

Slide 1 of 51

Slide Title: Data Collected Through the PIAAC

Slide 2 of 51

This module provides more detailed information about some of the topics and components of the PIAAC study that were described within the introductory module.

First, this module begins with a description of PIAAC’s main components, which include the background questionnaire and four assessment domains. Information provided includes the definition of each domain, what each domain measures, and the types of items included in the assessment for each domain.

Next, the module describes the PIAAC assessment design in terms of administration and workflow; features of the background questionnaire; computer-based assessment items, or CBA; paper-based assessment items, or PBA; and, the CBA adaptive process.

Finally, the module describes the scales and proficiency levels used in reporting.

Slide 3 of 51

There are two main components of the PIAAC study: the Background Questionnaire, commonly called the “BQ”, and the direct assessment. The direct assessment includes four domains: literacy, which is either a paper- or computer-based administration, reading components, which is only a paper-based administration, numeracy, which is either a paper- or computer-based administration, and, problem-solving in technology-rich environments, or PS-TRE, which is only a computer-based administration.

All countries that participate in PIAAC are required to assess the literacy and numeracy domains. The United States assessed all four domains.

Slide 4 of 51

The PIAAC Background Questionnaire, or BQ, is designed to identify the skills participants regularly use in their job and in their home life, how participants acquire those skills, and how those skills are distributed throughout the population.

In order to obtain this information, the background questionnaire asks participants about their education and training, present and past work experience, the skills they use at work, their use of specific reading, writing, math, and information and communications technology, or ICT, skills at work and at home, personal traits, and, background information.

Countries that participate in PIAAC are allowed to add up to 5 minutes of country-specific items and may adapt items to reflect their country-specific context.

Slide 5 of 51

In the United States, the PIAAC BQ additions and adaptations are related to current, past, and required education, country of origin, language, ethnicity, training courses, occupation, health, economic sector, and earnings.

Slide 6 of 51

The direct assessment component of PIAAC evaluates the skills of adults in four fundamental domains, literacy, numeracy, reading components, and problem solving in technology-rich environments, or PS-TRE (*pronounced P-S-T-R-E*).

These domains constitute “key” information processing skills since they provide a foundation for the development of other, higher-order cognitive skills, and are prerequisites for gaining access to and understanding specific domains of knowledge. In addition, these skills are necessary in a broad range of contexts, from education to work to everyday life.

Slide 7 of 51

, as had been done in the Adult Literacy and Lifeskills Survey or, ALL, and a new domain known as “problem solving in technology-rich environments,” or PS-TRE. It also included a measure of vocabulary recognition and fluency called “components of reading.” As you can see in the slides that follow this presentation, in an effort to maintain trends, PIAAC included literacy items from the prose and document domains of the International Adult Literacy Survey or, IALS and ALL, and numeracy items from ALL. The assessment of problem solving in technology-rich environments was a novel addition and represents a baseline for the study of a new trend.

Slide 8 of 51

Literacy in PIAAC is defined as “Understanding, evaluating, using and engaging with written text to participate in society, to achieve one’s goals and to develop one’s knowledge and potential.” Based on this definition, PIAAC, in contrast to previous assessments, takes a broader view of literacy, expanding the range of skills that literate adults bring to “*participating in society to achieve one’s goals, and develop one’s knowledge and potential.*”

To provide more detailed information about adults at the lower end of the literacy spectrum, the assessment of literacy in PIAAC was complemented by a test of “reading component” skills that are comparable across a range of languages. PIAAC reading components measure literacy skills that provide necessary preconditions for gaining meaning from written text. These include knowledge of vocabulary, sentence comprehension, and basic text passage comprehension and fluency.

