

CALIFORNIA STATE BOARD OF EDUCATION

MARCH 2004 AGENDA

SUBJECT

Standardized Testing and Reporting (STAR) Program: Approval of scope of work for the 2004-2005 California Alternate Performance Assessment (CAPA)



Action



Information



Public Hearing

RECOMMENDATION

Approve the extension of the CAPA contract through December 31, 2005, and direct the State Board's Testing Liaisons and Executive Director to work with the Department staff to finalize the CAPA Scope of Work.

SUMMARY OF PREVIOUS STATE BOARD OF EDUCATION DISCUSSION AND ACTION

The CAPA is an alternate assessment for students with significant disabilities who are unable to take the California Standards Tests, even with accommodations or modifications. Educational Testing Service (ETS) has had a two-year contract to develop, administer, and report the CAPA. This contract expires June 15, 2004.

In July 2003, the Board approved the performance standards for the CAPA English-Language arts and mathematic content areas. The Board approved the CAPA student report at its September 2003 meeting.

SUMMARY OF KEY ISSUES

Federal regulations require that an alternate assessment be offered for students with significant cognitive disabilities and the results from this assessment be included in the state's accountability system. The CAPA was developed through a contract with ETS and administered statewide for the first time in 2003. Since CAPA is part of the STAR Program, the continuity in the administration and reporting is vital. The 2004-2005 scope of work delineates the activities required of the contractor to continue the development of CAPA, administer the assessment in 2005, and report test results to districts, parents, and the public. These activities are closely aligned to the contract requirements for the STAR Program. An extension of the current contract with ETS will ensure the continuity of the STAR Program.

FISCAL ANALYSIS (AS APPROPRIATE)

The Department of Finance has authorized \$2.2 million from federal Title VI funds to support the 2004-05 administration of the CAPA.

ATTACHMENT

[Attachment 1](#): CAPA Scope of Work 2004-05 (42 pages)

[Attachment 2](#): CAPA/STAR Integration Contract (1 page)



Scope of Work

2004-2005

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Component 1: Test Development

The California Alternate Performance Assessment (CAPA) must be of the highest technical quality and follow professional guidelines outlined in the Standards for Educational and Psychological Testing (AERA, APA, NCME, 1999). That technical quality includes the appropriateness of the instrument to the students for whom it is designed. For the past two years, Educational Testing Service (ETS) has worked closely with the California Department of Education (CDE) and California practitioners to develop an alternate assessment for the Standardized Testing and Reporting (STAR) Program that reflects a fair assessment for students with significant cognitive disabilities. It is critical that CAPA maintains the validity and reliability standards set in the first two years of development. ETS has formed a team with the appropriate expertise to ensure that CAPA test development adheres to the highest professional standards and effectively serves its unique testing population.

A. Instrument Design

ETS will develop five (5) operational test forms in 2005, one for each of the five CAPA levels. Operational tests will be developed in the content areas of English language arts, mathematics and science. ETS will develop a science field test for grade-8. Students taking CAPA Levels I – V will be assessed in English Language Arts (ELA) and mathematics. Students in grades 5 and 10 will be tested in science.

In the content areas of ELA, mathematics, and science, there will be eight (8) operational items per level assessed, and possibly one (1) field test item. There will be multiple versions of each test form distributed throughout the state; each version of the ELA, mathematics, and science portions will have eight common items and one unique field test item. The science field test for 8th graders will have 72 unique field test items. The field test items associated with each content area will create an item pool large enough to support the construction of operational forms for the three content areas. As described above, the field tests will produce items for the operational tests that meet strict content and psychometric requirements. Table 1 shows the content areas for each level.

Table 1. CAPA Levels and Content

CAPA Level	Grade	Operational Content	Field test Content
I	2-11*	English Language Arts, mathematics	Science (Grades 5 & 10 only)
II	2-3	English Language Arts, mathematics	
III	4-5	English Language Arts, mathematics	Science
IV	6-8	English Language Arts, mathematics	
V	9-11	English Language Arts, mathematics	Science

*Students with profound disabilities – eligibility determined by the student’s Individualized Education Program.

Quantities of Items

ETS is responsible for developing items in the correct proportions so that the resulting item bank represents a distribution of items across all performance indicators and in the proportion required by the test blueprints. If the required number of items for any CAPA performance indicator is not being developed within the appropriate time frame, ETS will identify the number and kind of items needed and will give additional item writing assignments to highly experienced writers.

Table 2 indicates the number of items written at the 2003 item writing workshop and reviewed at the 2003 content review. It also gives the number of items being tested in 2004 and 2005 for English-Language Arts, mathematics, and science.

Table 3 shows the number of items that need to be developed for the 2005 forms by strand.

Table 2. CAPA Item Development Inventory

	ELA	Math	Science
Number of items written at Item Writer Workshop	» 180	» 220	» 270
Number of items reviewed during Content Review	Level I: 34 Level II: 17 Level III: 24 Level IV: 37 Level V: 34 Total: 146	Level I: 21 Level II: 23 Level III: 32 Level IV: 34 Level V: 24 Total: 134	Level I: 46 Level III: 66 Level V: 66 Total: 178
Number of items being prepared for Field Test	Level I: 15 Level II: 12 Level III: 19 Level IV: 22 Level V: 15 Total: 83	Level I: 14 Level II: 14 Level III: 24 Level IV: 21 Level V: 15 Total: 88	Level I: 24 Level III: 54 Level V: 34 Total: 112
For Field Test Ready Items*	» 42	» 33	78
Number of Operational Ready Items (Field Tested in 2002)	Level I: 1 Level II: 7 Level III: 6 Level IV: 2 (3) Level V: 1 (2) (1)	Level 1: 3 Level 2: 11 Level 3: 3 (5) Level 4: 4 (1) Level 5: (3) (1)	None
2004 Operational	8 Operational items per level – 5 Anchors and 3 Operational Ready Items per level (5 Levels)	8 Operational items per level – 5 Anchors and 3 Operational Ready Items per level (5 Levels)	
2004 Field Test	1 new field test item per 8 versions per 5 levels = 40 Field Test items	1 new field test item per 8 versions per 5 levels = 40 Field Test items	All new Field Test items: » 112
2005 Operational	8 Operational items per level – 5 Anchors and Operational Ready items per level (5 levels)		8 Operational items for Levels I,III,V – from 2004 field test
2005 Field Test	1 new field test item per version per 5 levels		All new field test items for grade 8, addressing Levels IV

* This number reflects the amount of stimulus cards in production. The actual number of stimulus cards in the 2004 stimulus card packet will be about half the amount shown.

Table 3. Number of Items Developed for 2005 by Strand

English Language Arts	
Strand	Number Of Items To Be Develop for 2005
Reading/Word Analysis	25
Sight Word Reading	45
Reading Comprehension	70
Writing/Writing Strategies	40
Listening	45
Speaking Applications	60
Mathematics	
Strand	Number Of Items To Be Develop for 2005
Number Sense	40
Counting and Money	25
Algebra and Functions	10
Measurement and Geometry	70
Statistics, Data Analysis and Probability	15
Science	
Strand	Number Of Items To Be Develop for 2005
Investigation and Experimentation	50
Physical Science	55
Life Science	30
Earth Science	15

Key features of each test item include:

- **Task Preparation**
A description of how to administer the item, including the presentation of materials. When applicable the task preparation will provide specific scoring specifications and specific adaptations for students with sensory or motor disabilities.
- **Cues and directions**
The exact words the examiner uses to elicit a response from the student
- **Scoring rubric**
Level I has a 5-point scoring rubric that emphasizes the student's degree of independence in attempting or completing a task. The 4-point scoring rubric for Levels II-V indicates the breadth and quality of the student's response. For Levels II-V the rubric is customized for each item by listing specific scoring criteria.

Materials with Items

Some items require stimulus cards and/or manipulative materials. ETS will design and produce the applicable stimulus cards, which the Test Creation System (TCS) will generate. In addition, districts will receive lists of manipulatives required for the administration of each version so districts can purchase which manipulatives that they need.

B. Item Reviews and Other Committees

The development and review of CAPA items is a collaborative partnership between the ETS CAPA Test Development team, the CDE and committees composed of California teachers, school administrators, special education student advocates, parents, and other educational stakeholders. ETS will convene the following committees to help develop new items and review, decline, and recommend proposed items:

- Item writing committee
- Content review committee

ETS will set up, coordinate, and facilitate these committees to the extent possible.

CAPA Meeting Logistics

ETS Program Management will meet all of the requirements for meeting logistics for the CAPA test development committees including:

- Identifying and arranging suitable accommodations and meeting space, including necessary A/V equipment
- Communicating with prospective committee members
- Handling all travel arrangements and reimbursing all allowable expenses for committee participants
- Collating, packing and shipping all meeting materials

ETS item development coordinators will prepare all meeting materials, such as agendas and training materials. The CDE will review and approve the materials in a timely manner. ETS will also develop the particular formats for presentation of the items with

the CDE's approval. ETS staff will prepare the items for the CAPA Content Review Committee meetings in three-ring binders. Each item will be presented on a single page and its appearance will closely resemble its appearance in a final published booklet. Any accompanying artwork, graphics and stimulus materials, including passages, will be included. Items may be presented to the committee members with the answer key marked or not marked, at the discretion of the CDE. The academic content standard being assessed by the item will be printed at the top of the page. ETS program management staff will print, collate, and package all meeting materials to be used by meeting facilitators and committee participants.

