research Associates
 Street 155 N. Wacker
 City Chicago State IL Zip 60606
 Phone: Area code 313 Number 984-7182

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
- A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	ITEMS	GRADE LEVEL (AGE)							
			Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____	Information			X						
	not available			X	X	X	X			
				X	X	X	X			
				X						
						X	X	X		
					X	X	X	X		
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
				X	X	X	X			
SCIENCE _____ Higher Order Thinking Skills _____				X	X	X	X			
				X	X	X	X			
ART _____ Higher Order Thinking Skills _____				X	X	X	X			
				X	X	X	X			
		139		X	X	X	X			

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- if you checked the above box, please list the programs you are using _____
- specially designed for our system by _____
SRA Personnel
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

- d. If your software handles test development, indicate its capabilities below:**
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e. If your software handles scoring, please indicate its capabilities below:**
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f. If your software handles reporting, please indicate its capabilities below:**
- subtest profiles -- student
 - subtest profiles -- class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g. If your software handles student recordkeeping, please indicate its capabilities below.**
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h. If your software has graphics capabilities, please indicate these below:**
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

- i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)**
- IBM Mainframe

- l. What is the approximate cost of your testing software?**

- j. What is the name of your item banking/test scoring software package?**
- It is an internal system

- k. Is your software:?**
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- m. Technical assistance in running the software is:**
- available from us
 - available through vendor
 - not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Tescor, Inc.
Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) FIRST NATIONAL ITEM BANK & TEST DEVELOPMENT SYSTEM (FNIB)

For information about the bank contact:

Name Teresa Sisco
 Title Vice President - FNIB Operations
 Organization Tescor, Inc.
 Street 461 Carlisle Drive
 City Herndon, State VA Zip 22070
 Phone: Area code 800 Number 842-0077
 703 435-9501

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____	90	1200	←→					
	Structural Analysis _____	60	600		←→				
	Vocabulary _____	60	1200	←→					
	Comprehension _____	275	2000	←→					
	Reading Readiness _____	20	80	←→					
	Reference (Study) Skills _____	90	800		←→				
	Higher Order Thinking Skills _____	200	1500	←→					
	Literature _____	80	700		←→				
MATHEMATICS	Computational skills _____	1000	6000		←→				
	Concepts _____	900	8000		←→				
	Problem Solving (Application) _____	150	800		←→				
	Geometry _____	150	700		←→				
	Calculator Math _____	20	100				←→		
	Higher Order Thinking Skills _____	100	700	←→					
	Algebra _____	250	1400				←→		
	Computer Science _____	90	300				←→		
LANGUAGE ARTS	Grammar _____	100	300		←→				
	Usage _____	200	1200		←→				
	Mechanics _____	150	2000		←→				
	Foreign Language (specify: _____)								
	Composition _____	170	2400		←→				
	Higher Order Thinking Skills _____	150	2000	←→					
SCIENCE	Science _____	1200	9000		←→				
	Higher Order Thinking Skills _____	500	1000		←→				
	Health _____	10	50				←→		
SOCIAL STUDIES	Social Studies _____	2100	13000		←→				
	Music _____	80	600				←→		
	Business Education _____	250	1000				←→		
	Higher Order Thinking Skills - S.S. _____	500	1000				←→		
	Home Economics _____	250	1100				←→		

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE	CD/ROM
item texts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
item graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-references to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by
Reference Technology, Inc.
Network Technology, Inc.
 purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i What type of computer do you use? (if micro, please indicate XT, AT, 286, etc.)

_____ XT, AT

j What is the approximate cost of your testing software?

k What is the name of your item banking/test scoring software package?

FIRST NATIONAL ITEM BANK & TEST DEVELOPMENT SYSTEM

k Is your software ?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor CDC
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Kansas Minimum Competency Test Item Bank

For information about the bank contact

Name John Poggio
 Title Project Director
 Organization University of Kansas
 Street School of Education
 City Lawrence State Kansas Zip 66045
 Phone: Area code 913 Number 864-3726

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- ~~test bank analysis data~~ Logist
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____	5	75		x					
	5	75		x	x	x			
	4	60		x	x	x	x		
	5	75		x	x	x	x		
	5	75			x	x	x	x	
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____ Measurement/Estimation _____	6	85		x	x	x	x		
	7	95		x	x	x	x		
	8	110		x	x	x	x		
	4	60		x	x	x	x		
	4	60		x	x	x	x		
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____	5	75		x	x	x	x		
	5	75		x	x	x	x		
	5	75		x		x	x		
SCIENCE Higher Order Thinking Skills _____									
HER Consumer Skills _____ Basic Life Skills _____	10	95				x	x		
	10	95				x	x		
Higher Order Thinking Skills _____									



7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by _____
US
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below.

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

- d. If your software handles test development, indicate its capabilities below:
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e. If your software handles scoring, please indicate its capabilities below:
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f. If your software handles reporting, please indicate its capabilities below:
- subtest profiles--student
 - subtest profiles--class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g. If your software handles student recordkeeping, please indicate its capabilities below.
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h. If your software has graphics capabilities, please indicate these below:
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

- i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)
- IBM (Mainframe & PC)
- NCS
- VAX

- j. What is the name of your item banking/test scoring software package?
- many--
- e.g., SPSS, Logist, etc.

- k. Is your software?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- l. What is the approximate cost of your testing software?
- INQUIRIES INVITED -??-

- m. Technical assistance in running the software is
- available from us
 - available through vendor
 - not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) _____

For information about the bank contact.