Slide 9 of 51

Numeracy in PIAAC is defined as “The ability to access, use, interpret, and communicate mathematical information and ideas, to engage in and manage mathematical demands of a range of situations in adult life.” This definition is different than the definition of quantitative literacy that was used in NAAL and other adult literacy assessments prior to ALL. Quantitative literacy is focused on overall literacy and basic arithmetic, while PIAAC’s numeracy is based on mathematical concepts and is viewed as a competency separate from literacy.

In PIAAC, problem solving in technology-rich environments is defined as “*Using digital technology, communication tools, and networks to acquire and evaluate information, communicate with others, and perform practical tasks.*”

Slide 10 of 51

PIAAC items developed for all four domains are authentic, culturally appropriate, and drawn from real-life situations that are expected to be of importance or relevance in different contexts. They are intended to reflect the purposes of adults' daily lives across cultures, even if specific characteristics are not necessarily familiar to all adults in all countries. Furthermore, the items cover different levels of ability and are adaptive to conventions across the participating countries. For example, the items assessed for the numeracy domain are adaptive to each country’s measurement systems and currencies.

Slide 11 of 51

A total of 58 items were used to measure literacy. The distribution of items by context is shown in this table.

Slide 12 of 51

This table shows the context distribution of the 56 items used to measure numeracy.

Slide 13 of 51

This table shows the context distribution of the 14 PS-TRE items.

Slide 14 of 51

The PIAAC literacy domain includes both continuous texts, also called prose literacy, and non-continuous texts, also called document literacy.

PIAAC provides an opportunity to deepen the understanding of cognitive skills that underlie adult literacy. The three cognitive processes used for working on text items or tasks that have been identified in PIAAC are to access and identify, to integrate and interpret, and, to evaluate and reflect upon information. These processes will be explained in more detail on the next slide.

Data Collected Through the PIAAC

As previously noted, PIAAC broadened the literacy definition and construct to include new mediums, such as digital texts, including hypertext and text in interactive environments such as forms and blogs, in addition to print-based texts.

Slide 15 of 51

For PIAAC literacy items, examples of task aspects associated with the cognitive process of “accessing and identifying” include locating items of information in a text, finding required information that is directly and plainly stated in the text, and, making inferences and having rhetorical understanding.

“Integrating and interpreting” may include understanding the relationships between different parts of a text, which may be either explicitly signaled or require the reader to make inferences, comparing and contrasting, and, reaching an understanding of a text as a whole.

Examples of task aspects associated with “evaluating and reflecting” include assessing the relevance, credibility, argumentation and truthfulness of the information presented in the text, within a context of information not presented; evaluating the purposefulness, register, structure or reader-awareness of the text, or the success with which the author uses evidence and language to argue or persuade; and, being aware of the strategies used in texts to persuade readers to a particular end, as well as of the intended audience for the text.

Slide 16 of 51

The distribution of the 58 literacy items by cognitive process is shown in this table.

Slide 17 of 51

This table shows the distribution of the literacy items by medium. The literacy domain is almost evenly split between print-based and digital texts.

Slide 18 of 51

PIAAC included a reading components domain, which included measures of accuracy and fluency for each of three sections: vocabulary knowledge, sentence processing and passage comprehension.

Fluency was assessed by collecting data on response times. Shorter response times implied greater fluency.

Collectively, these items were designed for consistent measurement across languages and countries.

Slide 19 of 51

This table contains examples of task aspects in each of the reading components domains.

An example of a task used to measure vocabulary knowledge involves asking the respondent to circle a word that matches a picture.

An example sentence processing task is assessing whether a sentence makes sense in terms of the properties of the real world or in terms of the internal logic of the sentence.

Passage comprehension is exemplified by tasks that involve reading a passage and circling the word that most makes sense among underlined alternative words.

Slide 20 of 51

As was the case for literacy, PIAAC numeracy items were developed across the key facets of numeracy defined in the framework.

The PIAAC numeracy construct contains several aspects that are described in the PIAAC numeracy framework. In this module we review two of the main aspects: cognitive/response processes and item content. The cognitive/response processes include: identify, locate and access; act upon and use; and, interpret and evaluate. The mathematical content includes items relating to data and chance; dimension and shape; pattern, relationships and change; and, quantity and number.