Security During Development and Review

During the development process, ETS staff members consistently follow these established security procedures, which represent best practices in the industry:

- Only authorized individuals will have access to test content at any step in the development, review, and data analysis processes
- ETS will keep in locked storage all hard-copy test content, computer disk copies, art, film, proofs, and plates when not in use
- ETS will shred working copies of secure content once they are no longer needed during the development process
- ETS will maintain careful control over all written communications with item writers and reviewers. Use of secure, traceable methods of delivery, such as express delivery service with a record of delivery will be kept for all mailings.

In addition, ETS requires any developers or reviewers to maintain security. During the development process, ETS staff members will consistently follow these established security procedures, which represent best practices in the industry:

- All individuals who participate in the content and bias/sensitivity reviews during the development process must sign the confidentiality/nondisclosure agreement before they receive access to any test content.
- Implications of signing the confidentiality/nondisclosure form for each committee member's personal behavior are explained before any materials are distributed.
- All copies of materials used during the review meetings are sequentially numbered. Individual committee members sign out for a specific numbered copy. Copies cannot be removed from the meeting room during the review process.
- All materials are collected and inventoried at the end of each meeting before individuals are allowed to leave the review room.
- Review committee members are permitted to write notes only in the review books and on evaluation sheets, which ETS' staff will collect.
- Committee members are not allowed to bring computers or similar devices into the review rooms.
- Rooms containing secure materials are kept locked when not in use

Item Writing Committee

This committee will develop on-demand performance items for the CAPA item bank, based on the subset of content standards identified for CAPA and the related CAPA performance indicators. Based on the inventory of items across levels, content, and standards, the Item Writing Committee will produce new items for future development. This committee will meet for two days in July 2004 in Sacramento. Item writers will receive an honorarium of \$100 per day or the district of employment will be reimbursed for substitute costs. ETS will recruit experienced CAPA item writers in addition to new item writers who apply and whom the CDE approves. ETS will be responsible not only for meeting logistics as described above, but also reimbursements for travel and lodging. ETS CAPA assessment specialists will oversee the item writing process.

In selecting the pool of item writers, ETS will seek appropriate balance and diversity. ETS will provide the CDE with the names and documentation of writers' qualifications for all item writers selected to write items for the program.

ETS will produce training materials for the item-writing committee meeting that includes an overview of the scope and purpose of the program, an overview of the California Content Standards, test and item specifications, including general and specific guidelines for item and rubric writing. The packet will also include sample items and any other materials requested by the CDE.

ETS will provide the committee members with an item-writing template. Prior to the meeting, ETS staff will determine the performance indicators in each content area and assign the writers for level. Previous inventory analysis done of the item pool statistics review will determine the performance indicators.

ETS will give the item writers a complete set of item specifications for all levels and contents subject to CDE approval. This document will guide item-writing and will be updated and revised after the item-writing workshop with recommendations from the participants.

Participants will also have a set of manipulatives and stimulus cards. One goal of the program is to utilize manipulatives from previous CAPA operational tests for new items and to limit the addition of new manipulatives. Item writers may use existing for new item development or develop new stimulus cards.

On the first day of the item-writing meeting, each participant will receive an ID number that matches the ID number on the materials they receive. ETS will record the ID numbers of each participant and the set of materials they receive. Participants will be required to sign a security agreement, notifying them of the confidentiality of the materials used in the item-writing process and prohibiting the removal of the materials from the meeting area. To ensure that all materials are accounted for, ETS will verify the participant IDs and material IDs at the end of each day and at the conclusion of the item-writing workshop.

Content Review Committee

The content review committee will review CAPA test items for the items' match to the standards and performance indicators, technical quality, and suitability for the students assessed. At the first meeting of this committee, participants will review the previous year's items and their statistical data. At the second meeting of this committee, they will review new items in the item writing pool. The first meeting will be in late June 2004, and the second meeting will be in early August. ETS will be responsible for meeting

logistics as described above and reimbursements for travel and lodging. ETS will recruit members of the 2003 content review committee.

The criteria for evaluating items will include overall technical quality, match to the California Content Standards, match to the construct being assessed by the standard, difficulty range, clarity, correctness of the answer, as well as more global issues, including appropriateness, difficulty, and readability. The committee will also be trained on how to make recommendations for revising items. The guidelines for reviewing items are summarized below.

Does the item—

- Have clear criteria for a performance or constructed response?
- Measure the content standard?
- Match the test item specifications?
- Align with the construct being measured?
- Test worthwhile concepts or information?
- Reflect good and current teaching practices?
- Have a prompt that gives the student a full sense of what the item is asking?
- Use developmentally appropriate language?
- Call for responses that are plausible and reasonable?
- Avoid clues to students, such as absolutes or words that, when repeated, constitute an appropriate response?
- Reflect content that is free from bias against any person or group?

Is the stimulus (if any) for the item—

- Required in order to answer the item?
- Likely to be interesting to students?
- Clearly and correctly labeled?
- Providing all the information needed to answer the item?

Does the rubric for the item—

- Cover a full range of stages of mastery with respect to achievement and independence?
- Use clearly-defined, non-overlapping stages of mastery?
- When possible, match rubrics for items with similar structure and/or content?
- Reflect an appropriate difficulty for the necessary level?

All items developed become the property of the CDE. Ownership is defined as those items that are taken to the committee for review.

Sensitivity Reviews

Internal Sensitivity Review

ETS assessment specialists who are specially trained to identify and eliminate performance items that contain content or instruction that could be construed to be offensive to or biased against members of specific ethnic, racial, or gender groups will conduct the next level of review. These trained staff members will review every item before it is prepared for committee review.

Statewide Pupil Assessment Review (SPAR) Panel

The CDE convenes this panel monthly to review all test items proposed for California statewide pupil assessment programs. This review guarantees that questions or items not solicit disclosure of a pupil's, or his or her parents'/ guardians' personal beliefs or evaluates the pupil's personal behavioral characteristics. ETS will be responsible for preparing proposed CAPA items for the SPAR committee and making a test development specialist available for questions or clarifying issues that the committee may have. ETS will delete or revise items as specified by the SPAR panel recommendations.

C. Generation of New Items and the Item Pool

The item development process will support the development and maintenance of a high-quality item pool for every content area of the CAPA. For operational forms, the content requirements of the test blueprint will govern the selection of items. Each operational item will also meet stringent psychometric requirements.

Items selected for operational forms will span a range of difficulty (average item score) and will be selected so that the forms parallel previous operational forms in test difficulty unless otherwise specified by the CDE. ETS will also include items that are easier and more difficult in order to increase the range of achievement that CAPA measures and to provide more meaningful and accurate scores for students at a wider range of performance levels. The CDE will provide any available information on form values for previous forms.

Item Attrition

The development plan includes an overage of items in each of the content areas. The overage in item development will allow for the elimination of any item that might be rejected during any phase of the item development process including ETS internal reviews, reviews by the CDE, and reviews by the committees of California educators including the content, community, and the SPAR Panel.

The items must be of sufficient quality to yield a sound psychometric design, to ensure curricular and instructional validity, and to lead to scores that are valid and reliable. Validity and reliability are subject to prevailing standards and what is feasible for students with disabilities. The item development plan takes into consideration the expectation that some items will need to be replaced each year.

The goal is to provide the CDE with more than 250 items across 5 levels and 2-3 content areas that are a true measure of knowledge or skill, an engaging task for students, and an example of reasonable assessment.

At least three factors can contribute to item attrition:

1. Committee Rejection

When committees review items, they may recommend that they not be used. In this case, the CDE could reject items.

2. Field Test Survival Rates

ETS develops statistics on each field test item to determine whether to use that item in an operational test. The average item score is impacted by how well the scoring rubric worked in a field test. This will be calculated after the 2004 administration.

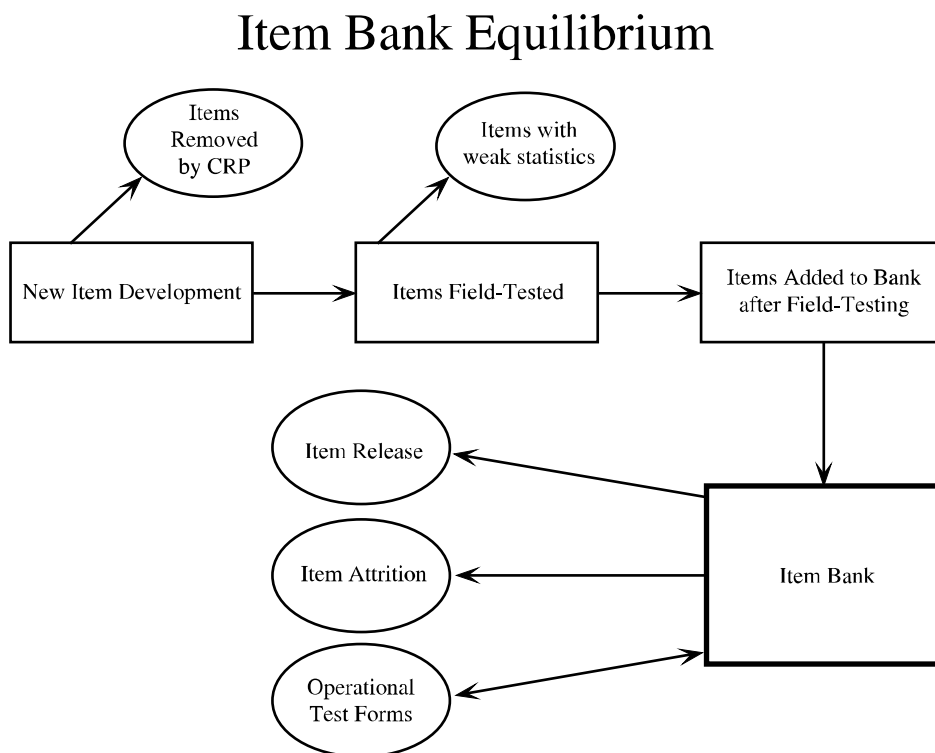
3. Released Items

A third item attrition factor is the numbers of items expected to be released to the public on an annual basis. Due to the uniqueness of this assessment and the student population, there are limited ways of writing test items. This impacts the release of items.

