# OMB DITAP Pre-Program Assessment and Release 1 Summary of Results

## October 6, 2016

As part of the DITAP program, the current cohort has completed two separate assessments. The purpose of the first assessment, the Pre-Program Assessment, was to take a quick measurement of program participants’ incoming level of knowledge and experience related to various digital service procurement topics. Next, the purpose of the Release 1 Assessment was to provide valuable information for program enhancements, verify that participants are acquiring the desired knowledge and achieving the performance objectives, and help the development team ensure program offerings meet the participants’ learning needs. This document provides a summary of the results from both of these assessments.

Of the entire cohort, 29 participants (97%) completed the Pre-Program Assessment, which 28 participants (93%) completed the assessment for Release 1. In total, 27 participants (90%) completed both assessments.

## Pre-Assessment: Cohort Level Results

Overview

As a first step in this program, participants completed the Pre-Program Assessment. This assessment was scenario-based and designed to assess Performance Objectives across all of the releases. Two scenarios were aligned to each release, though sometimes the objectives aligned across release content. This section provides a summary of the cohort-level results from this Pre-Program Assessment.

Assessment Data by Objective

The following table provides descriptive statistics for each of the Performance Objectives included on the Pre-Program Assessment.

| **Descriptive Statistics – Group Percentage Score by Objective (worst to best)** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Objective** | **N** | **Opportunity Range\*** | **Minimum (%)** | **Maximum (%)** | **Mean (raw)** | **Mean (%)** | **Std. Deviation (%)** |
| Objective 4.5 | 29 | 3.00-3.00 | .00 | 100.00 | 1.034483 | 34.4828 | 25.94677 |
| Objective 2.5 | 29 | 2.00-5.00 | .00 | 100.00 | 1.241379 | 37.5862 | 26.68372 |
| Objective 3.9 | 29 | 1.00-4.00 | .00 | 100.00 | 1.275862 | 44.5402 | 22.30247 |
| Objective 1.1 | 29 | 2.00-2.00 | .00 | 100.00 | 0.896552 | 44.8276 | 24.43953 |
| Objective 2.4 | 29 | 3.00-5.00 | .00 | 100.00 | 2.172414 | 46.4943 | 21.79151 |
| Objective 2.6 | 29 | 1.00-1.00 | .00 | 100.00 | 0.482759 | 48.2759 | 50.85476 |
| Objective 3.7 | 29 | 1.00-1.00 | .00 | 100.00 | 0.482759 | 48.2759 | 50.85476 |
| Objective 4.7 | 29 | 5.00-5.00 | .00 | 100.00 | 2.793103 | 55.8621 | 24.71513 |
| Objective 4.6 | 29 | 3.00-3.00 | .00 | 100.00 | 1.689655 | 56.3218 | 28.31715 |
| Objective 4.8 | 29 | 3.00-3.00 | .00 | 100.00 | 1.689655 | 56.3218 | 26.87928 |
| Objective 3.5 | 29 | 5.00-7.00 | 33.33 | 83.33 | 3.551724 | 56.9130 | 14.67090 |
| Objective 3.6 | 29 | 2.00-4.00 | 33.33 | 100.00 | 1.724138 | 58.9080 | 22.70531 |
| Objective 2.2 | 29 | 5.00-8.00 | 12.50 | 100.00 | 4.37931 | 62.9187 | 19.57284 |
| Objective 3.10 | 29 | 3.00-4.00 | .00 | 100.00 | 1.965517 | 62.9310 | 30.42247 |
| Objective 3.01 | 29 | 5.00-6.00 | 20.00 | 100.00 | 3.241379 | 63.7931 | 17.90017 |
| Objective 1.6 | 29 | 4.00-5.00 | 25.00 | 100.00 | 3.137931 | 64.8276 | 21.35929 |
| Objective 1.7 | 29 | 3.00-5.00 | .00 | 100.00 | 2.586207 | 66.2644 | 26.13934 |
| Objective 3.8 | 29 | 5.00-7.00 | 28.57 | 100.00 | 4.344828 | 67.1429 | 15.96735 |
| Objective 2.1 | 27 | .00-2.00 | .00 | 100.00 | 1.068966 | 68.5185 | 39.58474 |
| Objective 2.3 | 29 | 4.00-5.00 | 20.00 | 100.00 | 2.931034 | 68.6207 | 20.39330 |
| Objective 4.3 | 29 | 1.00-1.00 | .00 | 100.00 | 0.689655 | 68.9655 | 47.08236 |
| Objective 3.2 | 29 | 4.00-6.00 | 25.00 | 100.00 | 3.551724 | 71.7816 | 20.51389 |
| Objective 1.5 | 29 | 6.00-7.00 | 33.33 | 100.00 | 4.793103 | 71.8391 | 16.69178 |
| Objective 3.3 | 29 | 7.00-9.00 | 33.33 | 100.00 | 6.275862 | 73.3990 | 15.75155 |
| Objective 4.4 | 29 | 2.00-2.00 | .00 | 100.00 | 1.482759 | 74.1379 | 34.38410 |
| Objective 2.7 | 29 | 2.00-4.00 | .00 | 100.00 | 1.689655 | 74.4253 | 32.11548 |
| Objective 4.1 | 29 | 3.00-3.00 | 33.33 | 100.00 | 2.448276 | 81.6092 | 24.53732 |
| Objective 3.4 | 29 | 1.00-4.00 | 25.00 | 100.00 | 1.586207 | 84.7701 | 25.59500 |
| Objective 1.8 | 29 | 1.00-1.00 | .00 | 100.00 | 0.862069 | 86.2069 | 35.09312 |
| Objective 1.2 | 29 | 2.00-2.00 | 50.00 | 100.00 | 1.758621 | 87.9310 | 21.77471 |
| Objective 1.4 | 29 | 1.00-1.00 | .00 | 100.00 | 0.965517 | 96.5517 | 18.56953 |
| Objective 1.3 | 29 | 1.00-1.00 | 100.00 | 100.00 | 1 | 100.0000 | .00000 |
| Objective 4.2 | 1 | .00-1.00 | 100.00 | 100.00 | 0.034483 | 100.0000 | . |