Slide 21 of 51

For PIAAC numeracy items, examples of task aspects associated with identifying, locating, or accessing information include identifying, locating or accessing some mathematical information that is present in the task or situation.

Acting upon and using information may include using arithmetic operations, such as counting and making calculations; ordering or sorting, estimating or using various measuring devices; and, using (or developing) a formula that serves as a model of a situation or process.

Examples of task aspects associated with interpreting and evaluating information include: interpreting the meaning and implications of information of a mathematical or statistical nature; making a judgment or developing an opinion about mathematical or statistical information; analyzing a problem and evaluating the quality of the solution against some criteria or contextual demands; and, representing and communicating mathematical information, describing the results of actions or interpretations to someone else, or explaining and justifying the logic of analysis or evaluation.

Slide 22 of 51

This table shows the distribution of the 56 numeracy items by cognitive processes.

Slide 23 of 51

This table shows the distribution of the 56 numeracy items by mathematical content: data and chance, dimension and shape, pattern relationships and change, as well as quantity and change.

Slide 24 of 51

The PIAAC domain of problem solving in technology-rich environments is organized along four key cognitive dimensions, as well as a technology dimension.

The cognitive dimensions refer to the mental processes by which a person actually performs problem solving. They include goal-setting and progress monitoring; planning and organizing; accessing and evaluating information; and making use of information.

The technology dimension refers to conducting tasks in simulated software applications, as well as the use of commands and functions commonly found in email, web pages, and spreadsheets.

Slide 25 of 51

The “tasks” dimension for PS-TRE refers to elements of a situation that trigger a condition for problem solving, such as the scenario and task directions presented to test takers. These range from online shopping, to finding interactive health prevention information, to managing personal information and business finances.

The complexity dimension refers to whether the problem solving necessary for an item involves a single step or multiple steps.

Slide 26 of 51

Examples of goal-setting and progress monitoring include: articulating one's needs or purposes; establishing and applying criteria for constraint satisfaction and achievement of a solution; monitoring progress; and, detecting and interpreting unexpected events, impasses and breakdowns.

Planning and organizing is exemplified by tasks that involve setting up adequate plans, procedures, and strategies; and, selecting appropriate devices, tools or categories.

Examples of accessing and evaluating information include orienting and focusing one's attention; assessing reliability, relevance, adequacy, and comprehensibility; and, reasoning about sources and contents.

Slide 27 of 51

Making use of information is exemplified by tasks that involve selecting information, organizing information and integrating across potentially inconsistent pieces and across formats, and, transforming information, for example, through writing.

Slide 28 of 51

This table shows the distribution of the 14 PS-TRE items by the cognitive dimensions just described. It is important to note that some items are coded to more than one dimension.

Slide 29 of 51

Here is the distribution of PS-TRE items by technology dimensions. As noted in the previous slide, some items are coded to more than one dimension; so, the numbers add up to more than 14.

Slide 30 of 51

This table shows the distribution of the 14 PS-TRE items by their complexity.

Slide 31 of 51

Examples of items from the literacy, numeracy, and problem solving in technology-rich environments domains at various proficiency levels are available from the OECD Education and Skills Online presentation. This tool is an assessment designed to provide individual-level results that are linked to PIAAC and can be accessed by clicking on the corresponding underlined screen text.

Examples of reading component items are available from the PIAAC section of the NCES website. To access the examples, click on the corresponding underlined screen text.

Slide 32 of 51

PIAAC requires in-person interviews to complete the background questionnaire, before administering the direct assessments in the four domains. As mentioned earlier, the direct assessments are available in two modes: paper-based and computer-based.

Slide 33 of 51

The workflow of the PIAAC survey includes four parts.