ETS plans to reuse at least five anchor items at each level and each content area. Two items or 25% of CAPA items will be released each year. ETS will work with the CDE to select the released items and rotate the level and content area of the released items to give a variety of items, but minimize depletion of any level or content area.

Figure 1 summarizes the inputs and outputs that create equilibrium in an item bank.

Figure 1. Item Bank Equilibrium



Electronic Item Banking System

ETS will incorporate CAPA items into the ETS-developed electronic database that includes STAR and CAHSEE items. The item bank will support future development of

CAPA operational forms. Each item will be in a separate PDF file. The database will include technical and other information about each item. It will also include:

- The item itself with any graphics or reading passages
- Dates of field testing
- Dates of live administration
- Form placement, and item statistics from each field-test and operational administration.

This will be a Structured Query Language (SQL) database and it will provide additional fields of data such classifications, any relevant difficulty estimates, any relevant fairness information and any relevant copyright information. The CDE will own the database, which will be refreshed as test items are developed, field tested, and used operationally. The SQL database will be integrated into the CAHSEE/STAR electronic item bank stored on the CDE internal network.

ETS will design and develop an electronic item bank that will meet all of the CDE requirements, including sufficient items for five years of test administration. The item bank will be in SQL 2000. The new item bank will permit the CDE staff to participate in the development and evaluation of CAPA test forms and review and report on the statistics and other data about items and forms. ETS will maintain the item bank on an ongoing basis throughout the life of the contract and provide the CDE with the latest versions of the item bank, on a CD ROM or through FTP transfer (at the CDE's option), on a schedule to be determined by the CDE.

The file for each item will contain:

- Item ID that links each item to the instructional level strand concept, and standard; representations of each item as it appears in the test booklets
- Full text
- Any artwork or other graphic images for stems
- Any artwork or other graphic images, or information for stimuli or props
- Content and standard codes, including CAPA levels
- Item author
- Answer keys
- Rubric
- Copyright information
- Item type
- Form information
- Status
- Data on stimuli with more than one associated item, with links to their associated items through a unique stimulus ID
- Data on set stimuli including their text, graphics, copyright information, length

- Community and content item reviewers' recommendations, including dates reviewed by each type of committee (entered after each panel meeting)
- SPAR Panel rejection/revision recommendations and comments, with dates (entered after the CDE has provided the information in a Word document or similar electronic file)
- Date of final CDE approval of the item
- All other documentation related to item development and field-test and operational statistics by administration
- Reason for removing items from the active database and the date of such removal
- Whether and when to release an item to the public

In addition, all items in the current CAPA item bank will be moved into the integrated item bank in July, 2004. The accuracy and completeness of the transfer of current and other items will be confirmed in two ways:

- Electronically comparing data from the current CAPA item bank to the corresponding data in the new item bank
- Printing the contents of the two databases and manually comparing the results

The SQL system delivered to the CDE will also include facilities for form construction, summary data for new forms and summary information about the contents of the item bank. In addition, the database will accommodate additional fields that the CDE requests or that will store historical information about individual items.

ETS will perform the following steps to design and build the electronic item bank

- Analyze the current CAPA item bank data dictionary to determine content, structure, and data definitions (July 2004)
- Design the needed user functions (ongoing)
- Obtain review and approval of the database structure and functions by the CDE and develop the functional capabilities
- Obtain approval of the database structure and functions by the CDE and develop the functional capabilities
- Develop and document database maintenance and updating procedures
- Design reports and forms for CDE and ETS staff
- Develop interfaces to other ETS systems as needed
- Conduct acceptance testing with the CDE
- Transfer any existing CDE items into the database and verify the accuracy and completeness of the transfer as described above (July 2004)

ETS will maintain statistics by administration for each item. We will link these data to the item data through the unique item ID. Historical data and statistics will include such data as instructional level, field-test date, operational test date, form position and item statistics such as p-value, index of reliability, mean square fit, equated item difficulty, point item-total correlation, scaled item difficulty, inter-rater reliability (for constructed response items), score point distributions, and bias analysis. ETS will add preliminary

item statistics to the database no more than eight weeks after completing a field-test or six weeks after completing the final student file for an operational test. ETS will verify the data two weeks after a final data file is available from each field-test or operational test administration.

E. Reliability Issues

Score reliability is an essential component to any assessment. ETS will adhere to reliability standards as set forth in the *Standards for Educational and Psychological Testing* and in accordance to what is feasible for the population of students with significant cognitive disabilities. Performance assessments present their own unique reliability issues that must be addressed. (This, of course, is coupled with the variance among this population of students in general.) One such issue is the agreement of multiple raters when scoring the same performance. The CAPA scoring rubrics are designed to include specific behavioral descriptors for each score point, which will serve to minimize subjectivity in the rating process and thereby facilitate score comparability and reliability.

To help ensure score reliability, raters must be adequately trained in the use of the scoring rubrics. Because of the critical nature of adequate rater training, ETS will consult with the CDE as needed to ensure information and resources are available for use in the rater training.

To provide sufficient data for the estimation of rater reliability while minimizing the cost in terms of teacher and student administration time, districts should routinely double-rate 10% of examinees in each content area to continuously monitor rater reliability. The raters should be trained school staff who are licensed or certificated and familiar with the characteristics of students with special needs. For students who are rated by two raters, the rating assigned by the primary rater, or examiner, will be used in the calculation of the students content category.

Coefficient alpha, inter-rater reliability, and standard errors of measurement will be reported for each content category score. Generalizability analyses will be conducted to estimate variance due to the student by task interaction and, when multiple raters are used, to estimate rater variance. Decision studies will be performed to estimate the generalizability coefficient for the design and to provide information as to the optimal number of tasks, and raters necessary to achieve a generalizability coefficient of at least 0.80.

Assessment design procedures are intended to minimize the changes in the assessment that need to be made from one year to the next. While some changes will be necessary due to the rotation of items or content areas, it is intended that procedures, rubrics, and most of the item stimuli themselves will remain constant from one year to the next, thereby enabling the comparability of the CAPA assessment from year to year.

ETS will maintain 5 common items from year to year and version to version within each assessment level. These 5 common items will be used to equate the CAPA forms from year to year so that score comparability is maintained. To ensure high-quality calibrations for the constructed response tasks, ETS will use the proprietary version of the PARSCALE computer program. This program allows for flexible estimation of item parameters for polytomously scored items. For the constructed response items, the fitted model will be the Rasch generalized partial credit model.

All CAPA forms will have embedded field test sections and ETS will calibrate the field test items simultaneously with the operational items and link them to the operational scale through a common-item equating design. The general process for calibrating and scaling the embedded field test items will be similar for each administration. The specific steps that will be completed for the calibration of items will be:

1. Conduct preliminary item analyses for all items, confirming that the statistical performance of all items is satisfactory. Before calibrating the items, remove items identified as flawed or requiring revision (e.g., negative item-total correlation).
2. Simultaneously calibrate the field test items with the operational items, employing the Rasch generalized partial-credit model for all tasks.
3. Evaluate model-data fit. ETS will evaluate fit statistics in conjunction with plots of model-data fit that are generated by the GENASYs system. ETS will evaluate items flagged for potential misfit with respect to their impact on test specifications, psychometric quality and coverage of academic content standards and strands.
4. Link the item parameter estimates for the field test items to the operational scale through a set of anchor or linking items consisting of operational items from previous administrations. Equate 2004 forms to the 2003 form using the Rasch partial credit model. Note that in standard one-parameter model analyses, this consists of setting the mean of the anchor item parameters based on the new calibrations equal to the mean of the anchor item parameters in the previous calibrations.

ETS scaled the English-language arts and Mathematics CAPA following the 2003 administration. ETS used the raw scale cuts identified in the June 2003 standard setting for each test level to determine the scaled score range for each performance level: advanced, proficient, basic, below basic, and far below basic. In 2004/2005 ETS will need to hold a standard setting to determine the raw scale cuts for Science. The current CAPA scale and the new Science scale adhere to the following guidelines:

- Is non-vertical
- May be used to equate forms within years
- Must be able to be used to equate forms from year to year
- Is unique so that it is not misinterpreted as relating to any nationally administered test. The scale does relate to the scale used for the California Standards Tests.
- Has the proficient level set at a scale score of 35 and the basic level set at a scale score of 30

F. Statistical Analysis

ETS will carry out most of the ongoing psychometric work for the California Alternate Performance Assessment (CAPA) using a statistical analysis system called GENASYs, which is proprietary software developed by ETS. The GENASYs system contains components for establishing testing program statistical information, processing examinees, traditional item analyses, and IRT analyses. The GENASYs system has been developed to analyze both items scored right/wrong (selected-response items) and items scored for partial credit (constructed-response items) as is the type in CAPA.