Name R.C. Johnson (Interim)
 Title Director, Dept. of Research and Evaluation
 Organization Palm Beach County Schools
 Street 3323 Belvedere Road
 City West Palm Beach State Florida Zip 33402
 Phone: Area code 305 Number 684-5114

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications; detailed content descriptions etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ?	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ?	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ?	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
- A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____									
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____ Algebra I _____ Algebra II _____	66	331		x	x	x			
	88	469		x	x	x			
	144	718		x	x	x			
	98	392					x		
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____									
SCIENCE Higher Order Thinking Skills _____									
OTHER Higher Order Thinking Skills _____									



7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by
internally developed
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically scores answer keys
- prints test
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below:

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM 4381 Mainframe

j. What is the name of your item banking/test scoring software package?

Internally developed
programs

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

Would have to be specifically discussed with interested party.

l. What is the approximate cost of your testing software?

Would have to be specifically discussed with interested party

m. Technical assistance in running the software is:

- available from us
 - available through vendor
 - not available
- Would have to be specifically discussed with interested party.

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Language Arts, Social St., Reading, and Math Grades 3-8

For information about the bank contact

Name Dan Penhallegon
 Title Director, Testing and Evaluation
 Organization Yakima School District
 Street 104 N. 4th Avenue
 City Yakima State WA Zip 98902
 Phone: Area code 509 Number 575-3484

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____	35	200		X	X	X			
	Structural Analysis _____	30	200		X	X	X			
	Vocabulary _____	25	200		X	X	X			
	Comprehension _____	85	500		X	X	X			
	Reading Readiness _____									
	Reference (Study) Skills _____	40	200		X	X	X			
	Higher Order Thinking Skills _____									
MATHEMATICS	Computational skills _____	200	2,500		X	X	X			
	Concepts _____	65	1,000		X	X	X			
	Problem Solving (Application) _____	50	1,000		X	X	X			
	Geometry _____	10	500			X	X			
	Calculator Math _____									
	Higher Order Thinking Skills _____									
LANGUAGE ARTS	Grammar _____	X	800			X	X			
	Usage _____	X	800			X	X			
	Mechanics _____	X	1,200			X	X			
	Foreign Language (specify: _____)									
	Composition _____									
	Higher Order Thinking Skills _____									
SCIENCE	_____									
	Higher Order Thinking Skills _____									
SOCIAL STUDIES	Social Studies _____	X	1,500			X	X			

OTHER	Higher Order Thinking Skills _____									

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- stem type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9 In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using
CAM PLUS
- specially designed for our system by
District Staff
- purchased from test or research organization

c If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- can print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Wang System 4000
Apple IIe
Apple Macintosh
MicroVax II

j What is the approximate cost of your testing software?

Not Available

k What is the name of your item banking/test scoring software package?

Locally developed

l Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

SECTION B

PRE-DEVELOPED TESTS ONLY AVAILABLE

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) _____

For information about the bank contact:

Name Judy Ringaman
 Title Manager of Customized Tests
 Organization American Guidance Service
 Street Publishers' Building
 City Circle Pines State MN Zip 55014
 Phone: Area code 612 Number 786-4343

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____		750				X	X		
		400				X	X		
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____		300				X	X		
		300				X	X		
		300				X	X		
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____ Medical/Clerical _____									
		800							X
SCIENCE _____ Higher Order Thinking Skills _____									
OTHER _____ Higher Order Thinking Skills _____									
		160							

7. Which of the following can be used to retrieve items? (Check all that apply)
- objective to be tested
 - item difficulty
 - item type (e.g., multiple-choice)
 - cognitive level (e.g., recall, inference)
 - key words
 - other content area, blueprint
location
 - none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)
- Bloom's Taxonomy
 - other well-known cognitive taxonomy, please list _____
 - modified an existing taxonomy, please list _____
 - developed our own cognitive taxonomy
 - other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Item graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below.

- subtest profiles-- student
- subtest profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

Prime _____

l. What is the approximate cost of your testing software?

j. What is the name of your item banking/test scoring software package?

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is:

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

Just getting off the ground. Responses included here not necessarily true of entire item bank, but will be true of all items eventually.

ITEM BANK DATA SHEET

Detroit Pub Schools

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) DET High School Proficiency Exam.

DET. Assessment of Basic Skills

For information about the bank contact

Name Sharon Johnson-Lewis
 Title Director Evaluation & Testing
 Organization Detroit Public Schools
 Street 5035 Woodward
 City Detroit State MI Zip 48202
 Phone: Area code 313 Number 494-2022

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____		X						
	Structural Analysis _____								
	Vocabulary _____			X	X	X	X		
	Comprehension _____		X	X	X	X			
	Reading Readiness _____								
	Reference (Study) Skills _____					X	X		
	Higher Order Thinking Skills _____								
MATHEMATICS	Computational skills _____		X	X	X	X			
	Concepts _____		X	X	X	X	X		
	Problem Solving (Application) _____		X	X	X	X	X		
	Geometry _____		X	X	X	X			
	Calculator Math _____								
	Higher Order Thinking Skills _____								
LANGUAGE ARTS	Grammar _____				X	X	X		
	Usage _____				X	X	X		
	Mechanics _____								
	Foreign Language (specify: _____)								
	Composition _____		X	X	X	X	X	X	
Higher Order Thinking Skills _____									
SCIENCE	_____								
	Higher Order Thinking Skills _____								
OTHER	_____								
	Higher Order Thinking Skills _____				X	X	X	X	X

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7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

- d** If your software handles test development, indicate its capabilities below
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____
-
-

- e** If your software handles scoring, please indicate its capabilities below
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____
-
-
-

- f** If your software handles reporting, please indicate its capabilities below
- subtest profiles--student
 - subtest profiles--class
 - summary reports
 - cross reference to materials/methods
 - other _____
-
-
-

- g** If your software handles student recordkeeping, please indicate its capabilities below.
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____
-
-

- h.** If your software has graphics capabilities, please indicate these below:
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

l What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

- k** Is your software?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- m.** Technical assistance in running the software is
- available from us
 - available through vendor
 - not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) END-OF-COURSE EXAMINATIONS (Secondary Level, grades 7-12)

For information about the bank contact.