First, an interviewer determines if a sampled person is eligible for the assessment. This process is referred to as case initialization, and takes approximately 5 minutes.

Next, the interviewer administers a 45-minute background questionnaire, or BQ, to the respondent using computer-assisted personal interview technology, or CAPI.

Data Collected Through the PIAAC

After completing the BQ, the Assessment Core is administered. The Assessment Core is composed of two parts: an information and communication technology (or ICT) core that measures basic computer skills, for those who are willing to take the computer-based assessment; and, a literacy/numeracy core, via either paper-based or computer-based assessment, which measures basic skills within the literacy and numeracy domains. Each of these cores takes approximately 5 minutes.

Participant scores on the two Assessment Core sections are used to establish the path by which participants will complete the direct assessment.

The overall direct assessment time is approximately 60 minutes for those taking either the computer-based assessment or the paper-based assessment. However, PIAAC is not a timed assessment. Some participants may take longer to complete the assessment. The total survey time is approximately 2 hours.

Detailed information about the features and administration of each part of the workflow is provided in the next few slides.

Slide 34 of 51

Since the background questionnaire, or BQ, is conducted using CAPI, it has a degree of routing and adaptiveness. BQ routing is determined by whether respondents are employed, unemployed, out of the labor force, or in education. In addition to routing respondents according to their labor force status, the adaptiveness of the CAPI BQ allows for language selection within the respondent's country and adaptations based on specific ages or genders for questions about the health status of respondents. For example, in the US, there are a lot of health-related questions that are age- and gender-based. The computer allows for adaptation of the BQ based on age and gender for these questions. Some countries, such as Canada, may have extended their sample to include other age groups. Again, the adaptive nature of the PIAAC BQ allows for appropriate routing and adapting based on such samples.

Slide 35 of 51

The Background Questionnaire, administered via CAPI system, includes the following sections:

- General Information
- Past Education and current Education and Training
- Current Status and Work History
- Current work, if applicable.
- Last job held within the past 12 months, if the respondent is not currently employed
- Skills used at work , which is called the Job Requirements Approach, or JRA
- Literacy, numeracy, and information and communications technology at work
- Literacy, numeracy, and information and communications technology at home
- About yourself, and

Data Collected Through the PIAAC

- Background.

Slide 36 of 51

Respondents who indicated having previous experience with computers in the interview are directed to the information communication technology, or ICT, core of the computer-based assessment path. The ICT core assessment includes a set of basic computer tasks, such as cutting and pasting, moving, and highlighting, in order to assess the basic functional computer skills necessary to take the main assessment on a computer. Respondents who fail the ICT core, proceed to the paper-based literacy-numeracy core assessment. Participants who pass the ICT core, proceed to the computer-based literacy-numeracy core assessment.

Slide 37 of 51

The literacy/numeracy core for both the computer-based assessment and paper-based assessment includes a set of short, easy literacy and numeracy tasks that gather information about the basic literacy and numeracy skills of participants and serve as a basis for routing participants to the appropriate domain. Those who fail the literacy/numeracy core (regardless of whether it was delivered via computer- or paper-based assessment) will be immediately directed to the reading components domain. Participants who pass the literacy/numeracy core proceed to additional literacy/numeracy items.

The computer-based literacy/numeracy core consists of 3 literacy and 3 numeracy items. The paper-based literacy/numeracy core consists of 4 literacy and 4 numeracy items.

Slide 38 of 51

The Paper-Based Assessment, or PBA, begins with a 10-minute core of literacy and numeracy. Participants who perform at or above a minimum standard on this core will be randomly assigned to either a 30-minute cluster of literacy items, or a 30-minute cluster of numeracy items. After they complete those items, they will receive a 20-minute assessment of reading component items.

Participants who fail to correctly answer the majority of tasks in the literacy-numeracy core will be routed directly to the reading components assessment. All paper-based respondents take the reading components domain, regardless of ability, so that the performance of low-literacy respondents can be measured more accurately.