ETS staff will verify the output from the scoring programs to ensure the accuracy of the scoring process. After each operational administration, they will run a set of preliminary item analyses based on a sample of the early answer document receipts. The preliminary item analyses will be used to assure the accuracy of the scoring. A minimum of 1,000 answer sheets at each assessment level from a heterogeneous sample of different schools (i.e., diverse in geography and demographic characteristics) will be used. They will institute a set of flags that will automatically identify items with questionable performance characteristics. Item flagging rules supported by the GENASYS system include:

- Items with P-values above or below a specified threshold (e.g., above 3.2 or below 1.2 at Level I; above 4.0 or below 1.5 at Levels II - V)
- Item-total correlations below a specified threshold (e.g., 0.60)
- A greater number of high ability test takers receive a lower rating than received the highest ratings (generally the top 20 percent of scores is used to define this high ability group)
- A significant percentage (e.g., greater than 5 percent) omits the item
- A significant percentage (e.g., greater than 5 percent) do not reach the item

Content specialists will examine all flagged items, to verify that the items in the published test book were correct and unambiguous.

In addition to preliminary item analyses derived statistically, ETS will compare hand scoring for a small sample of student answer sheets to the scanned results to confirm the accuracy of scanning and scoring.

After scoring, ETS will subject all test items to extensive statistical analyses. These analyses will show which items are at an appropriate difficulty level for the testing population and are free from any form of differential item difficulty for subgroups of the state's population. Additionally, ETS content specialists will confirm the item-to-standard match for each of the content areas.

For all items the following sets of statistical analyses will be completed:

- Item analysis
- Differential Item Functioning (DIF) Studies
- Calibration, scaling, and equating

To assist psychometricians in overall evaluations of field-test items, the GENASYS system provides a comprehensive item evaluation module that incorporates information from a variety of analyses. The interface for this item evaluation module includes graphical plots of response options, plots of the item characteristic curve (ICC), information about the percentages of students receiving various ratings, the IRT statistics for the item, and classical statistics for the item (e.g., average item score, correlation with a criterion score). The evaluation module also includes an interface for statisticians to enter flags that indicate poor or questionable functioning directly into the GENASYS database.

The CAPA tasks will be calibrated using the Rasch generalized partial credit model. Each task will be evaluated using fit statistics in conjunction with plots of model-data fit that are generated by the GENASYS system. Tasks flagged for potential misfit will be

evaluated with respect to their impact on test specifications, psychometric quality and coverage of academic content standards.

Following each administration of the CAPA, ETS will review classical test theory statistics for all items. Tasks will be flagged that do not meet strict psychometric criteria as described above. Both the research and test development staff will carefully review these items. Test development-staff, together with the CDE, will review all field-test items and make recommendations for revisions.

ETS will also routinely analyze additional information about the constructed response tasks. This information includes:

- Percentage of scores awarded at each score point
- Number and percentage of exact agreement between raters
- Number and percentage of adjacent agreement between raters
- Number and percentage of non-adjacent scores between raters
- Rater reliability indices

DIF analyses will be carried out for all major subgroups of the testing population, using the Mantel-Haenszel (MH) statistic. The CDE will provide a list of these subgroups. ETS and the CDE will evaluate items that exhibit significant differential item functioning and will determine whether continued operational use of the items is acceptable.

Alternatively, items exhibiting DIF may be revised for additional field testing or removed from the item pool. Such decisions will depend on the nature of the DIF observed and the availability of alternate items with similar content and statistical characteristics.

The criterion for DIF that ETS uses is a statistic on the equated delta scale (MH D-DIF). Based on the absolute value of the MH D-DIF statistics and the related statistical significance test, items are classified into three categories:

- MH D-DIF not significantly different from zero or absolute value less than 1.0. (Category A)
- MH D-DIF significantly different from zero and absolute value of at least 1.0, yet either less than 1.5 or not significantly greater than 1.0. (Category B)
- MH D-DIF significantly greater than 1.0 and absolute value 1.5 or more. (Category C)

Based on the Mantel-Haenszel and standardization analyses, ETS will classify items into one of these three categories according to rules that have been successfully used at ETS for over 10 years. The three categories carry the labels A, B and C. Category A contains items with negligible DIF. Category B contains items with slight to moderate values of DIF, and Category C contains items with moderate to large values of DIF. Test development staff will review items classified in Category C to consider any identifiable characteristics that may have contributed to the differential item functioning. Consistent with ETS DIF procedures, ETS will exclude any field-test Category C items from operational use.

G. Standard Setting

To enable the reporting of scale scores for the Science content area when it becomes operational in 2005, a standard setting will need to be conducted. The purpose of the standard setting is to determine the raw score points to be used as cutpoints for reporting

of CAPA science scores in the following performance levels: Far Below Basic, Below Basic, Basic, Proficient, Advanced.

For consistency with the ELA and Math cutpoints established in 2003, the standard setting will use the Performance Profile Method. ETS will work with the CDE to recruit approximately 30 panelists at each grade level to participate in the standard setting. ETS will make arrangements for the lodging of panelists, meals, meeting rooms, and other logistics necessary for the standard setting meeting using the current CDE guidelines for cost and reimbursement to panelists. Panelists should be representative of the population of the state of California and have knowledge of science and students with significant cognitive disabilities.

Once a date for the two-day standard setting session is identified and prior to the standard setting session, ETS will provide the necessary standard setting plan and any other needed documentation to the CDE for approval by the California State Board of Education. Following the standard setting session, ETS will produce a technical report, which documents the standard setting session and its results. The standard setting technical report will be provided to the CDE for approval and ultimately shared with the California State Board of Education for discussion. Following the required public hearings, the California State Board will be asked to adopt the resulting cutpoints so that score reporting for the 2005 CAPA may occur.

H. Technical Manual

ETS will produce an annual technical manual for CAPA. The manual will include:

- Summary data tables
- Narrative interpretation and analysis of the data
- Areas where the data indicate that the tests are not meeting industry standards and improvement is needed, if any are found
- Recommendations for improving the tests where improvement needs are indicated
- Summary data tables

At a minimum, the manual must include the following information:

- The number of students with valid scores on each test
- The characteristics of the students tested at each grade level including:
 - Total number tested
 - Percent of English language learners:
 - Percent of economically disadvantaged students
- Descriptive statistics for each test including means, standard deviations, median p-values and range of p-values, and median polyserials.
- Validity Evidence
 - Information about performance level reporting including the distribution of scores among the performance levels.
 - Reliability and Standard Errors of Measurement
 - For each content area score, estimates of reliabilities and standard errors of measurement
 - Standard errors of measurement at the performance level cut points
 - Probability of misclassification

- Inter-rater reliability
 - Generalizability analyses
 - Sample size
- DIF Analysis by
 - Gender
 - Ethnicity
- Scaling procedures
- Standard setting results and documentation

ETS will submit the 2005 Technical Manual to the CDE by October 1, 2005.

Component 2: Administration, Scoring, Reporting

ETS, along with its subcontractors, will print, package, distribute, and collect testing materials for districts to administer the CAPA. ETS further will verify scoring, produce reliable statistics, and work with the CDE to create meaningful reports that accumulate data for parents, teachers, schools, districts, and policy-makers.

A. Overall Test Administration Plan

ETS will work with the CDE and California schools to provide meaningful and timely results for the CAPA program. All eligible California examiners and students will benefit from the appropriate content, test booklets and forms designed with simplicity, ease of understanding, and security in mind.

ETS and its subcontractor will be responsible for printing all materials and scannable documents, implementing pre-identification procedures, packing and shipping answer documents, and test booklets, receiving and accounting for answer documents and test booklets, and following-up on any missing documents. In addition, ETS will scan the CAPA answer documents, and resolve answer document edits.

The timeline in Table 16 shows an overview of the major tasks and times to administer CAPA. Details appear in the next requirement. The assumption of this time line is that CAPA has a unique testing window that's the same for all districts. If CAPA follows the same window as STAR CSTs and CAT/6, based on the districts' completion of 85% of instruction days, then these dates will vary by district and parallel the CST and CAT/6 timeline.

Table 4. Administrative Timeline

Administration Task	Timeline 2004-05
Take orders for operational tests	November 2004
Pre-ID of operational answer sheets	January 2005
Print examiner's manual, stimulus cards, and answer documents	January 2005
Package examiner manuals, stimulus cards and answer documents	February 2005
Ship testing materials to districts	March 2005
Retrieve scorable and non-scorable testing	May 2005

Administration Task	Timeline 2004-05
materials	
Score tests	May-June 2005
Analyze both operational and field test results	May 2005
Initial results reported on the web site	August 2005
Ship student reports and master list summaries to districts	June – September 2005
Process demographic corrections	September – October 2005
Prepare technical report	October 2005

B. Test Material Production

After CDE has approved test items and forms proved, the next step is to print the materials, test production. ETS will work with the CDE and ETS' subcontractors to design and produce the materials, including materials to accommodate the special needs of teachers such as large print Braille.

The materials produced specifically for CAPA include examiner's manuals and answer documents. The STAR District Coordinator and Test Site Coordinator manuals include CAPA chapters. The Student Group Identification sheet (SGID) covers both CST and CAT/6 and CAPA tests.

Materials

Examiner's Manual

Each examiner's manual will include test directions for administering the test, assessments for all content areas within a level, and scoring rubrics for interpreting student performance. There may be multiple versions of the examiners manual because of embedded field test items that differ from version to version.

If ETS prints multiple versions, the cover of each manual will have a barcode keyed to one of each version of the assessment. ETS will package manuals with corresponding stimulus cards to be used during the assessments. Based on an analysis of students and school districts, the estimate for printing is 24,000 of each manual annually; print specifications are approximately 78 pages, self-cover, 8-1/2 x 11, 50# white offset paper, black ink only, saddle-stitch binding, paper banded in quantities approved by the CDE. ETS will shrink-wrap each Examiner's Manual and matching set of stimulus cards.