*\*Opportunity range represents the range of maximum possible points for each objective across participants*

*Note: Highlighted objectives were not assessed for all participants because questions assessing these objectives were dependent on getting a previous question correct or incorrect.*

Mean Percentage Scores for Each Performance Objective

The following charts show the mean percentage scores for each of the performance objectives included on the Pre-Program Assessment.

*\*Note: Objective 4.2 was only evaluated for one participant, who got the question correct.*

## Release 1: Assessment Results Summary

Overview

Twenty-eight of the 30 participants completed the Release 1 assessment (93 %). Overall, participation remained strong on core activities and the guided learnings. Overall, participants had positive perceptions of the type of content included in Release 1, however many were overwhelmed with the amount of work and the time required to complete readings and activities. The average overall score on the knowledge assessment questions was 60% correct.

Section 1 Results

* **Participation in activities**
  + Majority of participants completed the Release Scenario Staging and read the Digital Services Playbook. Additionally, most participants also completed the Task 1 Live Digital Assignment, watched the “Coding a Better Government” video, and completed the readings on TechFAR and Digital Government. Only 21% of participants completed the Lean UX reading.
  + The majority of participants (68%) said that their IDP helped to focus their efforts during Release 1 to **a slight extent** or less.
  + Participants continue to feel overloaded with the time commitment and do not feel they have enough time to complete coursework and assignments.
* **Perceptions of Release 1 content**
  + Nearly all participants (93%) have either a strong or moderate commitment to apply what they learned in Release 1 to their work.
  + A clear majority (85%) of participants believe their work behaviors will improve as a result of Release 1.
  + A clear majority (86%) of participants reported that the quality of Release 1 learning elements supported their learning.
  + Multiple participants felt that the content in Release 1 Content provided good foundational knowledge that they need; some participants indicated that real world applications of content, such as showing contract language, would have been beneficial to include.
* **Participant commitment, expectations, learning application**
  + Majority of participants (86%) said that their expectations for Release 1 were met to **a moderate or great extent**.
  + Half of the participants (50%) are in a job role where they can apply what they have learned immediately.
* **Instruction and technology**
  + There were many comments about the large amount of content and information coming at once. Multiple participants indicated that this was especially difficult coming at the end of the fiscal year when their job responsibilities are particularly heavy.
  + Several comments focused on having too many readings or desiring more real-time examples.
  + Overall, participants thought that the instruction for this Release was good, although some did indicate a desire for more in-person instruction or real-time interactions, even though they acknowledge this may not be realistic.
  + Some participants experienced challenges with the portal, such as not being able to access it on the GSA network or challenges due to DoD firewalls. While many participants thought that the portal was fine, a few participants found the portal difficult to navigate.