Slide 39 of 51

One of the useful aspects of PIAAC is the adaptive design of the Computer-based Assessment, or CBA, which allows participants to be directed to sets of easy, medium, or difficult items as they advance through the assessment. The CBA consists of two modules and each module consists of two stages. Participants who perform well on both parts of the computer-based Core sections –ICT and literacy/numeracy will be

Data Collected Through the PIAAC

randomly routed to one of three domains for Module 1: computer-based literacy, computer-based numeracy, or problem-solving in technology rich environments.

Module 1 takes approximately 30 minutes to complete. For Stage 1, participants are assigned a testlet, or set of items, based on the participant's level of education, status as a native or non-native language speaker, and performance on the CBA Core, including both literacy/numeracy and ICT core questions, which are automatically scored as correct or incorrect.

Stage 2 of Module 1 tests the same domain as tested in Stage 1. The difficulty of the assessment items included in the testlet assigned for Stage 2 is based on the same set of variables used in Stage 1, as well as on the participant's performance on Stage 1 items.

Slide 40 of 51

After completing Module 1, participants are randomly directed to an alternate domain for Module 2, which takes approximately 30 minutes to complete. Similar to Module 1, Module 2 includes 2 stages of items assessed for the same domain. For Stage 1, the testlet is assigned according to the variables used for Module 1. For Stage 2, the testlet is assigned using these same variables, as well as the participant's performance on the Stage 1 items.

The diagram in the next slide provides a graphic presentation of the PIAAC assessment for both the paper- and computer-based assessment paths.

Slide 41 of 51

This diagram provides a graphical representation of the assessment workflow that follows from the BQ, which we have just discussed. The process for paper-based assessment branches are to the left and the computer-based assessment branches are to the right.

One of the items in the BQ asks about the respondent's computer experiences. Respondents indicating no experience in using computers or refusing to take the test on the computer are directed to the paper-based version of the literacy/numeracy Core. Respondents who indicate having previous experience with computers are directed to a Computer-Based Assessment Core section, or CBA-Core.

The CBA- Core is composed of two parts: an information communication technology core, or ICT core, which measures basic computer skills, and a literacy/numeracy core, which is similar to the literacy/numeracy core in the paper-based path and measures basic skills within the literacy and numeracy domains. Each of these cores takes approximately 5 minutes.

Participants who fail the ICT core will proceed to the paper-based assessment, and take the paper-based literacy-numeracy core items.

Data Collected Through the PIAAC

Participants who pass the ICT core proceed to the computer-based literacy-numeracy core. If they do not pass the computer literacy-numeracy core, participants will proceed directly to the reading components section of the paper-based assessment.

Participants who perform well on both parts of the computer-based Core section will be randomly routed to the computer-based literacy, computer-based numeracy, or the problem-solving in technology-rich environments domains.

The computer-based assessment consists of two stages in each module; and two modules, that is, Module One and Module Two. Each module is a set of literacy, numeracy, or problem-solving units.

Respondents who receive literacy or numeracy in CBA Module One will not repeat the same domain, but instead receive one of the other two domains in CBA Module Two.

Respondents who take the problem-solving in technology rich environments domain in CBA Module One have a 50 percent chance of receiving a second set of problem-solving items, and a 50 percent chance of receiving literacy or numeracy items in CBA Module Two.

Slide 42 of 51

This table shows the number of assessment items per delivery mode and domain. Note: Of the total 76 literacy items, 18 items were linking items between the PBA and CBA assessment mode, and of the total 76 numeracy items, 20 were also linking items. Combined with the 14 problem solving items, the 58 unique literacy items and the 56 unique numeracy items give PIAAC a total of 128 unique items. Reading components are not counted in the total number of unique items, as they are a pseudo-domain designed to measure the aptitude of those with very low levels of literacy, not for the sample as a whole.