Name Dr. Valeria A. Ford
 Title Director, Student Assessment Office
 Organization District of Columbia Public Schools
 Street 415 Twelfth Street, N.W. Suite 1001
 City Washington State D.C. Zip 20004
 Phone: Area code 202 Number 724-4164

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply) Planned for implementation over the next 3 years

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

Planned over the next 3 years

Planned over the next 3 years

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	Planned for implementation over the next 3 years
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
- A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____									
	Structural Analysis _____									
	Vocabulary _____ Development _____					X	X			
	Comprehension _____					X	X			
	Reading Readiness _____									
	Reference (Study) Skills _____					X	X			
	Higher Order Thinking Skills _____ Remedial/corrective Reading _____ Development Reading I _____						X	X		
MATHEMATICS	Computational skills _____									
	Concepts _____									
	Problem Solving (Application) _____									
	Geometry _____					X	X			
	Calculator Math _____									
	Higher Order Thinking Skills _____ Elementary Algebra _____ Essential Mathematics I _____						X	X		
LANGUAGE ARTS	Grammar _____									
	Usage _____									
	Mechanics _____									
	Foreign Language (specify: _____)									
	Composition _____									
	Higher Order Thinking Skills _____ English I _____ English II _____						X		X	
SCIENCE	Biology _____							X		
	Science for Decision Making _____							X		
	Higher Order Thinking Skills _____ Laboratory Skills _____							X		
OTHER	History & overnment of D.C. _____					X	X			
	Civics _____					X	X			
	Higher Order Thinking Skills _____ World Cultures _____						X	X		

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7. Which of the following can be used to retrieve items? (Check all that apply)
System to be implemented over the next

- objective to be tested 3 years.
(#s 7, 9, & 10)
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (if you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) ^{will} ~~are~~ this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- if you checked the above box, please list the programs you are using

- specially designed for our system by
In-house personnel
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

Our choice will handle:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below:

- subtest profiles--student
- subtest profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below. Decision not made yet.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Microcomputer

Sperry

IBM

j. What is the name of your item banking/test scoring software package?

Item Banking: Test Builder
(Data Guide)

Test Scoring: In-House
developed system

k. Is your software:?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

l. What is the approximate cost of your testing software?

Item Banking = \$1500.00

Test Scoring/Reporting approx. \$10,000.00

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) District Item Bank - Grades 3, 5, 8, and 10

For information about the bank contact

Name Dr. Thomas H. Fisher
 Title Administrator, Assessment, Testing, and Evaluation
 Organization Department of Education
 Street 506 Knott Building
 City Tallahassee State Florida Zip 32399
 Phone: Area code 904 Number 488-8198

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration) (grades 3 and 10 only)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____								
	Vocabulary _____	5	124			X	X	X	
	Comprehension _____	10	228			X	X	X	
	Reading Readiness _____								
	Reference (Study) Skills _____	5	74			X	X		
	Higher Order Thinking Skills _____								
MATHEMATICS	Computational skills _____	37	373			X	X	X	
	Concepts _____	23	231			X	X	X	
	Problem Solving (Application) _____	17	117			X	X		
	Geometry _____	3	32			X	X		
	Calculator Math _____								
	Higher Order Thinking Skills _____								
LANGUAGE ARTS	Grammar _____	10	60			X	X		
	Usage _____								
	Mechanics _____	15	198			X	X	X	
	Foreign Language (specify: _____)								
	Composition _____								
	Higher Order Thinking Skills _____								
	Organizing _____	6	48			X	X		
Applying Information _____	7	56			X	X			
SCIENCE	_____								
	Higher Order Thinking Skills _____								
OTHER	_____								
	Higher Order Thinking Skills _____								

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other Unique item number
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9 In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____
- _____
- _____
- _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

d If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

l What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

k Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Maryland Functional Testing Program

For information about the bank contact:

Name Dr. Robert Gabrys
 Title Chief, Program Assessment, Eval. & Instr. Support Branch
 Organization Maryland State Department of Education
 Street 200 W. Baltimore Street
 City Baltimore State MD Zip 21201
 Phone: Area code 301 Number 333-2382

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____								
	Structural Analysis _____								
	Vocabulary _____	2	15				X	X	
	Comprehension _____	30	240				X	X	
	Reading Readiness _____								
	Reference (Study) Skills _____	17	115				X	X	
	Higher Order Thinking Skills _____								
	Understanding Forms _____	8	115				X	X	
MATHEMATICS	Following Directions _____	17	115				X	X	
	Computational skills _____	13	240				X	X	
	Concepts _____	4	90				X	X	
	Problem Solving (Application) _____	6	90				X	X	
	Geometry _____								
	Calculator Math _____								
	Higher Order Thinking Skills _____	NONE							
	Using Data _____	3	90				X	X	
LANGUAGE ARTS	Measurement _____	4	65						
	Grammar _____								
	Usage <u>Grade 9 only*</u>	5	70					X	
	Mechanics <u>Cap., punc.; Gr. 9 only*</u>	16	140					X	
	Foreign Language (specify: _____)								
	Composition <u>Grade 9: 2 essays</u>	23	2					X	
	Higher Order Thinking Skills _____								
SCIENCE	<u>Grade 7: Multiple choice</u>	39	45				X		

	Higher Order Thinking Skills _____								
CITIZENSHIP	_____								
	Citizenship _____	23	255					X	
HIGHER ORDER THINKING SKILLS	_____								
	Higher Order Thinking Skills _____								

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Item graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other We also use
MicroCat for
micro-computer
adaptive testing

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by Staff
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other Rasch calibrating and linking; item info. banking; other item and score analyses

f. If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other subtest and test projects for school and LEA

g. If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below.