ETS will print and distribute large print and Braille versions of the examiner manuals for districts requesting these versions for examiners who are visually impaired.

Answer Document

The STAR Scoring and Processing Centers will work with the CDE and ETS to design the scannable CAPA answer document, including student demographic pages. The same scannable answer documents will also be used for collecting demographic information for those students who are eligible for CAPA but who are not assessed due to absence or parental exemption. Most of the demographic fields collected on the CAPA answer document will be identical those included on the STAR multiple choice answer document. The CAPA answer folder will have additional fields to identify the CAPA level and the version number. There will also be a place for the examiner or observer to indicate their role and to sign confirming that they have been trained in CAPA examiner procedures. The CDE will approve the final layout of the demographic pages.

ETS's subcontractor will print one global answer document for all tests annually. This will be a four-page scannable document with three pages of print. Raters will manually enter student identification information and the student's ratings or scores. If the school or district Pre-Identified student information, the document will carry a Pre-ID bar code with identifying information. The STAR Scoring and Processing Centers will be responsible for producing the answer document required for this program in sufficient quantities to test all students in Levels I – V.

Design

To design CAPA materials, ETS staff and designers, and the STAR Scoring and Processing Centers staff and designers will work together with CDE and other stakeholders to better understand the nuances of the administration processes and to confirm content specifications. ETS will:

- Work with test developers and other key individuals to make sure that the design and layouts of testing materials facilitate the measurement process.
- Work with the STAR Scoring and Processing Centers staff to make sure that scannable documents and other forms meet the required tolerances and can be processed accurately and efficiently.
- Submit drafts of all materials to the CDE for approval.
- Prepare revised versions of materials based on feedback from the CDE and any other stakeholders involved in the process.
- Submit all approved materials for production.

Production

The production phase for any material or form will go through five critical stages that include:

- Submission of final print specifications and/or mock-up to ETS for the examiner's manual and stimulus cards to ETS Publications
- Submit final print specifications to STAR Scoring and Processing Centers for the answer document
- Receipt and approval of proofs.
ETS staff will review all proofs to verify grammar, spelling, punctuation, content, and layout. Other personnel, such as scanning staff at STAR Scoring and Processing Centers will verify scannability. ETS will submit proofs to the CDE for approval

after ETS and the STAR Scoring and Processing Center staff have first ascertained that they are consistent with the specifications provided.

- Printing of the materials. ETS does not give the “OK to print” until all parties have signed off on the content and layout of the document.
- Receipt of all materials at the STAR Scoring and Processing Centers. The STAR Scoring and Processing Center staff inspect materials to verify covers, proper coding, colors, pagination, etc. before accepting the materials.

C. Ordering, Packaging and Shipping

ETS has set up a web STAR management system for all its STAR Programs that includes ordering, Pre-ID, and materials tracking features. The STAR Processing Center packages and distributes materials, based on orders received from the STAR management system. In the STAR management system, districts are listed according to their County-District-School (CDS) code, which CDE assigns.

CDS Master File

California assigns county, district, and school codes to each testing entity as appropriate. All counties are identified by a two-digit county code with valid numbers being 01 – 58 and 99. Districts are identified by a two-digit county code and a five-digit district code. Schools are identified by a two-digit county, five-digit district, and seven-digit school code (xx xxxxx xxxxxxx). The CDE will forward to ETS and any appropriate subcontractors an updated master CDS code file as needed. ETS will use the file to ensure that all appropriate districts have ordered CAPA test materials. ETS is required to report all test results using each testing entities’ unique CDS number. No modifications may be made to the CDS file unless they are expressly authorized by the CDE.

Ordering

District STAR coordinators will place orders on the ETS order system. The STAR Technical Assistance Center (TAC) will work with the districts to collect enrollment data and security agreements. The enrollment collection process is designed for TAC to approve district enrollment orders if the district has submitted an original security agreement. Once approves an enrollment order, that order must be locked to prevent changes to that order. STAR Scoring and Processing Centers will edit CAPA enrollment orders with edit criteria defined by ETS.

Pre-ID Services

If districts opt for pre-identification of demographic fields on answer documents, they will receive CAPA answer docs as a result of their upload of all district students in the STAR management system. ETS’ subcontractor will print plain or pre-identified answer documents.

Districts will have the option of either utilizing a secure web-based system or submitting a structured computer file to provide the Pre-ID data. The Pre-ID file will be used to print the barcode information directly on the answer documents. The districts will have two options for Pre-ID. Districts can submit one file for the district (all enrollment orders included) or submit one file per enrollment order. Districts will be charged once per student Pre-ID for this service, whether districts send all student Pre-ID files at the same time or by administration.

If a district decides to leave field 211 (designating CAPA) blank for schools to hand-grid during testing, districts will receive no Pre-Identified answer documents for those students. The examiner or test site coordinator would have to hand-grid all demographic fields on blank CAPA answer documents.

Packaging and Shipping Materials

According to the orders that each district enters into the system, the STAR Processing Center will box orders for each school and then send all boxes to the district. District coordinators should send the materials to schools at least 14 days before testing so administrators can review the materials.

The STAR Processing Center will determine the method for shipping materials to districts, except when errors or delays at the packing and shipping center require expedited shipping carriers to ensure on time delivery.

Districts that submit test orders to the California Technical Assistance Center by November 30, 2004 and submit clean Pre-ID files within ETS-specified timelines will receive priority for processing. ETS will attempt to meet the requested delivery dates for districts that submit orders after December 10 and/or do not meet the timelines for submitting clean Pre-ID files, but ETS is not obligated to do so.

The STAR Processing Center will package materials and clearly label for each school/program/building. They will ship the materials to a single district address for distribution within each district. If a district receives two or more pallets of materials, that district will also receive a pallet map. The STAR Processing Center will print and enclose packing lists and master file sheets.

District Shipments

Each district will receive at least one box of materials. Box 1 of each district or county office shipment will include:

- Return freight kits for scorable and non-scorable materials
- Directions to site coordinators for inventorying the materials and notifying the TAC of any missing materials or shortages
- A set of packing lists for all school shipments within the district or county office,
- A packing list for the district/county overage with materials listed in the order in which they are packed
- Reminders about maintaining the materials in secure-locked central storage

Other boxes will contain overages of examiner's manuals and blank answer docs to fill site requests.

ETS is authorized to charge districts for freight kits that are lost after delivery. ETS and STAR Scoring and Processing Centers will immediately notify affected districts of any delays in shipments including but not limited to backordered materials. ETS will fill backorders based on district testing dates. ETS will charge districts that order excessive materials.

All delivery carriers must have shipment tracking capabilities. The California Technical Assistance Center staff will verify shipment and delivery dates of materials for all districts.

Districts will inventory materials upon receipt and notify the California Technical Assistance Center of any errors, shortages, or additional materials required. Errors and shortages in orders will be filled and shipped to districts within two business days of notification. The STAR Processing Center will process requests for additional materials will to be processed as long as shipments to other districts are not delayed.

School Shipments

Box 1 of each school shipment will include:

- Return freight kits for scorable and non-scorable materials
- Directions to site coordinators for inventorying the materials and notifying the district coordinator of any missing materials or shortages
- A packing list with materials listed in the order in which they are packed
- Reminders about maintaining the materials in secure-locked central storage

Other boxes will contain examiner's manuals and answer folders.

Multiple versions of each examiner's manual may be distributed throughout the state; each version of the ELA and Math portions will have common items and one or more unique field test item.

D. Return of Materials

The STAR Scoring and Processing Center is responsible for retrieving all scorable and non-scorable materials from districts. Districts are required to have all scorable and non-scorable materials available for pickup no more than five working days after the last testing date for all regular and make-up testing in the district. All non-scorable materials must be picked up within five days of completing all regular and make-up testing for the last test administration period. ETS will include information to contact return freight carriers in coordinators' freight kits. Each district STAR coordinator will to contact the district's assigned carrier and arrange for pickup within the required five-day period for the district. ETS is responsible for paying the freight costs for pick up and return of all materials.

The TAC will monitor the receipt of materials from districts at the STAR Scoring Center and notify CDE of districts that did not have their materials picked up five days after completing testing in the regular CAPA test window. CDE will notify the district superintendent in writing that the district is delinquent in returning materials and request that the district schedule a pick up of the materials within 24 hours.

Scorable Documents

The District STAR Coordinator's Manual will include specific directions for packaging and returning all answer documents to be scored. The directions will include specific information for packaging documents for students for whom demographic only documents are submitted. Coordinators will receive return address labels and directions about how to arrange for having the materials picked up. Districts will return all scannable (scorable) materials will be returned to the STAR Scoring Center via express service to expedite the processing of scorable materials. The STAR Processing Center will verify all returned shipments for completeness and notify districts of any shipment discrepancies.

The STAR Processing Center will store all scored CAPA materials until January 30 each year, after which time they will destroy the scorable documents in a secure manner.

Non-scorable Materials

The District STAR Coordinator's Manual CAPA chapter will include specific directions for packaging and returning all non-scorable documents, including return address labels and directions about how to arrange for pick up. Secure non-scorable materials will be picked up from school districts for return to the STAR Scoring Center no more than five working days after the last authorized testing date for any district. Districts will return all non-scorable materials via ground delivery in order to minimize shipping costs. The STAR Processing Center will complete the check-in of secure, non-scorable materials quickly to maximize resolution of missing documents before score reporting.

