CODESP Online Item Banking Using a Consortium Approach to Make the Most of Limited Resources

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CODESP

- Since 1973, the Cooperative Organization for the Development of Employee Selection Procedures, CODESP, has provided public educational agencies with employee selection materials, training and consultation needed to select qualified employees.

- Office is located in Huntington Beach, CA.

- www.codesp.com

CODESP IS A CONSORTIUM

- CODESP is a non-profit consortium of over 600 public educational agencies, which was formed to be a central resource for school district employee test materials. Other public agencies may now receive services as subscribers.
- By utilizing our services, agencies improve their selection procedures to meet federal and state guidelines.
- CODESP test materials are customized to meet individual members' needs.

CONSORTIUM PURPOSE

- PURPOSE
- CODESP is established for the purpose of administering this Agreement and of engaging in activities including but not limited to the following:
- a.   Providing a system of cooperative measuring devices relevant to common skills, knowledges and abilities related to common jobs.
- b.   Establishing priorities to be given to development of written tests, interview standards and other selection devices.
- c.   Developing and training representatives of member public agencies in the use of such selection devices.
- d.   Developing guidelines whereby individual public agencies can isolate elements of particular jobs and determine which selection devices can appropriately be used.

CONSORTIUM DEFINED

- A consortium is a group of organizations that participate in a joint venture.

- For example, several similar agencies join to form a consortium in order to secure an expensive product or to provide a labor intensive service to save money, require less staff, and to access a greater variety of materials.

MORE ON CONSORTIUMS

- Starting a consortium is similar to establishing a temporary business without the formal structure or tax liabilities.
- The consortium is governed by the rules laid down in a contract or "consortium agreement"
- Members are part of the consortium but keep their independence.

ADVANTAGES OF FORMING A CONSORTIUM

- Ease of formation–no formal writing is required except for the consortium agreement.
- No capital is required.
- Can change their contractual agreement at anytime to suit changed circumstances.
- Can be set to expire on a given date without the formal requirements needed in the case of dissolution of a corporation.
- Eliminates the need for agencies to hire additional staff members to duplicate the work performed by the consortium

THE CONSORTIUM ALLOWS THE ABILITY TO:

- Keep current and respond to emerging issues through online alerts and mass emails.
- Provide up-to-date information through newsletters including posting job openings.
- Provide group training opportunities through live and webinar training.
- Entice speakers who are more interested in providing "free" services to a consortium rather than one agency.
- Simplify the job description development process by sharing a system that contains similar KSAs & use of a competency dictionary.

**"Alone we can do so little; together we can do so much." - Helen Keller**

ECONOMIES OF SCALE

▶ By combining their commercial efforts, public authorities can achieve economies of scale:
  ◦ Examples include:
    • U.S. Communities, a purchasing consortium of local government agencies.
    • The County Schools Fringe Benefits Consortium (FBC) which was formed to provide medical benefits to San Diego area school districts as a non-profit government entity. Employees joined together to self-insure their health plans. The 403(b)/457(b) Deferred Compensation Program was created and offered to participating school districts to provide a high quality, low cost retirement savings alternative.
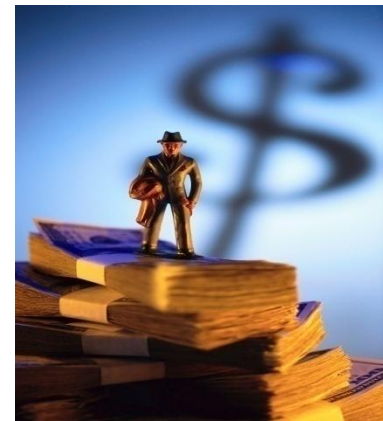
CONSORTIUM CHALLENGES

- Getting equal participation out of the members.
- Funding – based on each member's ability to pay or flat fee.
- Satisfying varying types and sizes of agencies with limited staff and budgets.
- Ability to pay and size of the organization does not always equate to the level of services required from the consortium.
- Consortia with paid staff require business insurance coverage and accounting and payroll services.
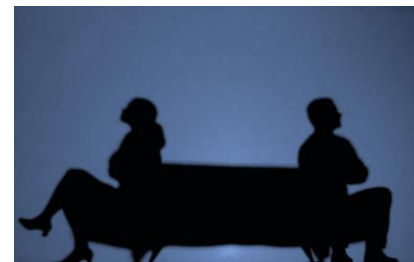
MEMBER INPUT

- To be effective, a consortium must not only provide its members output through products and services, but input as well.

- Members should be active participants in the future of the consortium.

- CODESP consortium members complete an annual survey on their satisfaction with current products and services.

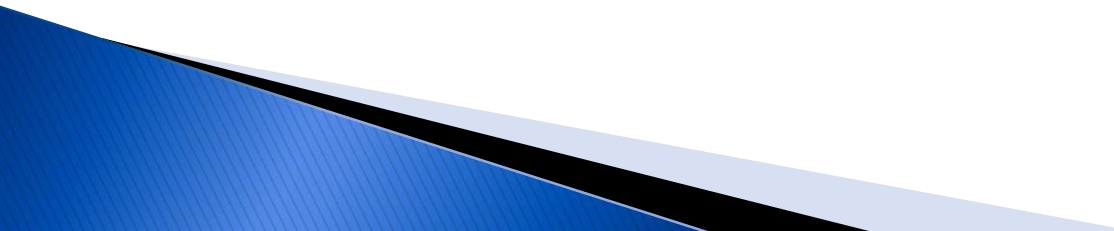- The survey also allows them to request products and services they would like to see in the future.

JPA AUTHORITY

- To operate separately CODESP became a JPA in the 1990's.
- CODESP continues with the same form of Board of Directors' management as it did as a consortium alone.
- JPA boards can be given any of the powers inherent in all of the participating agencies.
- The authorizing agreement states the powers the JPA authority is allowed to exercise.
- The term, membership, and standing orders of the board of the authority must also be specified.
- The joint authority may employ staff and establish policies independently of the constituent authorities.