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

HP3000

l. What is the approximate cost of your testing software?

\$200,000

j. What is the name of your item banking/test scoring software package?

Link

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

We use MicroCat for adaptive testing; currently undergoing field testing. We are just beginning to develop frameworks for thinking skills assessment.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) _____

For information about the bank contact

Name James L. Friedebach
 Title Director, Testing & Assessment
 Organization Dept. of Elem. & Sec. Education
 Street PO Box 480
 City Jefferson City State MO Zip 65102
 Phone: Area code 314 Number 751-1395

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test developer personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED		NO	
	YES	NO		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED		NO	
	YES	NO		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		printing of test materials
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		development of individual student profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		assistance in interpreting test data

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	ITEMS	GRADE LEVEL (AGE)						College	Adult
			Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)			
READING	Phonetic Analysis _____	Core competencies have been developed for grades								
	Structural Analysis _____	2 through 10 inclusive. The area of Reading/Language/								
	Vocabulary _____	Arts/English, Math, Science, Social Studies/Civics are								
	Comprehension _____	included in the Core competencies/key skills.								
	Reading Readiness _____	Approximately 25 core competencies/key skills have been								
	Reference (Study) Skills _____	identified per grade. For more technical information								
	Higher Order Thinking Skills _____	please contact: Dr. Steve Osterland, Director								
		Center for Educational Assessment								
		403 E uth 6th Street								
		Columbia, MO 65211								
MATHEMATICS	Computational skills _____									
	Concepts _____									
	Problem Solving (Application) _____									
	Geometry _____									
	Calculator Math _____									
Higher Order Thinking Skills _____										
LANGUAGE ARTS	Grammar _____									
	Usage _____									
	Mechanics _____									
	Foreign Language (specify: _____)									
	Composition _____									
Higher Order Thinking Skills _____										
SCIENCE	_____									
	Higher Order Thinking Skills _____									
OTHER	_____									
	Higher Order Thinking Skills _____									

180

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by
University of Mo.
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below.

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

- d If your software handles test development, indicate its capabilities below
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e If your software handles scoring, please indicate its capabilities below
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f If your software handles reporting, please indicate its capabilities below
- subtest profiles-- student
 - subtest profiles-- class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g If your software handles student recordkeeping, please indicate its capabilities below:
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h If your software has graphics capabilities, please indicate these below
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

l What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

- k Is your software?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

- m Technical assistance in running the software is
- available from us
 - available through vendor
 - not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Pennsylvania Educational Quality Assessment

For information about the bank contact

This is a test package not an item bank

Name Dr. Richard L. Kohr
 Title Testing and Evaluation Supervisor
 Organization Pennsylvania Department of Education
 Street 333 Market Street
 City Harrisburg State PA Zip 17126-0333
 Phone: Area code 717 Number 787-4234

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this test bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications; detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the ^{test's} bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the ^{test} bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank? test

YES	CAN BE		NO	
	ARRANGED	one copy of a test		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		all or most of the bank is available for sale
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE		NO	
	ARRANGED			
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		assistance in interpreting test data
				other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____		48			X	X	X			
	MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____		8-20			X	X	X		
			20			X	X	X		
			20-32			X	X	X		
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (Specify: _____) Composition _____ Higher Order Thinking Skills _____		(48-64)			X	X	X			
SCIENCE Life, Physical, Earth & Space _____ Higher Order Thinking Skills _____		30-44			X	X	X			
OTHER See Attachment _____ Higher Order Thinking Skills _____										
		184								

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other Test booklet with all items in the content area
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

-Item text is simply a test booklet which also shows the graphic
 -Item statistics are shown on a printout

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c If your software handles item management, indicate its capabilities below.

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

- d** If your software handles test development, indicate its capabilities below.
- on-line generation of tests
 - can use various criteria for selecting items
 - can add/delete/change items that are computer selected
 - automatically stores answer keys
 - prints tests
 - has special print features
 - will print multiple forms
 - other _____

- e** If your software handles scoring, please indicate its capabilities below:
- mark sense reader
 - subtest and total scores
 - objective mastery
 - item statistics
 - test statistics
 - other _____

- f** If your software handles reporting, please indicate its capabilities below
- subtest profiles-- student
 - subtest profiles--class
 - summary reports
 - cross reference to materials/methods
 - other _____

- g** If your software handles student recordkeeping, please indicate its capabilities below..
- by objective mastered
 - total scores over time
 - gradebook or series of scores
 - other _____

- h** If your software has graphics capabilities, please indicate these below
- can generate most graphics
 - can attach external graphics to item text
 - can generate graphics and merge them in with item text
 - can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

j. What is the name of your item banking/test scoring software package?

- k** Is your software.?
- available on exchange agreement
 - available for purchase from vendor
 - available for purchase from you
 - not available for others

l What is the approximate cost of your testing software?

- m** Technical assistance in running the software is
- available from us
 - available through vendor
 - not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems



ITEM BANK DATA SHEET



Northwest Regional Educational Laboratory

Please type or write legibly This questionnaire will be photocopied.