The STAR Processing Center will scan the barcodes on each Examiner's Manual and stimulus card. They will compare these counts to the counts of materials sent to the schools/districts. If used scorable materials are found, they will be forwarded the same day to the STAR Scoring Center for processing and scoring. If SABE/2 materials are found, they will be forwarded the same day to CTB/McGraw-Hill for processing and scoring. The secure and non-secure materials should be separated and the secure materials will be separated by grade level and type. Secure materials include the CAPA Examiner's Manual and the CAPA stimulus cards, including large print and Braille versions.

All secure materials including large print versions that were shipped to each district must be accounted for at the school level.

The STAR Processing Center will check in secure materials through a rigorous security process. A report of secure materials not received, a "Missing Security Document" report, will be generated and sent to ETS staff to conduct follow-up activities with personnel at the schools identified with missing materials. Based on ETS findings, the California CAPA security database counts will be updated and a final electronic Missing Security Document report will be issued to the CDE and ETS within ten working days after completion of check-in of secure materials. The STAR Processing Center will generate a report of secure materials not received and send it to ETS staff who will conduct follow-up activities with personnel at the schools identified with the missing materials.

The electronic tracking system is to be updated to show the date on which each district's materials were received so that CDE can verify the status for each district.

All answer documents will be examined for accuracy and completeness, and to ensure that they are not damaged. Before documents are released for scanning, quality checks will be completed to:

- Ensure school's materials are complete and not missing materials
- Ensure system is complete and not missing schools or materials
- Verify school and codes against Receiving Log
- Review condition of answer documents to ensure they are suitable for optical scanning

E. Scanning and Scoring

The STAR Scoring Center will be receiving and scanning all of the answer documents. STAR Scoring and Processing Center is responsible for verifying that all electronic

scanners and scanning programs are operating properly. Quality checks for both equipment and program accuracy must meet the highest industry standards for electronically processing test documents. Test sets of sample documents must be scanned and the results analyzed to ensure that scanners are properly calibrated and that all gridded and bar-coded information is being read correctly.

The STAR Scoring Center will use ISO 9000 quality-control procedures relating to forms design and printing to ensure that documents can be accurately scanned. Stringent quality control procedures and regular preventative maintenance will be performed to maintain properly functioning scanners. Measures to control scanner quality include:

- Diagnostics tool in scan programs that must be completed before processing
- Scanner accuracy that prints every 500-1,000 documents to manually check accuracy of the scanner
- At least one (1) Blank Diagnostic Sheet (BDS) Quality Check Sheet contained in each batch scanned
- At least one (1) Multi-Sheet Quality Check Sheet contained in each batch scanned
- Manual inspection of stacks scanned for readable PAS (Print-after-Scan) number
- Automatic check of page ID codes to verify that pages scanned in order
- Automatic document form type integrity verification to prevent recognition by the scan program of incorrectly placed documents in the batch
- Use of PC monitors to display quality controlled image samples
- Defined record discrepancies flagged for correction in pre-edit
- Identification of damaged documents, torn and crumpled sheets, document misfeeds, and paper jams. In these events, the scanner will stop automatically. The operator or the editing staff must make any needed corrections to the documents being scanned.

A staff person experienced in testing will validate the CAPA scoring program. The staff will hand grid a test deck using the actual school identification header sheets for every test and form. The test deck will contain up to 25 answer documents for each test and form. ETS testing staff will check each of the item responses for key accuracy. They will grid one or more of these types of keys and test completeness validations. The term “foil,” as used below, means “item response bubble.”

- All response foil one
- All response foil two
- All response foil three
- All response foil four
- All response foil five
- Random marks
- Entirely blank
- Missing items
- Test completeness algorithm
- Unique test requirement

Demographic Editing

As answer documents are scanned, the data will be transcribed directly to CAPA data files. After scanning, a three-step data editing process will be performed to verify that all data on the project database are complete and accurate. During this process, the data will be edited per the agreed-upon editing specifications. The first quality control step will consist of a complete computer editing of the data to account for all documents and to check for all possible “suspects” or omissions. At this point ETS will verify that the batch’s data are being properly and correctly scanned.

The STAR Scoring processing Center is responsible for completing demographic edits and preparing all required reports including the Internet subgroup reports for all districts that have all materials to be scored available for pickup on or before the designated date, if the districts:

- Submit all materials in a processable condition with the exception of passing demographic edits; and either
- Pass demographic edit checks without alerts; or
- Respond to any requests for demographic information and provide all information in a correct format within the 72-hour period.

If districts submit answer documents for scoring after the deadline and the documents are not in a processable condition and the district does not provide demographic data within 72 hours, ETS will complete the scoring process to ensure that the districts have an "all students" report in the August 15 Internet posting. ETS will continue to work with districts to complete the demographic edits and provide all required reports including the Analysis of Variables Reports. The final Internet report will include subgroup data for these districts provided corrections made by the district are received and processable by the deadline for submitting that information.

The STAR Processing Center will process documents for these districts as they are received using all regular scoring and reporting procedures; if the documents are not processable on receipt, they will be processed after all requirements in the scoring specifications are completed. The student scores will be included in a student data file to be delivered to the CDE. A second Internet report will also be delivered to the CDE. If these districts have not provided complete demographic data by the specified deadline, ETS will include an all student report in the September Internet report and will continue working with the district(s). Complete subgroup data for these districts will then be included in the November Internet report.

Except as provided in subdivision (c), ETS will score all processable answer documents identified for pick up during the specified period and produce all required individual student reports and include the student scores in the final Internet report to be delivered to the CDE.

District Corrections of Demographic Data

Demographic fields need to be correct to pass editing and to meet Academic Performance Index (API) and Adequate Yearly Progress (AYP) requirements. Districts have the opportunity to make data corrections at several points:

- Uploading Pre-ID
Districts have to have clean data or their files will not be accepted.
- After Pre-ID is sent

ETS will edit all Pre-ID files and verify that all required student demographic information, including name, birth date, gender, school and grade, are entered for each record. In addition, missing data for the following demographic fields must not exceed the school tolerances identified:

Demographic Area	Missing Data may not Exceed
Primary Ethnicity	5%
Language Fluency	3%
Counted in October CBEDS	3%
Special Education Services	3%
National School Lunch Program	3%

- After reporting
Districts may notice demographic errors when they review reports, and the Accountability department may notify districts of changes to meet API. In this case, districts can choose to pay ETS \$600 and \$.15 per each student in the district to re-edit their demographic fields.

Scoring

Both scale scores and performance level scores are reported for CAPA. Scale scores range from 15 – 60, similar to the CST scale scores of 150 – 600. In 2003 a standard setting was held to determine cutpoints for performance level scoring of English-language arts and Mathematics. The standard setting identified the raw score cutpoints for the CAPA performance levels. These raw score cuts were transformed to the CAPA scale using a linear transformation which fixed the basic cut at a scale score of 30 and the proficient cut at a scale score of 35 to be consistent with the CST cuts of 300 and 350. Performance level scoring consists of 5 performance levels consistent with the CST performance levels: Far Below Basic, Below Basic, Basic, Proficient, Advanced. ETS will provide score key and conversion specifications to Pearson. Once scanning and scoring are complete, ETS will review a select sample of cases from the datafile for quality control purposes to ensure that scoring has been performed correctly.

ETS, Pearson Educational Measurement, and the Grow Network will work together to create a comprehensive schedule and plan for the verification of data and reports, and for the handoff deadlines which must be met to remain on schedule.

Approximately 20 percent of CAPA examinees will have two answer documents, which must be matched for scoring. One document should have the examiner field gridded, while the other document should have the observer field gridded. For scoring purposes, responses on the examiner document will be used for score reporting. Responses on the observer document will be used in conjunction with responses on the examiner document to monitor inter-rater reliability. If only an observer document is found for a student, the observer document becomes the examiner document and is used for scoring purposes.

ETS will work with Pearson and the CDE to develop a resolutions plan to handle answer documents with missing or inconsistent data. The resolutions plan should contain at a minimum procedures for handling answer documents with no gridded test level, with no grade gridded, and with a grade gridded which does not match the test level gridded.

Wrong Level Scoring

The student's grade determines the age-appropriate CAPA level. Examiners grid the level for a student on the answer document according to the following guidelines:

- Level I : grades 2 - 11
- Level II: grades 2 and 3
- Level III: grades 4 and 5
- Level IV: grades 6, 7 and 8
- Level V: grades 9, 10 and 11

If no grade level is indicated, the rule is to take the student's age as specified by the gridded date of birth and subtract 5 years; $\text{Age} - 5 = \text{grade}$, based on the above guidelines. Any test outside of Level 1 that does not comply with the grade level will be scored as "Far Below Basic."

F. Reporting

After scoring is completed, the STAR Scoring center sends data to Stat Analysis for Standard setting. The STAR Scoring Center will provide the raw data from the CAPA assessment to the ETS psychometricians. ETS will work with STAR Scoring Center and the CDE to turn this raw data into information that is useful to the CDE, the SBE, other state policy makers, students, parents, teachers, and administrators in California. The information will be used to develop policy recommendations for the SBE and reports that may be placed on the Web site.

Report Verification

The STAR Scoring Center will prepare a comprehensive schedule and test plan for the verification of reports. The plan must include verifying unit and system testing score and report programs. To validate the score and report programs, STAR Scoring Center will grid actual answer document test decks for each test and form, and in addition will create test files containing hundreds of student test records for each test and form. Based upon the test plan, ETS will build the test files to contain every possible type of district, school, level and student testing condition. The CDE will review pilot reports.