CODESP JOINT POWERS AGENCY AGREEMENT FOR CONSORTIUM

- CODESP Agreement states:
- *This agreement is entered into pursuant to the provisions of Title I, Division 7, Chapter 5, Article I (Section 6500, et seq.) Of the California Government Code relating to the joint exercise of powers, between the public educational agencies signatory hereto, for the purpose of operating an agency to be known and designated as "Cooperative Organization for the Development of Employee Selection Procedures*
  - *WHEREAS, the parties signatory hereto have determined and hereby declare that it is in the public interest that they join together in an organization for cooperatively developing selection procedures which will comply with state and federal requirements*

CONSORTIUM ITEM BANK

- Early in the consortium members were asked to submit questions to share with other members.
- Security agreements were signed.
- Consortium staff edited the items and compiled them in test segments by topic.
- This was the beginning of the current item bank.

WHAT IS AN ITEM BANK?

▸ Database of multiple choice test items that are stored in a system that categorizes them according to subject matter content.

▸ Data regarding history of use and item statistics are also stored with the item.

  ◦ As items are used in tests, new history data are added.

▸ Items can be organized in a database according to topic and difficulty.

  ◦ For example, a computer technician test might include subtopics such as – hardware, application software, troubleshooting and network protocols.

  ◦ For each of these topics, items can be written at three levels of difficulty – easy, medium and difficult or three levels of expertise- entry, advanced or expert.

MORE ON ITEM BANKS

- Users can select test items which are position-specific to create a test.
- Since most item banks contain several thousand test questions, the number of tests that could be generated from the bank is almost unlimited.
- Test formats are flexible, they can:
  - cover several topics or be specific
  - be easy or difficult, or both
  - include graphics or not
  - be long or short
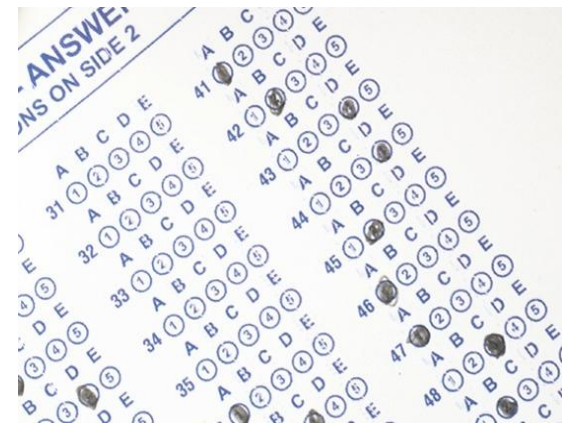
ITEMS CAN ALSO BE ENTERED UNDER JOB FAMILIES AND KEYWORDS AS IN OURS

Category

A question category is required and is used as *the* first or major grouping level for relating similar questions. This will enable you to segregate Accounting, Mechanical or Custodial type questions, etc.

-- Select a category --

Question Name

A question name is required and will be used as a more "friendly" way to reference a question.

Question Text

Question text will appear on *all* tests as the actual question verbiage but is not required. You may display an image in lieu of text.

Source

Format   Font Arial   Size

Question Type

A question type is required and controls how you build the question choices and correct answers on the next page.

-- Select a type --

Keywords / Keyphrases

Category

A question category is required and is used as *the* first or major grouping level for relating similar questions. This will enable you to segregate Accounting, Mechanical or Custodial type questions, etc.

-- Select a category --

-- Select a category --
AA
Accounting
Animal Care
Athletic
Attendance
Audio-Visual
Autobody
Carpenter
Child Care
Clerical
Custodian
Data Processing
Drafting
Electrician
ElectronicTechnician
English Usage
First Aid
Food Service
Forms
Grounds
Guidance
Health / Therapy
Human Relations
HVAC
Indian Education
Instructional Aide
Legal
Library
Maintenance

Maintenance
Manuals
Math
Mechanic
Mgt-supn
Music
Painting
Personnel
Plumbing
Pool Maintenance
Printing
Programs / Research
Psychology
Public Information
Purchasing
Radio-Television
Reading Comp
Reasoning
Reports
Risk Management
Safety
Science
Security
Spanish
Statistics
Student Relations
Telephone
Theater
Togalog
Transportation

Question Type

A question type is required and controls how you b

-- Select a type --

-- Select a type --
Instruction
Multiple Choice
True or False

Question Maintenance

Item Bank	-- All Item Banks --
Search For	
	in ☑ Question Name ☑ Question Text ☑ Answer Choices
Keywords	

Searches can be conducted by words found in the Question Name, Text or Answers or by Keywords

ITEM BANK BENEFITS

▸ Improve the efficiency of staff

▸ Produce higher quality multiple choice tests through writing standardization

▸ Provide variety in each subject area so that there is no need to construct new items for every test

▸ Allow for item selection from subject matter categories based on their item analysis history

▸ Allow for item monitoring and improvement based on their cumulative performance

▸ Can categorize items as performing well for one type of classification and not for another

▸ Allow for keyword searches to pull up any item that relates to a particular subject

MORE BENEFITS OF ITEM BANKING

- Large groups of customers can use the same pool of questions without each having to create items on their own.
- Allows for larger pool of test results to gather statistical data from item analysis.
- Multiple users allow for frequent item review, updates and submissions of new items.
- Easier search of items by subject matter.
- Streamlines test construction process.
- Easy to develop different versions of the same test.

SAVES TIME AND ENERGY

- Item banking provides substantial savings of time and energy over conventional test development.
- In traditional test development, items can only be described relative to the other items within the test and to whom they were given. That is, item characteristics are test specific.
- With item banking, items are described by their cumulative results from prior administrations in various agencies for various positions.
- To develop a new test, customers do not need to go through the labor intensive process of developing a large set of items for piloting and evaluating. Instead, they choose from the bank by reviewing the statistical results of past test generations.

DIFFICULTIES OF ITEM BANKING

- Keeping large item banks up-to-date.
- Preventing redundancy in item banks.
- Keeping items from being copied and disseminated to non-members/subscribers.
- No item bank can be better than the material that is put into it, and consortium members must continue to be responsible for ensuring that their final tests are fair, appropriate, reliable and valid.