Item Bank Title (if any) _____

For information about the bank contact:

Name Dr. John KauffmanTitle Vice President, MarketingOrganization Scholastic Testing Service, Inc.Street 480 Meyer RoadCity Bensenville State IL Zip 60106Phone: Area code 312 Number 766-7150

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
 classification of items by content
 general objectives or topic statements
 item specifications, detailed content descriptions, etc.
 suggested instructional activities
 cross references between objectives and appropriate instructional materials
 content review or other validity information
 reliability estimates
 p-values
 Rasch calibrations
 other item analysis data
 technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
 developed by state or local central office staff
 developed by test development personnel within your organization
 developed by an outside organization
 collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
 content review to match items to objectives
 content review to establish appropriate grade levels or age levels
 editing for clarity
 editing based on reviews by technical personnel
 editing based on technical data
 review for sex bias
 review for cultural and ethnic bias
 informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
 formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with any of the following content areas, please be sure to include it.

ART
PHYSICAL EDUCATION
HOME ECONOMICS
INDUSTRIAL EDUCATION
HEALTH
BUSINESS EDUCATION

MUSIC
CAREER DEVELOPMENT
CONSUMER SKILLS
BASIC LIFE SKILLS
LITERATURE
AFFECTIVE MEASURES

DRIVER'S EDUCATION
LISTENING SKILLS
SPEAKING SKILLS
CHEMISTRY
BIOLOGY
PHYSICAL SCIENCE

GOVERNMENT
CITIZENSHIP
U.S. HISTORY
WORLD HISTORY
GEOGRAPHY

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____	1	26		X	X				
Structural Analysis _____	3	23		X	X				
Vocabulary _____	2	390		X	X	X	X		
Comprehension _____	3	415		X	X	X	X		
Reading Readiness _____									
Reference (Study) Skills _____	4	550		X	X	X	X		
Auditory Discrimination _____	1	28		X	X				
Visual Discrimination _____	1	18		X					
MATHEMATICS Computational skills _____	9	450		X	X	X	X		
Concepts _____	14	100		X	X	X	X		
Problem Solving (Application) _____	16	330		X	X	X	X		
Geometry _____	1	36		X	X	X	X		
Calculator Math _____	-	-							
LANGUAGE ARTS Grammar _____	2	150		X	X	X	X		
Usage _____	1	279		X	X	X	X		
Mechanics _____	3	350		X	X	X	X		
Foreign Language (specify: _____)	-	-							
Composition _____	1	90			X	X	X		
Listening _____	4	37		X					

7 Which of the following can be used to retrieve items? (Check all that apply.)

- objective to be tested
- item difficulty
- item type (e.g. multiple-choice)
- cognitive level (e.g. recall/inference)
- key words
- other _____
- none

8 In what form are the following available? (Check all that apply.)

	HARD COPY	COMPUTER TAPE	OTHER	NOT AVAILABLE
item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. If computer software is used to support item banking, please answer the following questions. In each case, check all responses that apply.

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

b. What is the origin of the software?

- specially designed for this system, by whom STS Research Staff
- application programs adapted from generic software (e.g. spreadsheets, data base management)
- other _____

d. If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

f. If your software handles reporting, please indicate its capabilities below:

- subtest profiles — student
- subtest profiles — class
- summary reports
- cross-reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. What type of computer do you use?

Honeywell

k. What is the approximate cost of your software?

i. What general data base or other standard programs do you use in your system?

l. Is technical assistance available to help others get your software running?

YES NO

j. Is your software available for others to use or adapt?

YES NO

10. Please provide any descriptive comments or explanatory information you wish to make about your item bank and testing systems on a separate sheet of paper.

STS Testing Program Development Process

1. Curricular outlines reviewed with District staff
2. Testing objectives selected
3. Items written to match objectives
4. Administrator's manual and other ancillary materials prepared
5. Data processing programs developed
6. Items in Steps 3, 4, and 5 reviewed, revised, and approved
7. Field testing
8. Items (with analyses) and ancillary materials reviewed, revised, and approved
9. Final test materials constructed
10. All materials printed and delivered
11. Tests administered and scored
12. Results analyzed and reported

For further information please contact:

John D. Kauffman, Ph.D.
Vice President, Marketing
Scholastic Testing Service, Inc.
480 Meyer Road
P. O. Box 1056
Bensenville, Illinois 60106
(312) 766-7150

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Basic Skills Assessment Program, Grades 1, 2, 3, 6, 8, and Exit Examination

For information about the bank contact

Name Vana Meredith Dabney
 Title Chief Supervisor, Educational Assessment
 Organization S. C. Department of Education
 Street 1429 Senate Street, Room 607
 City Columbia State S. C. Zip 29201
 Phone: Area code 803 Number 734-8266

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization **IOX initially plus committees later**
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank:

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data
			other _____

- 6 Please place "Xs" in the appropriate spaces to indicate the subject area and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
- A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)							
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult	
READING	Phonetic Analysis _____	1	5-26		X	X				
	Structural Analysis _____	1	7-22		X	X	X	X		
	Vocabulary _____	1	7-20		X	X	X	X		
	Contextual Word Meaning _____	1	11-34		X	X	X	X		
	Main Idea _____	1	25-100		X	X	X	X		
	Reading Readiness _____	18	50	X						
	Reference (Study) Skills _____	1	22-100		X	X	X	X		
	Higher Order Thinking Skills (Analysis of Literature and Inference) _____	1	54-200		X	X	X	X		
	Details _____	1	25-100		X	X	X	X		
	Computational skills (Operations) _____	1	29-100		X	X	X	X		
MATHEMATICS	Concepts _____	1	28-100		X	X	X	X		
	Problem Solving (Application) _____	1	23-100		X	X	X	X		
	Geometry _____	1	25-100		X	X	X	X		
	Calculator Math _____									
	Higher Order Thinking Skills _____									
	Measurement _____	1	25-100		X	X	X	X		

LANGUAGE ARTS	Grammar Sentence formation _____	1								
	Usage _____	1	One prompt per assessment;							
	Mechanics _____	1	with 7 to 35 prompts in the							
	Foreign Language (specify: _____) _____		pool							
	Composition _____	1								
	Higher Order Thinking Skills _____									
SCIENCE	_____									

	Higher Order Thinking Skills _____									
OTHER	_____									

Higher Order Thinking Skills _____										

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9 In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using

- specially designed for our system by
Huynh Huynh
University of South Carolina
- purchased from test or research organization

c If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d If your software handles test development, indicate its capabilities below.