Reporting Results to Schools, Districts, and Counties

Starting with the 2004 administration, CAPA data will be merged with STAR data for reporting. If the district tests multiple STAR administrations, the CAPA data will be merged with the final STAR administration for aggregation and reporting. Shipping of reports to districts will begin on a date that has been agreed upon with the CDE. All reports will be in districts by a date that has been agreed upon with the CDE, except as provided in subdivision E.4 (c) and (d). CAPA reports will be sent to the student's district of service.

Each shipment of reports for schools, districts, and counties will include a diagram showing how the reports are packaged to assist the district with report distribution. All reports will be assembled according to grade, school, and district. School sets of reports will be assembled and shipped to the district for distribution to schools.

If for any reason, it becomes necessary to produce revised reports due to an error caused by ETS, all of the reports will be clearly identified as "revised" with a revision date.

Table 5. Required Reports

Report	Format	# Copies	School	District	County **
Student Report	Separate/customized, produced by Grow	2	2*		
Student Record Label	On same report with STAR	1	1		
Student Master List	Integrated with STAR	2	1	1	
Student Master List Summary	Integrated with STAR	2	1	1	
Subgroup Summary	Integrated with STAR	2	1	1	
Student Data File	Like STAR, data will be extracted and sent to CDE with student information	1		1	

* 1 copy for parent/guardian and 1 copy for current teacher

** County offices of education for schools operated by the county

ETS, the STAR Scoring and Processing Center and Grow will have joint responsibility in defining the reports. The reports will be developed as followed:

- Grow will create and print the CAPA Student Report.
- CAPA data will be integrated into the Student Master List, the Student Record Label, the Student Master List Summary, and the Subgroup Summary.
- The STAR Scoring and Processing Center will aggregate the student data.
- The STAR Scoring and Processing Center will transfer aggregated data to ETS for creation of the Web reporting file.
- The STAR Scoring and Processing Center will generate all state, county, and district reports, integrated into the STAR reports.
- ETS will extract the Web reporting file.

CAPA Student Report

The CAPA Student Report will meet the following specifications:

- The reports will be one pages in length with information on both sides
- The CAPA scores will be shown on page one as a vertical bar graph for ELA and a vertical bar graph for mathematics indicating a student's performance on a scale of "far below basic" through "advanced" performance levels.

- Page one will also present a brief letter to parents from the state superintendent, demographic information identifying the student, and three guidelines for parents to help their children.
- Page two will include a primer on CAPA levels with a graphic showing the match between grade level and CAPA level, and definitions of each of the five performance levels for ELA and mathematics separately.

Printing and Packaging Reports

The STAR Scoring and Processing Center is responsible for printing and packaging all reports. School, district, and county reports will be packaged in folders by grade level. The CDE and ETS will jointly determine the order of the reports within folders.

Reports will be boxed and labeled by school with the boxes for all schools within each district shipped to the district STAR coordinator for distribution within the district. Box 1 for each school is to include a list of the reports included in the shipment with the purpose and distribution requirement for each. The district reports will be boxed separately.

ETS will include a pallet map with each shipment for districts that receive more than one pallet of reports.

Inaccurate or Incomplete Reports or Files

When a district notifies ETS pursuant to Title 5, California Code of Regulations section 857(d) that complete and accurate reports or files were not received, ETS shall remedy the inaccurate or incomplete reports and files and submit a report to the CDE and the district detailing the resolution of each inaccurate or incomplete report. If the error was caused by ETS or an ETS subcontractor and district notification is received no later than the specified deadline, the file will be corrected for inclusion in the August 15 Internet file. Errors reported after the specified deadline but before the last date allowable will be corrected for the September student data file and Internet Report.

Reports for CDE

CDE will receive electronic versions of the county reports and raw student data files. In addition, ETS will send to CDE a list of all districts who tested CAPA and the number of CAPA students in each district to assist with apportionment payments.

Internet Reporting

Note: ETS' completion of this task will have to be part of a new or extended contract.

CAPA data will be reported with STAR data on the Web site hosted by the CDE. To the extent possible, CAPA reports will be integrated with, or formatted similarly to the STAR reports. ETS will develop Internet reports (HTML report pages) for the site that display school, district, county, and state data for all students, by identified demographic subgroup, by level, by content area, by specified reporting group (performance level).

The static backup component of the site will contain all help, index, and primary subgroup report pages for the current year data.

ETS will provide CAPA research files in several formats as an integrated component of the Internet site to allow users to conduct their own complex analyses and customized reporting. The data will be the same data presented in the Internet reports. To protect student confidentiality, ETS will not include scores for any group of ten or fewer

students. The research files will be available in the same formats and structures as STAR files to the maximum extent possible.

Administrative functionality for CAPA will be comparable to STAR to the maximum extent possible

ETS will deliver the Internet report data to CDE according to the following schedule:

- **Prototype File** – The first Internet file will be the first delivery of the Internet site. The file will include all HTML help pages, indexes, and include all required site functionality. The data used for this file is to be synchronous with student file “V1” below.
- **2nd Internet File** – The second Internet file will include all changes identified from the prototype file and be synchronous with student file “V2”. This file will include all components of the final site including research files.
- **3rd Internet File** – The third Internet file will include all changes identified from the second Internet file and be synchronous with student file “V3.”
- **First Internet Posting** – The First Internet Posting file is the official file to be released to the public on August 15, 2005, (or another date specified by the CDE) . This file is to be synchronous with student file “P1.”
- **Second Internet Posting** – The Second Internet Posting file includes all data in the First Internet Posting plus data for schools not included in that posting because their testing dates were too late for inclusion or because they had not completed all scoring specification requirements for supplying missing data. This file is to be synchronous with student file “P2.”
- **Final Internet File** – The Final Internet File includes all data in the Second Internet Posting plus all corrections and additions of missing districts to the “P2” August Internet File. This file is to be synchronous with the “2005 Final” student file.

Table 6 Internet Sequence

Deliverable Title	Associated Student Data file	Description
Prototype	V1	Pilot district data
2 nd Internet File	V2	Internet file and research file for all districts for which processing is completed by June 9, 2005 with inclusion of preliminary HTML pages provided by CDE
3 rd Internet File	V3	Internet file and research file for all districts for which processing is completed by June 23, 2005 with inclusion of edited HTML pages provided by CDE by June 24, 2005
1 st Internet Posting File	P1	Research and Internet files for first posting. Date of posting set by statute. To the extent possible, ETS will include results for student tests that are scored during July in the August files.
2 nd Internet Posting File	P2	Internet files for second posting. Includes data for all districts including those with testing dates too late for

Deliverable Title	Associated Student Data file	Description
		scores to be included in 1 st Internet Posting.
Final Internet Posting File	2005 Final	Final Internet Files for final posting – includes all corrections to 2 nd Internet Posting and is the final posting of the score data.

Internet Report delivery dates will be determined by the CDE.

Errors in the final student data files due to contractor error) will require ETS to reissue a “corrected” final Internet Posting file at no cost.

Any electronic transfer of CAPA student level records between the ETS and the CDE or an individual school district/LEA must be in accordance with CDE approved security standards already established.

Component 3: Communication and Program Support

ETS will facilitate communication among ETS's various departments, CDE, subcontractors and districts. This communication will promote understanding of CAPA and contribute to greater efficiency in the completion of tasks and administration of CAPA.

A. Personnel and Organization

Most of the communication will occur between the CDE CAPA Program Director and the ETS STAR Associate Director. The ETS STAR Associate Director will keep the STAR/CAPA program coordinator informed of all informal communication. The STAR/CAPA Program Coordinator (located in Sacramento) will be the first back-up if the ETS STAR Associate Director is not available. If both the director and coordinator are unavailable, the administrative assistant will be notified to contact the appropriate coordinator as the third person in line for informal communication. ETS STAR Associate Director, STAR/CAPA Program Coordinator, and administrative assistant are all part of the program management team.

ETS Departments and Subcontractors

In addition to overseeing all parts of CAPA, the ETS STAR program management team is also responsible for written communication, including manuals, startest.org, training, and communication with districts. Besides program management, other ETS departments who help execute the CAPA program include:

- **Test development:** creating all items, running reviews, and putting together test forms; creating and maintaining item bank
- **Operations:** printing of testing materials, including special versions such as Braille
- **Psychometrics:** analyzing data, equating, standard-setting, writing technical manual
- **IS&T:** cleaning, extracting, and transferring data; maintaining STAR web management system

ETS regularly updates and distributes a list of the STAR team members responsible for the tasks and/or deliverables specified in each component. The contact list includes names, e-mail addresses, fax numbers, telephone numbers, and roles. ETS commits staffing for this scope of work as part of the STAR Program, including (1) senior decision-making executive staff person, who maintains an office in Sacramento to facilitate timely decision-making in the program and (2) sufficient staffing in the STAR Technical Assistance Center.

Any changes to staff named as key personnel will be subject to the prior written approval of the CDE. Such approval will not be unreasonably withheld.

ETS employees two sub-contractors:

- **Pearson:** printing answer documents; packaging and shipping all testing materials to districts; retrieving and checking in testing materials; scanning, scoring and creating reports

- **Grow:** creating student reports for parents

ETS has given to the CDE STAR Director evidence that ETS has evaluated the capacity of each subcontractor to complete the task(s) or deliverable(s) for which each has been subcontracted.