OTHER ITEM BANK DANGERS

- Since the establishment of an item bank is an expensive and time-consuming business, you need to avoid keeping them for too long without updating them.
- Must be constantly monitored for relevancy and accuracy.
- Requires significant staff time and cooperation from the customers of the bank to provide subject matter expert assistance and feedback.
- Considerable professional staff time is also required for item review, editing, and categorizing.
- Although many items are contributed by the customers, the consortium's professional staff must review all items for consistency of style, accuracy and duplicates.
- The security of the item bank requires constant monitoring of
  - websites for postings
  - individuals who have access

LIABILITY FOR ITEMS

- In completing requests, consortium members receive more items than they actually need to permit their agency's subject matter experts to review and make the final item selection from among the items provided.
- To avoid liability item bank consortiums should not provide final test development services.
- The item bank is provided by the consortium to be used as a resource for the local agency to develop job–related tests that are <u>locally</u> validated.
- The consortium members assume the responsibility of the final selection of the items on a test.
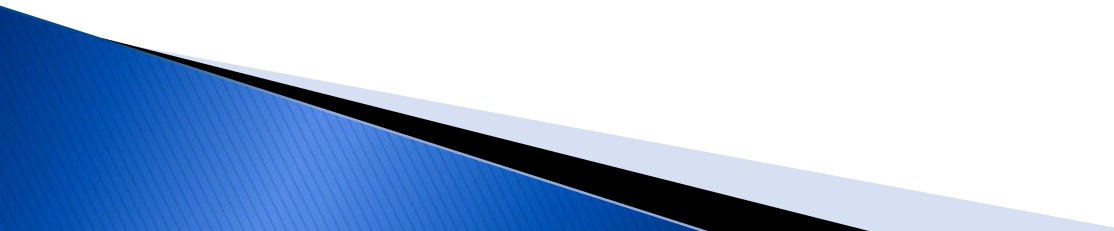
QUALITY OF TEST ITEMS

▸ The quality of the item bank is determined by how well the items meet the standards that the consortium sets.

▸ Member provided test items do not always meet the quality criteria.

▸ Items need to be well written to
  ◦ minimize the effect of guessing,
  ◦ avoid ambiguity about the meaning of the item,
  ◦ be easy to read (reading level should match the job),
  ◦ avoid tricking the test taker,
  ◦ measure what the item writer intended to measure and nothing else.

GUESSING

- The correct answer to a multiple-choice question with four answer choices can be guessed correctly 25% of the time (1 out of 4).
- Guessing undermines the quality of the test.
- Anything that increases a test taker's ability to guess the answer correctly should be avoided.
- Many of the common flaws in test item construction increase the test taker's ability to guess the answer correctly.

AMBIGUOUS ITEMS, ETC.

- Ambiguously written items prevent anyone from answering the item correctly–even the most skilled test takers - other than by chance.
- Ambiguity undermines the quality of the test.
- Good items measure only what they were intended to measure.
- Items should not require a high level of reading ability, knowledge of special terminology or acronyms, or sorting through a lot of detailed information when these are not the purpose of the test items.
- When flaws in the items occur, the test taker may answer the item incorrectly for the wrong reason.

SCORE CONSISTENCY

- A thorough job analysis and knowledgeable subject matter experts will provide the information needed to write a comprehensive and accurate sample of items for a topic.
- The goal of writing a set of items for a topic, or item bank job family, assumes that a test taker's score on one random set of items is pretty much the same as the test taker's score on another random set of items.
- This is a reasonable assumption as long as the items written by the item writers are proper, accurate, consistent and comprehensive for that topic.

EXPERTISE LEVEL

- An item bank should contain items from different levels of expertise for each topic.
- This requires an experienced item writer who has access to accurate job analysis information and subject matter experts.
- An item writer who is truly an expert in the topic being measured should be able to describe the entry skills and knowledge, common mistakes and points of confusion typically experienced by a novice and for a master performer including the level of skill and knowledge and special insights they possess.

PLANNING FOR AN ITEM BANK

▸ The most crucial steps in developing an item bank are:
  ◦ Hiring qualified staff
  ◦ Identifying sources for items
  ◦ Developing a classification system
  ◦ Building or buying software
  ◦ Developing criteria to determine which items are allowed into the bank
  ◦ Developing the item review and verification process
  ◦ Determining the item editing process to ensure a standardized format for the questions
  ◦ Developing a maintenance plan

ITEM BANK MAINTENANCE

- Items in an item bank must be reviewed periodically by subject matter experts to ensure their on-going relevance because over time, test items can become obsolete.

- Other test items, after being evaluated statistically, may turn out to work poorly, despite the test developer's best efforts to write only the best test items.

- Obsolete items and items that don't work statistically must be replaced, but the whole test doesn't need to be.

- In an item bank approach to testing, updates and revisions can be done easily without disrupting the testing process.

- Similar items that have been shown to work well can be substituted or new items can be written and added to the item bank.

- New items can be tried out with incumbents or subject matter experts to see if they work properly before including them into the item bank

CODESP ITEM BANKING EVOLUTION

- From 1973 through 1992 CODESP's test items were kept in files and were copied and sent to members through the fax and US mail.
- In 1992, CODESP Computerized Item Bank, C–CIB was implemented. The software was purchased from a private software company. This software assisted staff in grouping items by item bank/subject area, which simplified the search capability, but delivery was still by fax or mail.
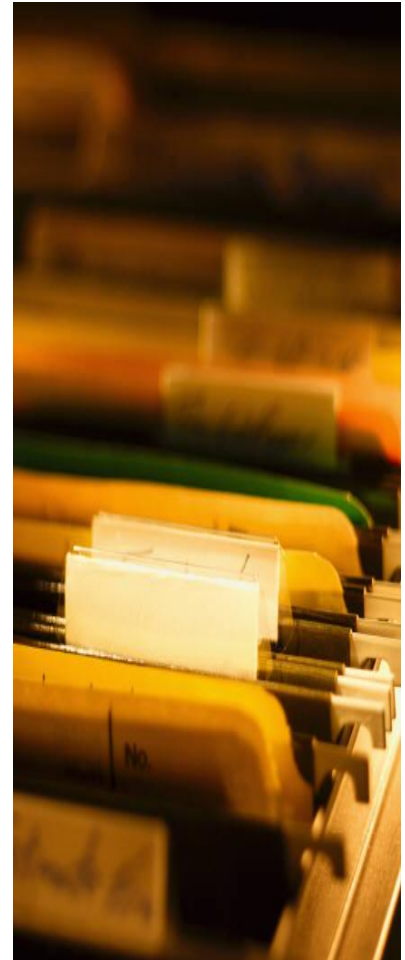
INTENT OF GOING WEB BASED