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print feature:
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials, methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other: _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

Mainframe

What is the name of your item banking/test scoring software package?

South D

BSAP Test

Genator

k Is your software ?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

l What is the approximate cost of your testing software?

Difficult to assess since consultant costs contains numerous other activities.

m. Technical assistance in running the software is

- available from us
 - available through vendor
 - not available
- Huynh Huynh - Consultant

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Wisconsin DPI Item Bank

For information about the bank contact:

Name Dr. John H. Thomas
 Title Item Bank Coordinator
 Organization Wisconsin Dept. of Public Instruction
 Street 125 S. Webster
 City Madison State WI Zip 53707
 Phone: Area code 608 Number 266-3089

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____	250			250	0	0		
	Structural Analysis _____	100			55	35	10		
	Vocabulary _____	600			200	250	100		
	Comprehension _____	1,200			380	550	270		
	Reading Readiness _____	-0-							
	Reference (Study) Skills _____	1,000			300	500	200		
	Higher Order Thinking Skills _____								
MATHEMATICS	Number & Numeration & Computation skills applications _____	690			129	410	151		
	Concepts vocabulary & symbolism _____	811			237	399	175		
	Measurement skills & applications _____	587			113	275	199		
	Geometry skills & applications _____	112			9	50	53		
	Calculator Math _____	-0-							
	Problem solving _____	99			38	33	28		
	Organizaing Info. skills & appl. _____	178			26	103	49		
LANGUAGE ARTS	Variables & relations skills & appl. _____	103			2	16	85		
	Grammar _____	750			250	250	250		
	Usage _____	400			100	150	150		
	Mechanics _____	600			200	200	200		
	Foreign Language (specify: _____) _____	-0-							
	Composition skills (machine scored only) _____	800			200	300	300		
	Higher Order Thinking Skills _____								
SCIENCE	_____								
	Higher Order Thinking Skills _____								
OTHER	_____								
	Higher Order Thinking Skills _____								
		197							

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE	
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This may change in future
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using
Current programs use Xerox Proprietary system. Use of MacIntosh Programs is under active consideration
- specially designed for our system by _____
- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other Test Construction

d. If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
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- prints tests
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- will print multiple forms
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- subtest profiles -- class
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- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

Possible not done

h. If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text system
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Xerox star 8010 consideration of moving to Apple MacIntosh

l. What is the approximate cost of your testing software?

j. What is the name of your item banking/test scoring software package?

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is:

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Wyoming Clearinghouse for Basic Skills

For information about the bank contact:

Name Alan G. Wheeler
 Title Administrative Assistant, Curriculum & Inst.
 Organization State Department of Education
 Street Hathaway Bldg
 City Cheyenne State Wy Zip 82002
 Phone: Area code 307 Number 777-6808

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
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- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

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- review to verify appropriate content
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- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
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5. What additional services related to the bank can be provided? (check all that apply)

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<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	assistance in interpreting test data

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

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CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____ Reading (General) _____									
	200	800		x	x	x			
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____ _____									
	200	800		x	x	x			
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____ Language Arts (including writing) _____									
	300	1200		x	x	x			
SCIENCE _____ _____ Higher Order Thinking Skills _____									
OTHER Democratic Governance _____ Free enterprise _____ Higher Order Thinking Skills _____									
	300	650		x	x	x	x		
	250	500		x	x	x	x		

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
 - test development
 - scoring
 - reporting
 - student recordkeeping
 - cross-reference to materials
 - on-line test administration
 - other _____
- _____
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
 - If you checked the above box, please list the programs you are using
- _____
- _____
- _____
- specially designed for our system by
- _____
- _____
- purchased from test or research organization
- _____
- _____

c. If your software handles item management, indicate its capabilities below

- stores items
 - full-screen editing
 - can add/delete/change items
 - can add/delete/change item classifications
 - will handle user history
 - will handle test analysis
 - other _____
- _____
- _____
- _____
- _____

d If your software handles test development, indicate its capabilities below:

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below:

- subtest profiles -- student
- subtest profiles -- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below.

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below:

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

l. What is the approximate cost of your testing software?

j. What is the name of your item banking/test scoring software package?

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is.

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

SECTION C

PROPRIETARY ITEM/TEST COLLECTIONS

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Basic Competency Tests/Alabama High School Graduation Examination (AHSGE)

For information about the bank contact

Name Dr. Anne Hess
 Title Coordinator of Student Assessment
 Organization State Department of Education
 Street 1020 Monlicello Court
 City Montgomery State AL Zip 36117
 Phone: Area code 205 Number 261-5241

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports AHSGE

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administrator procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____			X	X				
	Structural Analysis _____			X	X	X	X		
	Vocabulary _____			X	X	X	X		
	Comprehension _____			X	X	X	X		
	Reading Readiness _____								
	Reference (Study) Skills _____								
	Higher Order Thinking Skills _____								
MATHEMATICS	Computational skills _____			X	X	X	X		
	Concepts _____			X	X	X	X		
	Problem Solving (Application) _____			X	X	X	X		
	Geometry _____			X	X	X	X		
	Calculator Math _____								
	Higher Order Thinking Skills _____								

LANGUAGE ARTS	Grammar _____			X	X	X	X		
	Usage _____			X	X	X	X		
	Mechanics _____			X	X	X	X		
	Foreign Language (specify: _____)								
	Composition _____								
	Higher Order Thinking Skills _____								
SCIENCE	_____								
	Higher Order Thinking Skills _____								
OTHER	_____								
	Higher Order Thinking Skills _____								

d If your software handles test development, indicate its capabilities below

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below.