Slide 43 of 51

To ensure strong links in literacy and numeracy with IALS and ALL, approximately 60% of the assessment items in these two PIAAC domains have been drawn from those surveys. This table shows the distribution of literacy and numeracy items that are linked across the IALS, ALL, and PIAAC surveys.

Slide 44 of 51

In each of the three domains assessed—literacy, numeracy, and problem solving in technology-rich environments—proficiency is considered as a *continuum of ability* involving the mastery of information-processing tasks of increasing complexity. All test questions or “items” are placed on a scale of 0-500 for each of these domains. The top of the scale, 500, represents the point at which the most complex task could be placed on the continuum. Adults scoring at any point on the scale may be able to complete more difficult items (that is, those with a higher scale score), but their probability of success decreases as the distance between their average score and an item’s

Data Collected Through the PIAAC

placement on the scale increases. Conversely, adults will also be able to complete easier items with a greater chance of success.

MORE INFORMATION ABOUT PROFICIENCY SCORES, AND HOW THEY DIFFER FROM OTHER INTERNATIONAL LITERACY STUDIES, CAN BE ACCESSED BY CLICKING ON THE UNDERLINED SCREEN TEXT, PROFICIENCY SCORES.

Slide 45 of 51

Average scores are most informative when they are available for different subgroups of interest. Here is an example of an analysis that cross-tabulates PIAAC average literacy scores with the employment status that respondents reported on the PIAAC background questionnaire.

The graph displays average scores for each employment status: employed, unemployed, and out of the labor force. The average literacy score for employed Americans was significantly lower than the international average.

For both U.S. respondents and the international average, employed respondents had the highest average literacy scores, followed by unemployed respondents, and then those out of the labor force.

Slide 46 of 51

Besides average scores, another useful way to report PIAAC results in the domains assessed is by the percentage of adults who reach different proficiency levels. To help interpret the results, the reporting scales have been divided into “proficiency levels” that are defined by particular score-point ranges. Six proficiency levels are defined for literacy and numeracy: Levels 1 through 5, plus a base level below Level 1. Four are defined for problem solving in technology-rich environments: Levels 1 through 3, plus below Level 1. The OECD decided to combine levels 4 and 5 in the reporting of literacy and numeracy results, due to the small percentages of respondents who score at level 5.

These level descriptors provide a summary of the characteristics of the types of tasks that can be successfully completed by adults with proficiency scores in a particular range. The types of tasks that are associated with proficiency levels within each domain will be detailed in the following slides.

It should be noted that reading components is a pseudo-domain designed to measure the aptitude of those with very low levels of literacy, not for the sample as a whole. Since it does not include the whole sample, it is only reported in terms of an average reading components score, rather than in terms of levels.

Slide 47 of 51

This graph shows the six proficiency levels defined for the domain of literacy, mapped to the scale of proficiency scores across the domain.

Data Collected Through the PIAAC

The tasks at the base level, “Below Level 1”, require the respondent to read brief texts on familiar topics to locate a single piece of specific information.

Tasks at Level 1 require the respondent to read relatively short digital, print, or mixed texts to locate a single piece of information that is identical to or synonymous with the information given in the question.

At Level 2, tasks require respondents to make matches between the text and information, and may require low-level paraphrasing or inferences.

Tasks at Level 3 require the respondent to identify, interpret, or evaluate one or more pieces of information, and often require varying levels of inference.

Level 4 tasks often require respondents to perform multiple-step operations to integrate, interpret, or synthesize information from complex or lengthy texts. Complex inferences and application of background knowledge may be needed to perform the task successfully.

At Level 5, tasks may require the respondent to search for and integrate information across multiple, dense texts; construct syntheses of similar and contrasting ideas or points of view; or evaluate evidence based arguments.