▸ To create a powerful, yet user-friendly website and testing software package that would allow CODESP staff to easily search and select job related test items from a secure online multiple-choice item banks that could be sent securely to consortium members for final test construction.

WHAT WE WANTED
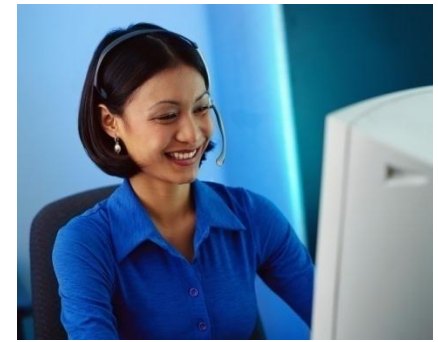
A system which would allow staff to:

- Readily create, store and search banks of multiple choice test items by subject area.
- Easily incorporate graphics into the items.
- Deliver test materials to members by posting them on their password protected individual account home page.
- Provide customers the ability to build, print and generate online tests from their own site.
- Scan and score answer sheets to obtain item analysis.
- Post newsletters, links, alerts, tutorials, invoices, etc.
- Online registration system for training and webinars.
- Post interviews, supplemental application forms, writing exercises, performance tests, in a format that would be easy for the customer to edit and print materials.

CUSTOMERS WANTED

▸ Easy to use system.

▸ Compatibility with their agency's computer system.

▸ No extra costs.

▸ Reduction in paperwork.

▸ Recordkeeping capabilities.

▸ Tutorials.

▸ Flexibility in customizing multiple choice tests and other test materials.

▸ Assistance in developing job related tests.

▸ Online registration capability for training.

▸ Links to practice tests for applicants.

▸ Online testing application.

WE FOUND SOFTWARE PROGRAMS THAT WEREN'T DESIGNED FOR:
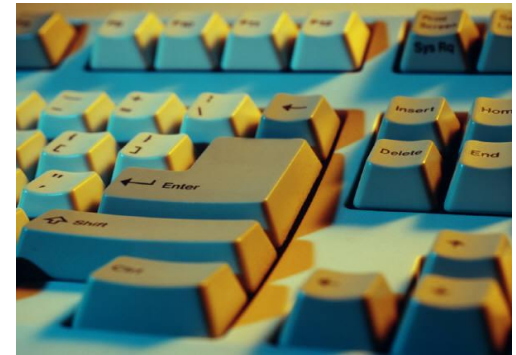
- producing customized tests from a single item bank
- delivery of packets of test items customized for each request
- online test review
- online final test generation capability
- limited budgets
- searching and storing of items by specific subject areas

WHAT WE CHOSE

▸ Since we didn't want to raise the fees for our members we went with a public school district agency to design and build the program.

▸ The Santa Clara County Office of Education serves the districts in Santa Clara County out of their San Jose, California offices.

▸ Its Regional Technology Center assists districts and other public agencies through contract generated projects throughout the state.

CODESP AUTOMATED TEST SYSTEM-CATS

- On January 31, 2005 the CATS system was implemented. Along with the introduction of the new software, a new website was unveiled.
- In 2009, the website was updated.

www.codesp.com

CODESP ITEM BANK

- Over 23,000 items.
- Items are reviewed periodically to ensure they are up-to-date.
- Most new items are developed by CODESP staff with the assistance of Subject Matter Experts.
- New items are edited so that they have similar formats.
- When relevant, graphics are included with the test items.

ONLINE REQUESTS

▸ Our website allows clients to request test materials by completing an online request form.
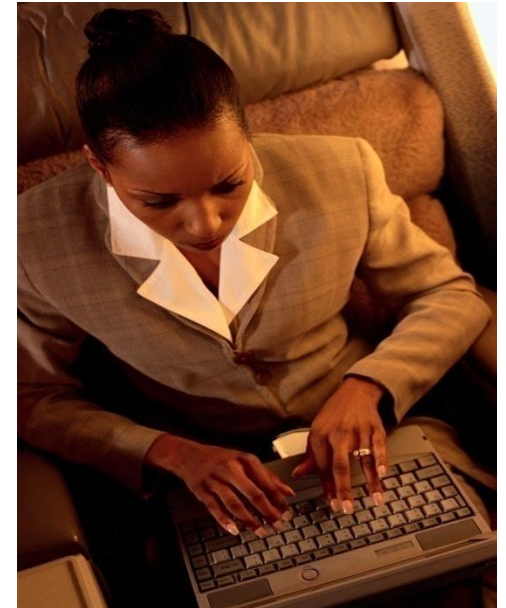
CATS Test Material Request Form

Please check our **Resources section** for Supplemental Applications, Interviews, Performance Exams, Writing Exercises, Pre-Assembled Tests, etc., <u>before</u> requesting custom materials.

I. Job Title

Enter the job title in the box below. Copy and paste your job description into the Special Comments or Instructions section below.

[   ]

II. Selection Materials

Date Needed
Please allow 7-10 business days from request date.

Multiple Choice Test Items	[⌄]	[⌄]
Custom Supplemental Application Form	[⌄]	[⌄]
Custom Interview Questions	[⌄]	[⌄]
Custom Performance Examination (explain below)	[⌄]	[⌄]
Custom In-Basket Assessment (explain below)	[⌄]	[⌄]
Custom Writing Sample (explain below)	[⌄]	[⌄]

III. Special Comments or Instructions

Paste position description here.