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student
- subtest profiles-- class
- summary reports
- cross reference to materials/methods
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

l What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

k Is your software ?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems



7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

These are under our test security and are not available to outside sources.

Currently being placed on computer.

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using _____
- specially designed for our system by _____
- purchased from test or research organization _____

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____



ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Curriculum Master File

Item Bank Title (if any) _____

For information about the bank contact

Name Alison CawleyTitle Curriculum Development ConsultantOrganization Clark County School DistrictStreet 600 North Ninth StreetCity Las Vegas State Nevada Zip 89101Phone: Area code 702 Number 799-8454

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items *
 classification of items by content
 general objectives or topic statements
 item specifications, detailed content descriptions, etc.
 suggested instructional activities *
 cross references between objectives and appropriate instructional materials *
 content review or other validity information
 reliability estimates
 p-values
 IRT (latent trait) calibrations
 other item analysis data
 technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
 developed by state or local central office staff
 developed by test development personnel within your organization
 developed by an outside organization
 collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
 content review to match items to objectives
 content review to establish appropriate grade levels or age levels
 editing for clarity
 editing based on reviews by technical personnel
 editing based on technical data
 review for sex bias
 review for cultural and ethnic bias
 informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results) - SOME
 formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

* eventually will be installed on district mainframe (IBM)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	* tests are constructed based on objectives in the item bank selected by the user
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	printing of test materials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	* test scoring services
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of individual student profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

7 Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested *
- item difficulty
- item type (e.g., multiple-choice) *
- cognitive level (e.g., recall, inference) *
- key words *
- other subject, grade level *
- none

8 If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list Norris Sanders
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts *	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item graphics *	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

- item management *
- test development *
- scoring *
- reporting *
- student recordkeeping *
- cross-reference to materials *
- on-line test administration *
- other Curriculum revision

b From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc
- If you checked the above box, please list the programs you are using
D-Base 3 Plus Clipper
- specially designed for our system by _____
- purchased from test or research organization

c If your software handles item management, indicate its capabilities below.

- stores items *
- full-screen editing *
- can add/delete/change items *
- can add/delete/change item classifications *
- will handle user history* X
- will handle test analysis *
- other _____

* eventually will be installed on district mainframe (IBM)

d If your software handles test development, indicate its capabilities below

- on-line generation of tests *
- can use various criteria for selecting items
- can add/delete/change items that are computer selected *
- automatically stores answer keys *
- prints tests *
- has special print features
- will print multiple forms
- other _____

e If your software handles scoring, please indicate its capabilities below

- mark sense reader *
- subtest and total scores *
- objective mastery *
- item statistics
- test statistics
- other _____

f If your software handles reporting, please indicate its capabilities below

- subtest profiles-- student *
- subtest profiles--class *
- summary reports *
- cross reference to materials/methods *
- other _____

g If your software handles student recordkeeping, please indicate its capabilities below:

- by objective mastered *
- total scores over time *
- gradebook or series of scores *
- other _____

h If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

AT - now
eventually mainframe

l What is the approximate cost of your testing software?

Currently not determined

j What is the name of your item banking/test scoring software package?

Curriculum Master File

k Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you eventually
- not available for others

m Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

* eventually will be installed on district mainframe (IBM)

CURRICULUM MASTER FILE

Curriculum Master File (CMF) is a computerized data base retrieval system for all of the Clark County School District learning objectives, instructional activities, and related test items (K-12). The first phase of CMF involved inputting Clark County School District's learning objectives in a host computer. This phase is completed. CMF contains elementary learning objectives (K-6) in 14 subject areas and secondary learning objectives (7-12) in over 350 courses. CMF's second phase requires the linkage of existing objectives and test items. This phase will be ongoing. Currently test items are being correlated in elementary math and reading and secondary math, reading, and English. The third phase of CMF will tie existing instructional activities and resources to established learning objectives (K-12). Teachers at school sites will also be able to input instructional activities on the mainframe for teachers at other sites.

Currently Clark County School District is converting to a new mainframe. Once the conversion is completed, Curriculum Master File will be installed on the new mainframe. Each individual school (140 schools districtwide) will be able to utilize the CMF program at their sites through modems.

At that point, CMF will include K-12 learning objectives, test items, instructional activities, and resources. The system will also have the capability to perform test scoring and record keeping functions.

Clark County School District (CCSD) is currently working with a variety of test items. We have purchased the Northwest Evaluation Association items; the Northwest Regional Educational Laboratory items; the Merrill math, reading, and language art item banks; the National Assessment of Educational Progress items; and we have developed district items in math, science, and social studies, and English.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) PREPS, Inc. T.I.B.