Slide 48 of 51

Here is a graph of the six proficiency levels defined for the numeracy domain. The tasks at the base level, “Below Level 1”, require the respondents to perform simple processes such as counting, sorting, performing basic arithmetic operations with whole numbers or money, or recognizing common spatial representations in concrete, familiar contexts.

Level 1 tasks require one-step or simple processes involving counting; sorting; performing basic arithmetic operations; understanding simple percentages such as 50%; and locating and identifying elements of simple or common graphical or spatial representations.

Tasks at Level 2 require the application of two or more steps or processes involving calculation with whole numbers and common decimals, percentages and fractions; simple measurement and spatial representation; estimation; and interpretation of relatively simple data and statistics in texts, tables and graphs.

Level 3 tasks involve several steps and the application of number sense and spatial sense; recognizing and working with mathematical relationships, patterns, and proportions expressed in verbal or numerical form; and interpretation and basic analysis of data and statistics in texts, tables and graphs.

Tasks at Level 4 involve multiple steps and analysis and more complex reasoning about quantities and data; statistics and chance; spatial relationships; and change, proportions and formulas. Level 4 tasks may also require understanding arguments or communicating well-reasoned explanations for answers or choices.

Data Collected Through the PIAAC

Tasks at Level 5 require the respondent to understand complex representations and abstract and formal mathematical and statistical ideas, possibly embedded in complex texts. Respondents may have to integrate multiple types of mathematical information where considerable translation or interpretation is required; draw inferences; develop or work with mathematical arguments or models; and justify, evaluate and critically reflect upon solutions or choices.

Slide 49 of 51

This graph shows the four proficiency levels defined for the domain of problem solving in technology-rich environments. The tasks at the base level, “Below Level 1”, are based on well-defined problems involving the use of only one function within a generic interface to meet one explicit criterion without any categorical, inferential reasoning or transforming of information.

At Level 1, tasks require little or no navigation and only a few steps to access the information or commands required to solve the problem. At this cognitive level, the respondent can readily infer the goal from the task statement; problem resolution requires the respondent to apply explicit criteria; and there are few monitoring demands (that is, the respondent does not have to check whether he or she has used the appropriate procedure or made progress towards the solution).

Level 2 tasks typically require some navigation across pages and applications to solve the problem. The task may require evaluating the relevance of a set of items to discard distractors. Some integration and inferential reasoning may be needed.

At Level 3, tasks may involve multiple steps and operators and some navigation across pages and applications is required to solve the problem. There are typically high monitoring demands and the task may require evaluating the relevance and reliability of information in order to discard distractors. Integration and inferential reasoning may be needed to a large extent.

Slide 50 of 51

Here is an example of how results can be reported by proficiency level. This sample analysis displays the distribution of adults in participating OECD countries compared to that in the United States, by the percentage reaching each of the numeracy skill proficiency levels.

For both the OECD average and the U.S., one third of respondents scored at proficiency Level 2.

For the OECD average, 47 percent of respondents scored at Level 3 or higher, compared with 39 percent of U.S. respondents.

Literacy related non-response, which was the proportion of respondents unable to take the assessment for literacy-related reasons, was three percent greater in the U.S. than on average among participating OECD countries. Note that while this percentage

Data Collected Through the PIAAC

difference is statistically significant, not all percentage differences presented are significant.

Slide 51 of 51

This module has described the main components of the PIAAC Background Questionnaire and four assessment domains. Definitions, measures, and types of items were discussed for each domain. It has also provided you with a description of PIAAC's assessment design in terms of its administration, workflow, background questionnaire features, computer-based assessment and paper-based assessment items, and CBA adaptive process. Finally, the module described PIAAC data reporting, and the proficiency levels for each domain. The module's objectives are summarized here for your reference.

You can access the module resources by clicking on the corresponding underlined screen text.

In the next modules, you will find more detailed information on how to appropriately use weights, variance estimation procedures, and plausible values with PIAAC data.

You may now proceed to the next module in the series, or click the "Exit" button to return to the landing page.