[   ]

JOB DESCRIPTION INCLUDED IN REQUEST

III. Special Comments or Instructions

ESSENTIAL DUTIES

Plans, organizes, schedules and monitors office activities and related ongoing projects; informs Executive Director of progress and problems; trains, assigns and directs the work of clerical

IV. Contact Information

CODESP STAFF FILLS REQUEST FROM ITEM BANK

Option of using existing template of test items.
  Or

Creating a new template of test items.

▸ Decision based on review of job description and available items.

▸ New items are researched if not available in item bank.

CODESP STAFF CAN SEARCH FOR ITEMS BY KEYWORD

Search for questions in category Painting ▼

With the name like [ ]   **and question text like** brush

With the following keywords (comma separated) [ ]   **Search Now**

Question Data
- -

Painting / Question 0003
Which one of the following brushes should be used on narrow moldings and edges?

Painting / Question 0004
Brushes may be placed on the bristle end if they are

Painting / Question 0005
To reclaim brushes with bristles which have become hard, soak them in

Painting / Question 0006
Naphtha flakes and tar sheathing paper are used to protect natural bristle brushes from

Painting / Question 0029
After a good wire brushing, the best wash for treating old cement-base paint is

Accounting
Animal Care
Athletic
Attendance
Audio-Visual
Autobody
Carpenter
Child Care
Clerical
Custodian
Data Processing
Define
Electrician
ElectronicTechnicia
English Usage
First Aid
Food Service
Forms
Grounds
Guidance
Heatvac
Human Relations

Update Packet

Animal Care \ Question 0003
Orangutans are native to what island in Southeast Asia?

a)   Sumatra
b)   Malaysia
c)   New Guinea
d)   Philippines

Item Packets Can be Made from Various Subject Areas

Safety \ Question 0001
The batter-heads of metal tools should be ground smooth and square primarily so that

a)   the hammer will have a larger target
b)   sharp hooks of metal will not cause cuts and rips
c)   pieces of metal will not break off and cause injury
d)   the tool will last longer

First Aid \ Question 0011
In an injury involving a possible broken bone or bones, you should

a)   move the victim immediately to the health station
b)   transport the victim to a hospital emergency room
c)   leave the victim as found until the extent of the injury is determined
d)   straighten the injured limb or limbs

Additional Materials   **Checkout**

CODESP

Tuesday, June 29, 2010 3:52:38 PM

You are logged in as **Ryanlong** - Home - Log Out

user profiles

My Profile

Add/Edit Profiles

membership

Member Directory

Edit District Profile

CATS

CATS Request Form

Create a Test

Score a Test

Test Library

Online Testing

Reports

Form Definitions

job descriptions

Instructions

Questionnaires

Glossaries

Builder

Welcome CODESP Staff!

Welcome to your CODESP homepage. You can select member services from the links on the left, above and below. If you need assistance you can contact us by using the Contact link.

To request Multiple Choice test items or other custom test materials, complete a CATS Request Form under CATS to the left. To view sample Interviews, Supplemental Application Forms, Performance Tests, Writing Exercises, etc., click on Resources from the tool bar above.

Alerts

10 Day Notice for CATS Requests Needed
More info...

CODESP Newsletters

- June 2010

- Newsletter Archives

Training Events

- IPAC Conference - 7/18/2010 - Hyatt Newport Beach - **Register at this site**

My Event Registrations

You are not currently registered for any classes.

My Request Status

You requested the following packets:

- Sample Test for IPAC   New
  Submitted On: 6/29/2010

PACKET APPEARS ON CATS HOMEPAGE

MEMBERS GENERATE TESTS FROM THE JOB-RELATED PACKETS

▸ They are sent approximately 150 test items per request.

▸ They can choose all of the items, print them and review them with a subject-matter expert.

▸ They can renumber them.

▸ A Selected Questions display keeps track of the number of items chosen by subject area as they build the test.

CATS Test Generator

SELECTED QUESTIONS

Accounting: 67
Math: 33
Word Processing: 19
Clerical: 17
Human Relations: 13
Athletic: 5

Total Selected: 154

Items per page: 10 [Go]

Displaying **1 - 10** of **160** Items

1 2 3 4 5 6 7 8 9 10 ... 16

Sort	Question	Add	Stats
1	**Accounting \ Question 0028** The unit of organization in the ledger is/are ✔ a) the control account b) closing entries c) the balance sheet d) the double entry	☑	
2	**Accounting \ Question 0029** After adjusting and closing entries have been posted, the balances of the accounts in the general ledger should agree with the amounts in the a) preclosing trial balance b) profit and loss statement ✔ c) balance sheet d) manual of accounts	☑	📊
3	**Accounting \ Question 0031** In double-entry bookkeeping, debit and credit balances in the general ledger are a) equal only if receipts and expenditures are in balance b) different by an amount which represents a surplus c) different by an amount which represents a deficit ✔ d) equal if the entries have been properly made	☑	📊

Stats Available →

CUSTOMERS CAN VIEW THE CONTENTS BY SUBJECT AREA AS THEY BUILD THEIR TESTS

CATS Test Generator

SELECTED QUESTIONS

Safety	6
Electrician	5
Human Relations	4
Math	4
Mgt-supn	4
Total Selected:	**23**

Select All Questions
Send Back
Save
Create Test
Save and Quit

FIGURES ARE INCLUDED IN MANY ITEMS

WORD FIGURE

Use the Word Figure below to answer questions regarding Word.

Word Processing \ Question F0201*
Using the Word Figure, number 1 is known as a
- **a)** Formatting Toolbar
- **b)** Menu Toolbar
- **c)** Ruler
- ✔ **d)** Title Bar

PROCTORED ONLINE TESTING

CODESP ONLINE TESTING SYSTEM

- In 2010 we added online testing as an option to our online system.
- Test items are chosen from our item bank and the customer receives a choice, print the test in paper and pencil mode, or convert the test to an online test.