B. Communication Activities

CDE members and ETS will keep in touch through weekly STAR conference calls and as-needed phone calls and e-mail messages. Communications regarding the tasks and deliverables in this SOW will be between CDE and ETS. Subcontractors may be included, as needed, in meetings and/or conference calls related to this SOW.

All external written communications, including e-mail from ETS or its subcontractors related to the CAPA Program components (CAPA technical issues; Internet and electronic reporting including the CAPA electronic item data bank; and administration, scoring, reporting, and program support), must be directed to the designated CDE contact and copied to Richard Diaz, CDE STAR program manager. All written communications including e-mail from CDE to ETS must be directed to the ETS designee for the component and copied to George Powell, ETS Director, STAR Testing Program.

ETS is responsible for the following communication activities:

- **Operational communications** among the CDE and ETS staff members responsible for each component of the program.
ETS program director and CDE's STAR manager will be notified in writing immediately of any anticipated problems related to program operations.
- **Weekly STAR telephone conferences** to discuss the ongoing operations of the CAPA program.
The CDE CAPA program director, and CDE's STAR manager will participate in these calls. By agreement of both CDE and ETS, any call may be limited to discussing only pre-specified components, or may be cancelled. ETS is responsible for writing and distributing agendas and minutes of all these weekly conference calls.
- A three-day **planning meeting** in Sacramento each year for the purpose of scheduling and planning all operational aspects of the STAR program.
The CAPA meeting will be integrated to the maximum extent possible into the annual STAR planning meeting. If additional meetings are needed, to the extent possible, they will be conducted as videoconferences.
- **Quarterly reports** as part of the STAR Program that summarize accomplishments during the previous three months, along with a description of the plans for the following quarter.
ETS will use "exception reporting" in order to minimize the burden on contractor and CDE staff members. Once detailed plans and time lines are approved, only exceptions will be identified. If tasks are on time and within budget, they will not be mentioned in these reports. The quarterly report may also include any problems, program changes, or program evaluation information that is significant to the program that does not otherwise constitute a "program exception." These reports will be sent to CDE's STAR Manager who will forward the reports to appropriate CDE and SBE staff.

ETS agrees that CDE owns all data and performance statistics related to individual student records. ETS will support CDE in protecting the confidentiality of such data in order to ensure the privacy of individual student records.

C. California STAR Technical Assistance Center

ETS will continue to incorporate CAPA responsibilities into the STAR Technical Assistance Center to provide services to California district STAR coordinators. The assistance center operates from 7 a.m. to 5 p.m. Pacific Time, Monday through Friday, except for the California school holidays specified in Education Code section 37220(a). Assistance center coordinators are assigned to specific districts and their primary responsibility is to assist the STAR district coordinators with all aspects of the program.

STAR Technical Assistance Center representatives will have knowledge of the CAPA Examiner's Manuals and Answer Documents for all of the instructional levels and subjects. Representatives will know and have a list of the ancillary materials that districts may request. All ETS phone staff will have an alpha listing of the schools as well as a numerical CDS listing to assist with verifying the callers. Representatives will log and track callers.

During peak call volume times, ETS will add temporary professional customer service staff in order to efficiently handle all incoming calls. The core full-time staff will train and supervise the temporary staff. The core staff will be available for resolution of difficult or unusual requests or questions

The STAR Technical Assistance Center is responsible for:

- Providing knowledgeable answers to questions. These staff will be available both via telephone and the customer service e-mail address provided on the STAR web site. These project staff are located at ETS offices in Concord, California.
- Having sufficient staff to ensure that all requests for assistance are handled within 24 hours of when they are received. ETS will report to CDE in its quarterly reports on the assistance center's telephone and e-mail response performance.
- Providing toll-free telephone access. ETS has a STAR Program toll-free phone number staffed during weekday work hours (7 a.m. to 5 p.m. Pacific Time).
- Providing a toll-free fax number for those district STAR coordinators who prefer written communications with the project staff.

The STAR Technical Assistance Center staff is responsible for annually:

- Contacting all charter schools to determine which are testing as independent charters
- Collecting the names and contact information for STAR district coordinators from district superintendents and independent charter school directors during August and September and forwarding this information to the CDE in a Microsoft Access database no later than October 31.
- Collecting CAPA orders from districts and independent charter schools no later than December 31
- Verifying school/district material orders, test dates, testing administrations, delivery dates and return shipment information. Ensuring that all dates are within regulatory requirements.

- Entering verified district and site information into electronic files
- Responding to district coordinator questions about ordering materials, Pre-ID procedures, deliveries, test administration, packaging and returning materials
- Monitoring the receipt and editing of Pre-ID files
- Ensuring that District CAPA Coordinator Security Agreements are received before any materials are shipped to districts
- Monitoring material distribution and following up with district shipments that do not arrive
- Notifying district STAR coordinators of any changes in shipping schedules
- Assisting district STAR coordinators in responding to edit alerts triggered by answer documents
- Following up on alerts to districts
- Monitoring the return of materials from districts through August/September
- Monitoring distribution and receipt of reports through August/September
- Assisting district STAR coordinators with report interpretation

D. Training

CAPA is integrated into Pre- and Post-Test STAR workshops for district coordinators, as well as into the District STAR Coordinator and STAR Test Site Coordinator manuals. In addition, the CAPA Program will be responsible for providing resources to train examiners.

Pre-Test Workshops

The purpose of pre-test training is to clarify the participation criteria for the CAPA Program and to prepare district STAR/CAPA coordinators to train test site coordinators on the procedures for receiving, administering, packaging, and returning test materials as securely as possible. In addition, participants will learn what is new in the CAPA program. ETS will work with CDE to set up and coordinate a minimum of 20 pre-test workshops throughout the state for district STAR coordinators. ETS will:

- Arrange for locations and equipment for the 20 meetings
- Notify district STAR coordinators of the meeting dates and locations
- Arrange for ETS staff members to coordinate and present the sessions with CDE staff
- Prepare pre-test training materials for the meetings, including slides, discussion and video clips. If a new video is made, it will include information on CAPA.

Post-Test Training

ETS will coordinate post-test workshops with CDE to help district STAR coordinators interpret reports and results. A minimum of five workshops will be scheduled throughout the state. ETS will:

- Work with CDE to arrange locations and notify district STAR/CAPA coordinators.
- Prepare post-test training materials.
- Arrange for ETS staff to coordinate and present the sessions with CDE staff.

Examiner Training

Examiners, including observers, must be certificated or licensed school personnel and receive training on administering CAPA. On the answer document, examiners and observers must verify that they received training and that the test was administered accordingly. Examiners/observers can receive training in one of two ways:

1. Attending a face-to-face local training given by trainer trained by the CDE, possibly given through the pre-test workshops or through web casts.
2. Viewing the web cast and practicing with video or DVD

E. Web Sites

ETS creates and supports www.startest.org targeted primarily at STAR district coordinators. One of the tabs is devoted to CAPA. This web site supports districts with the most current information and alerts districts to changes. Information on this web site will include a feedback form, links to external Web sites of interest, and information regarding the following:

- Workshops, including downloadable training materials
- Key administrative dates
- STAR and CAPA program calendar
- Instructions and forms, including how to order materials and how to order Pre-ID services
- District and test site coordinator manuals
- Reports

ETS will work with CDE to maintain the web site and to provide program support. ETS may make information about the CAPA available at this site or may link to a CDE site for information about the test. Any information related to the CAPA Program that is to be posted on a contractor maintained site must be submitted to CDE for review and receive written approval before being posted. Any site(s) maintained by ETS or a subcontractor must be free of advertising. The content of any web site(s) maintained by ETS must be consistent with CDE STAR/CAPA web sites.

In addition, ETS develops and maintains the STAR management web site. Districts have their own unique logon and password. Through this site, districts:

- Set up testing administrations
- Enter orders
- Receive messages about the status of their testing materials
- May upload Pre-ID files
- Track their orders

CAPA/ STAR Integration Contract
Projected Costs by Billing Period
(dollars)

CAPA/STAR Integration...
Attachement 2
Page 1 of 1

Line		6/16/2004	7/1/2004	10/1/2004	1/1/2005	3/31/2005	6/30/2005	9/30/2005	Total
<u>No.</u>	<u>Billing Period:</u>	<u>6/30/2004</u>	<u>9/30/2004</u>	<u>12/31/2004</u>	<u>3/31/2005</u>	<u>6/30/2005</u>	<u>9/29/2005</u>	<u>12/31/2005</u>	<u>Costs</u>
Cost Categories									
1	ETS Staff Costs	\$ 12,502	\$147,454	\$ 121,924	\$ 34,792	\$ 34,792	\$ 73,774	\$ -	\$ 425,238
2	ETS Staff Travel Costs	\$ -	\$ 7,000	\$ 7,000	\$ -	\$ -	\$ -	\$ -	\$ 14,000
3	Consultant Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	Data Processing Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Other Project Direct Costs	\$ -	\$ 30,000	\$ 30,000	\$ 27,087	\$ 27,087	\$ 27,087	\$ -	\$ 141,262
6	Sub Contracted Costs (Non OH)	\$ -	\$ -	\$ 67,341	\$ 286,810	\$ 191,210	\$ 283,350	\$ -	\$ 828,711
7	Indirect Costs at 20.5%	\$ 2,563	\$ 37,813	\$ 46,384	\$ 71,481	\$ 51,883	\$ 78,763	\$ -	\$ 288,888
8	Total Costs	\$ 15,065	\$222,267	\$ 272,649	\$ 420,171	\$ 304,973	\$ 462,975	\$ -	\$ 1,698,099

JGC 2/19/04