Section 2 (Knowledge Assessment) Results

* **Average overall score, score distribution**
  + Average score for the Section 2 (Level 2 knowledge assessment) questions was 15.68 out of 28 or 60% correct.
  + Lowest score was 8 (30%); Highest score was 21 (81%)
* **Highest and lowest scoring performance objective(s)**
  + The following performance objectives were included in this release:

| Objective | Objective Description |
| --- | --- |
| 1.1 | Define digital services and the problems they can be used to solve. |
| 1.2 | Identify key digital services roles/professionals in the digital services ecosystem and their challenges. |
| 1.3 | Identify modern design, development, and delivery methods used by digital services professionals. |
| 1.4 | Identify "who's who" in the digital services arena, including public and private sector organizations and individuals. |
| 1.5 | Illustrate your new role as a digital service acquisition professional and that of your team members. |
| 1.6 | Identify the available sources of supply within the digital services market segments, such as Open Source Software, Big Data, XaaS, Cloud, and more. |
| 1.7 | Identify the high-level principles of agile development that make it effective. |
| 1.8 | Describe what sets agile methods apart from waterfall development and delivery methods. |

* + Participants performed **best** on Performance Objective 4 – **Identify “who’s who” in the digital services arena, including public and private sector organizations and individuals,** followed by Performance Objective 2 – **Identify key digital services roles/professionals in the digital services ecosystem and their challenges,** and Performance Objective 3 – **Identify modern design, development, and delivery methods used by digital services professionals.**
  + Participants performed **poorest** on Performance Objective 8 – **Describe what sets agile methods apart from waterfall development and delivery methods,** followed by Performance Objective 7 – **Identify the high-level principles of agile development that make it effective.**
  + Mean percentage scores for each of the Release 1 performance objectives are provided in the following chart

## Release 1/Pre-Assessment Performance Comparisons

For each of the performance objectives included in Release 1, participants also completed Pre-Program Assessment questions to assess the same objectives. The table below displays the comparison between scores on the Pre-Program Assessment and Release 1 for each of the relevant performance objectives.

|  |  |  |  |
| --- | --- | --- | --- |
| **Comparison of Cohort Pre-Program Assessment and Release 1 Scores for Release 1 Performance Objectives** | | | |
| **Performance Objective** | **Score Increase** | **Equal Score** | **Score Decrease** |
| **1.1** | 41% | 56% | 4% |
| **1.2** | 19% | 59% | 22% |
| **1.3** | 0% | 93% | 7% |
| **1.4** | 4% | 89% | 7% |
| **1.5** | 19% | 44% | 37% |
| **1.6** | 37% | 30% | 33% |
| **1.7** | 26% | 52% | 22% |
| **1.8** | 7% | 78% | 15% |

One caveat with regard to these comparisons is that the scores for the Pre-Program Assessment relied on fewer items. This means that it may have been easier to receive a high score on the Pre-Program Assessment than Release 1 because fewer questions needed to be answered correctly. As such, to make these comparisons participant scores were grouped around confidence intervals to better equate scores. The number of items for each performance objective in both the Pre-Program Assessment and Release 1 are provided in the following table.

|  |  |  |
| --- | --- | --- |
| **Number of Items per Performance Objective** | | |
| **Performance Objective** | **Pre-Assessment**  **# of items** | **Release 1**  **# of items** |
| **1.1** | 2 | 10 |
| **1.2** | 2 | 7 |
| **1.3** | 1 | 8 |
| **1.4** | 1 | 7 |
| **1.5** | 6-7 | 10 |
| **1.6** | 4-5 | 13 |
| **1.7** | 3-5 | 14 |
| **1.8** | 1 | 12 |