ONLINE TESTING ALLOWS FOR MORE M/C TESTING TO BE EFFICIENTLY ADDED TO THE PROCESS

- Agencies that previously relied only on screening and interviews can easily add multiple choice testing to their employee selection process
- Each step in the testing process gathers valuable new information about the candidate
- Adding multiple choice tests will narrow the applicant pool, thus reducing the number of interviews that need to be conducted

NO PER CANDIDATE FEES

▸ Online tests can be administered to
  ▸ Large groups
  ▸ Small groups
  ▸ One candidate at a time

▸ All for a low annual online test service fee

▸ Online tests can be administered at
  ▸ HR office computers
  ▸ Computer labs in schools and district offices

ONLINE COMPUTERIZED TESTING BENEFITS

▸ The Internet allows for easier, faster, and cheaper testing:

- Instant updates to existing tests are available
- No printing or reissuing revised test forms or keys when a test changes
- Instant downloads as soon as a new test is published
- Agency never needs to mail answer sheets for scoring and never has to wait for results
- Economy of scale: it doesn't really cost the vendor much more money to test 500 people compared to 50

ADVANTAGES TO CUSTOMERS

- ▸ For test administrators, online tests mean no more test booklets, no more answer sheets, and no more copying, which significantly reduces turnaround time for receipt of results
- ▸ With candidate populations continuing to increase, traditional paper and pencil testing consumes more human and financial resources to manually produce, print and score increasing numbers of tests and associated material
- ▸ With online testing, it makes little difference in terms of financial resources whether 10 tests or 100 are administered

ONLINE TESTING SYSTEM INCREASES HR AUTOMOMY AND EFFICIENCY

▸ Online Testing System technology provides HR personnel with increased autonomy in the testing process

▸ From their desktops, HR personnel can order test items, generate tests, authorize tests for candidates, and receive tests scored and item analysis data

▸ All this is done securely through the web and significantly reduces turnaround time

MEMBERS HAVE THE OPTION TO PRINT THEIR TESTS OR DEVELOP AN ONLINE SESSION DIRECTLY FROM THEIR DESKTOP

ONLINE

CATS Test Library

Displaying 1 - 10 of 173 Tests

Page 1 Of 18

Title	Questions	Time Limit	Date Created			
Web Developer/Programmer	65	60	9/24/2009			

PRINTER

1   A 5-year-old child is playing and is having trouble accomplishing his goal . When should the adult come to the child's assistance?

  a) when the child shows extreme frustration
  b) when the child has exhausted his own resources and is ready to quit
  c) when the child asks for help and the adult thinks it will benefit the child
  d) at no time, as the child must be encouraged to be self-reliant

2   Which one of the following effects of play is most beneficial for young children?

  a) helps the child learn to use time effectively
  b) uses up a child's extra energy
  c) helps a child develop
  d) helps keep the child quieted down

3   Play situations for young children

  a) should be excluded from the school setting
  b) are frequently learning experiences
  c) are relatively unimportant
  d) should be highly structured

ONLINE TESTING SESSION

Provide a Time Limit, Session Begins date and time, and a Session Ends date and time for the Online Testing Session. The Session Begins date cannot be modified once the session is saved but the Session Ends date can be extended.

denotes a required field

Test Title	Instructional Aide
Time Limit *	120 Minutes
Session Begins *	[_____] 12 ▾ 00 ▾ AM ▾ MM/DD/YYYY
Session Ends *	[_____] 12 ▾ 00 ▾ AM ▾ MM/DD/YYYY

CANDIDATES

Enter the test candidate's information in the fields below and click Add. Repeat this process for all candidates. Create a unique Applicant ID for each candidate to identify the candidate's test results at the end of the testing session.

After entering the Online Testing Session data and candidates' information, click the Save button at the bottom of the page to create the test session and generate License Codes for all candidates. A License Code is required for each candidate to login to the Online Testing Session.

After clicking on the Save button, click the Print Roster button. The roster is confidential and should be kept in a secure location. It can be printed for proctor use to verify applicant names, applicant IDs, and applicant license codes. If License Codes are distributed to applicants at the test session, remove the applicant ID column and ONLY allow each candidate to view their individual License Code.

First Name *	Last Name *	Applicant ID *	Application ID	License Code		
[____]	[____]	[____]	[____]		Add	

 = Candidate has started the Online Testing Session
 = Candidate has completed the Online Testing Session and the test results are available for reporting

Print Roster	Save

Online Test Sessions

You can view and/or edit a session by clicking on the title or clicking on the 🗒 icon to the right of the session.

Select a Test:

Online Sample Clerical Test ▾

Test Title	Time Limit	Job Posting	Start Date	End Date	Cands.			
Online Sample Clerical Test Sample Clerical Questions	10		01-26-10 12:00 AM	12-31-10 12:00 AM	5	🗒	📊	✖

Excel upload available

	B	C	D	E	F	G	H
1	SessionId	ApplicantId	ApplicationId	ApplicantName	DateScored	PossibleScore	Score
2	71	1		Alex Brody	3/23/2010 10:33	5	0
3	71	2		John Doe	4/27/2010 14:27	5	2
4							
5							

ITEM ANALYSIS

Admission & Records Technician
Standard Item Analysis Report

District: Date Scored: 10/9/2008
Course Title: Admission & Records Technician

Total Possible Points: 110.00   Median Score: 93.00   Highest Score: 106.00
Standard Deviation: 11.18   Mean Score: 90.61   Lowest Score: 33.00
Applicants in group: 77   Reliability Coefficient (KR20): 0.91

| No. | Correct Group Responses | | | Point Biserial | Difficulty Index | Correct Answer | Response Frequencies | | | | | Non Distractor |
	Total	Upper 27%	Lower 27%				A	B	C	D	E	
1	83.12%	95.24%	76.19%	0.11	0.83	C	4	3	64	6	0	

TESTS DIFFER WITH REGARD TO THEIR....