For information about the bank contact

Name Hugh I. Peck
 Title PREPS Executive Director
 Organization PREPS, Inc.
 Street Box 5365
 City Mississippi State State MS Zip 39762
 Phone: Area code 601 Number 325-3717

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on test administration procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing or selecting objectives and item specifications
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	training on writing test items
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data

other _____

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
	OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING Phonetic Analysis _____ Structural Analysis _____ Vocabulary _____ Comprehension _____ Reading Readiness _____ Reference (Study) Skills _____ Higher Order Thinking Skills _____									
MATHEMATICS Computational skills _____ Concepts _____ Problem Solving (Application) _____ Geometry _____ Calculator Math _____ Higher Order Thinking Skills _____									
LANGUAGE ARTS Grammar _____ Usage _____ Mechanics _____ Foreign Language (specify: _____) Composition _____ Higher Order Thinking Skills _____									
SCIENCE _____ _____ Higher Order Thinking Skills _____									
OTHER _____ _____ Higher Order Thinking Skills _____									

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item statistics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
 - test development
 - scoring
 - reporting
 - student recordkeeping
 - cross-reference to materials
 - on-line test administration
 - other _____
- Item selection
- _____
- _____
- _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using
- _____
- _____
- _____
- specially designed for our system by
- _____
- purchased from test or research organization
- _____
- _____

c. If your software handles item management, indicate its capabilities below

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____
- _____
- _____
- _____

d. If your software handles test development, indicate its capabilities below.

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below:

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below:

- subtest profiles--student
- subtest profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

MSDOS - _____
 IBM PC or _____
 Clone _____

j. What is the name of your item banking/test scoring software package?

k. Is your software:?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

l. What is the approximate cost of your testing software?

not for sale _____

m. Technical assistance in running the software is:

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) _____

For information about the bank contact:

(not available)

Name Isabel E. Blomberg
 Title Director of Curriculum
 Organization MSD Washington Township
 Street 3801 E. 79th Street
 City Indianapolis State IN Zip 46240
 Phone: Area code 317 Number 845-9238

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- test items
- classification of items by content
- general objectives or topic statements
- item specifications, detailed content descriptions, etc.
- suggested instructional activities
- cross references between objectives and appropriate instructional materials
- content review or other validity information
- reliability estimates
- p-values
- IRT (latent trait) calibrations
- other item analysis data
- technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- developed by teachers
- developed by state or local central office staff
- developed by test development personnel within your organization
- developed by an outside organization
- collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- review to verify appropriate content
- content review to match items to objectives
- content review to establish appropriate grade levels or age levels
- editing for clarity
- editing based on reviews by technical personnel
- editing based on technical data
- review for sex bias
- review for cultural and ethnic bias
- informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- formal pilot testing (rigorous sampling and analysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available for sale
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	all or most of the bank is available free (or for cost of reproduction)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pre-developed tests are constructed from the item bank
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tests are constructed based on objectives in the item bank selected by the user
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	printing of test materials
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	test scoring services
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of individual student profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	development of class and school profiles
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on test administration procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing or selecting objectives and item specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	training on writing test items
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	assistance in interpreting test data
			other _____

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
- A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.
- B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
- C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

See attached indicators	Obj. & performance CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis _____									
	Structural Analysis _____									
	Vocabulary _____									
	Comprehension _____					X	X	X		
	Reading Readiness _____									
	Reference (Study) Skills _____									
	Higher Order Thinking Skills _____									
Totals	19	115								
MATHEMATICS	Computational skills _____									
	Concepts _____									
	Problem Solving (Application) _____					X	X	X		
	Geometry _____									
	Calculator Math _____									
	Higher Order Thinking Skills _____									
Totals	47	168								
LANGUAGE: ARTS	Grammar _____									
	Usage _____									
	Mechanics _____					X	X	X		
	Foreign Language (specify: _____)									
	Composition _____									
Higher Order Thinking Skills _____										
Totals	21	126								
SCIENCE	_____					X	X	X		
	Higher Order Thinking Skills _____									
Totals	34	204								
SOCIAL STUDIES	Social Studies _____					X	X	X		

Higher Order Thinking Skills _____										
Totals	44	264								
Grand Totals		115	219							

7. Which of the following can be used to retrieve items? (Check all that apply)

- objective to be tested
- item difficulty
- item type (e.g., multiple-choice)
- cognitive level (e.g., recall, inference)
- key words
- other _____
- none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)

- Bloom's Taxonomy
- other well-known cognitive taxonomy, please list _____
- modified an existing taxonomy, please list _____
- developed our own cognitive taxonomy
- other _____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	UNFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Item graphics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Item statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a. What function(s) does this software perform?

- item management
- test development
- scoring
- reporting
- student recordkeeping
- cross-reference to materials
- on-line test administration
- other _____

b. From where did you obtain this software?

- adapted from existing spreadsheets, databases, etc.
- If you checked the above box, please list the programs you are using

- specially designed for our system by

- purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

- stores items
- full-screen editing
- can add/delete/change items
- can add/delete/change item classifications
- will handle user history
- will handle test analysis
- other _____

d. If your software handles test development, indicate its capabilities below.

- on-line generation of tests
- can use various criteria for selecting items
- can add/delete/change items that are computer selected
- automatically stores answer keys
- prints tests
- has special print features
- will print multiple forms
- other _____

e. If your software handles scoring, please indicate its capabilities below

- mark sense reader
- subtest and total scores
- objective mastery
- item statistics
- test statistics
- other _____

f. If your software handles reporting, please indicate its capabilities below

- subject profiles--student
- subject profiles--class
- summary reports
- cross reference to materials/methods
- other _____

g. If your software handles student recordkeeping, please indicate its capabilities below

- by objective mastered
- total scores over time
- gradebook or series of scores
- other _____

h. If your software has graphics capabilities, please indicate these below.

- can generate most graphics
- can attach external graphics to item text
- can generate graphics and merge them in with item text
- can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc)

l. What is the approximate cost of your testing software?

j. What is the name of your item banking/test scoring software package?

k. Is your software?

- available on exchange agreement
- available for purchase from vendor
- available for purchase from you
- not available for others

m. Technical assistance in running the software is

- available from us
- available through vendor
- not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.