- ◦ content (what the test is supposed to measure)
- ◦ difficulty level (how hard it is to get it correct)
- ◦ discriminating power (how much does the item distinguish between the overall high performers and the low performers)
- ◦ candidate pool

▸ Interpretation of test scores is sometimes difficult due to the variation in candidates who are at differing levels of knowledge or skill attainment, and because the tests that the items are used on a variety of tests.

- ◦ The differences make it difficult to compare scores achieved on different tests even when these tests are measuring precisely the same thing.
- ◦ We can't control how the consortium members use the test items. Many don't understand that a math word problem not only tests for math skills, but also reading ability.
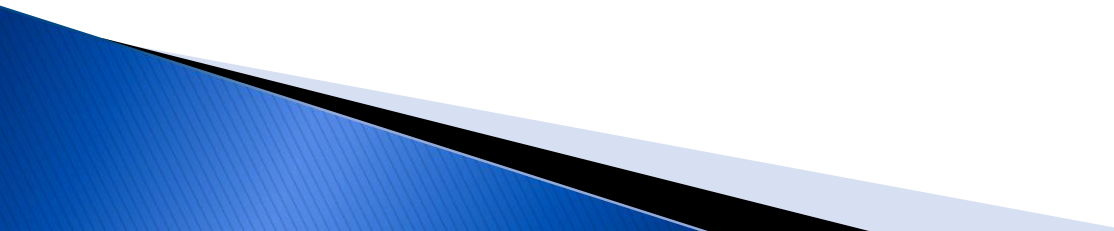
STATS VARY BY LOCATION AND TYPE OF TEST

Job Title	Admin Date	# Cands	Difficulty	Discrim	PBis
School Secretary II	01/19/2010	9	0.33	0.67	0.63
Instructional Assistant	03/08/2010	45	0.22	0.23	0.31
High School Registrar	03/15/2010	27	0.63	0.38	0.33
Secretary	01/30/2008	16	0.63	0.80	0.47
Secretary to the Vice Chancellor	06/04/2010	57	0.67	0.31	0.29

A danger of providing statistical information to consortium members. Sampling errors due to small candidate pools. We also do not know the agencies screening policies. Are they letting everyone take the test who applies? Do they have strict screening devices that eliminate many of those that would typically score lower before the written test. Customers sometimes jump to the wrong conclusion based on a quick look at the stats.

Difficulty: ← .3 too difficult - .8 → too easy
Discrimination: .3 → good - .6 → very good
PBis-Point Biserial: closer to +1 the better

SUGGESTIONS

- Always allow enough downtime to Beta test the program with a variety of clients.

- Be prepared to review every item and graphic that is converted to the system.

- Make sure the software designers understand what your final product needs to look like.

- Build flexibility into the program so that you can get into the customer screens and assist them in correcting problems that may occur while they are learning the system.

- Be understanding and patient.

PAST CHALLENGES – ISSUES – LESSONS LEARNED

▸ Windows Applications - Complex Solutions can be developed - Web Applications less sophisticated in functionality.

▸ Windows 7... Security models vary by agency.

▸ HTML and style sheets - VS - WYSIWYG In Windows Applications.

▸ Printing! What A Challenge, but overcome

▸ Scantron Data / Forms

▸ Different Web Browsers.

▸ Technology policies in agencies vary.

▸ Different skill levels between consortium member users.

FINAL THOUGHT…………

- Although the evolution from paper to a Windows based item bank, to a web based system and online testing has been a long road, using the consortium approach and working with public sector software developers has provided our members and subscribers with a low-cost, high quality system that allows them more efficiency in hiring and assessing employees.

CODESP

COOPERATIVE
ORGANIZATION FOR THE
DEVELOPMENT OF
EMPLOYEE
SELECTION
PROCEDURES

CODESP

QUESTIONS?
Other Services

www.codesp.com

WEBSITE TEST MATERIAL RESOURCES AND LINKS

INTERVIEW TIPS, INSTRUCTIONS & SAMPLE RATING GUIDE

INTERVIEWS

SUPPLEMENTAL APPLICATION FORMS

WRITING EXERCISES

PERFORMANCE EXERCISES

IN-BASKETS

INSTRUCTIONAL AIDE OBSERVATION/EVALUATION

ITEM ANALYSIS

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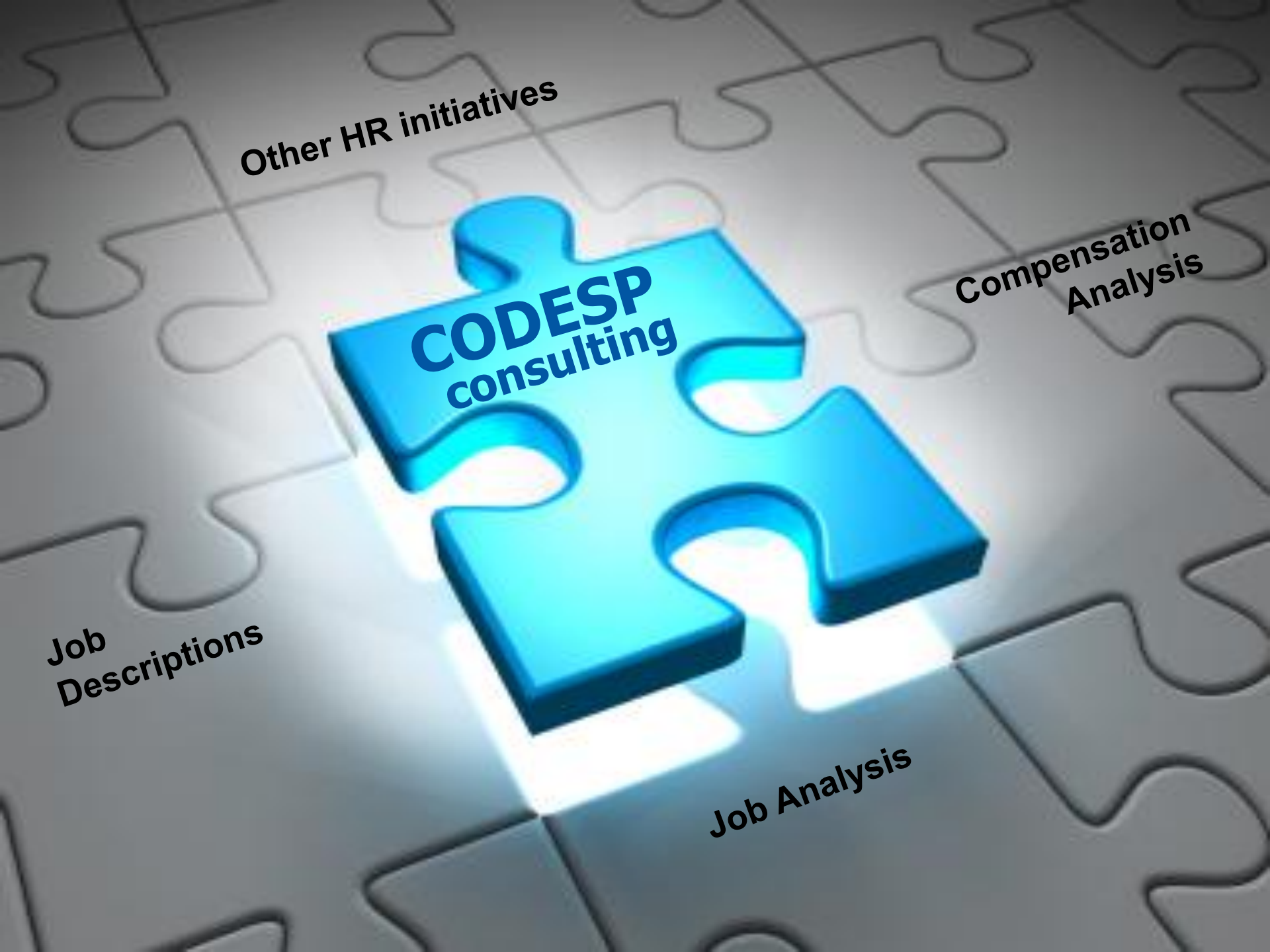or call
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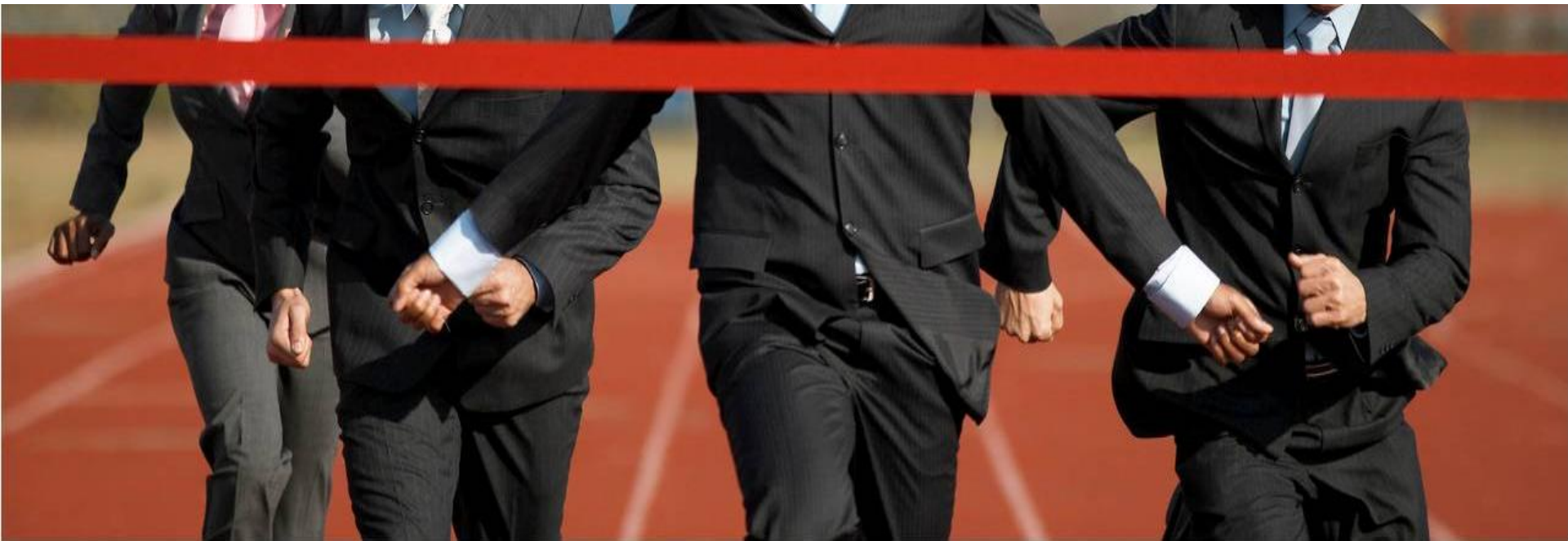
References

- http://www.consortiuminfo.org/essentialguide/whatisansso.php
- http://www.consortiuminfo.org/essentialguide/forming1.php
- http://www.appliedskills.com/White%20Papers/Item%20Bank%20Approach%20to%20Testing.pdf

- Develop applications that can be sustained
- Common requirements across different organizations
- Multiple organizations on single platform
- Cost Sharing

CODESP NEEDED

- Website and portal
- Reduction in administration effort
- Focus on placing processes online
- Reduction of long term cost of doing business
- Savings to enable more focus on professional activities

SCCOE DEVELOPED

- Website and content management tools
- Automated online subscriber management
- Automated online test requests
- Developed online test builder and administration
- New item banking, test generation and online testing system with CODESP acting as the beta site

RESULTS for CODESP

- Administrative tasks automated
- Customer input increased
- Output increased
- More time to focus on subject matter and accuracy
- More customer focus – Less administration

ONLINE TESTING COMPONENT

- Goals – Tackle the online / offline question
- Develop a model that can be re-used
- Rollout to other organizations to sustain long term