

Office of the Inspector General Application Development and Support

Report # A-2021DOE-028

August 2022

Executive Summary

In accordance with the Department of Education's (DOE) fiscal year (FY) 2020-2021 audit plan, the Office of the Inspector General (OIG) conducted an Application Development and Support Audit. The purpose of this engagement was to determine the effectiveness of Division of Technology & Innovation (DTI) internal controls for change management processes and procedures, from the initial request to project completion.

During this audit, we noted that DTI generally provided services in accordance with the established change management processes and procedures in place. We recommend DTI strengthen internal controls for emergency change management procedures and communication of testing requirements with customers¹. The Audit Results section below provides additional details noted during our audit.

Scope, Objectives, and Methodology

The scope of our audit included an examination of application changes from January 1, 2021, to June 30, 2021. The objectives of this engagement were to determine whether DTI manages application changes in accordance with Department policies, applicable Information and Technology Governance Frameworks, and applicable laws and regulations. The engagement included a review of DTI's documentation of application changes including impact assessments, authorizations, tracking, testing, and communication with program areas.

To accomplish our objectives, we reviewed applicable laws, rules, and regulations; reviewed policies and procedures; reviewed Information and Technology Governance Frameworks; reviewed the Operation and Maintenance Planning Standards; reviewed a sample of application changes and related documents; reviewed documentation of testing of application changes; and reviewed communication of the testing efforts and results with the program areas.

¹ We identified instances where improvements could be made to strengthen internal controls for emergency change management procedures and communication of testing requirements with customers, but we determined these two issues did not rise to the level of a material deficiency. We disclosed the observations verbally to DTI management.

Background

DTI is responsible for Technology Planning and Management; Educational Technology; Data Center Operations; Applications Development and Support; and Customer/End User Support. DTI inquired as to what extent they should be responsible for the application testing of requested changes. In the past, DTI has successfully met their customer's initial request for application changes; however, there have been instances where, once in production, an application has undergone additional testing due to coding errors that came as a result of the prior changes made. DTI currently follows the Operations and Maintenance Planning Standards, which serves as the change management policy and procedure for DTI. The purpose of the Operations and Maintenance Planning Standard is to "specify requirements for compliance with the Florida Department of Education's information technology and other department policies, as well as applicable laws and regulations."

Audit Results

We determined that DTI generally adheres to the change management policies, procedures, and Information and Technology Governance Frameworks and maintains proper documentation of the change requests and testing efforts in accordance with policies and procedures. DTI provided 22 completed change management requests for applications within our scope. We sampled 6 change requests and reviewed the corresponding Application Development Request forms, test case documents, User Acceptance Testing documentation, and technical manuals. We determined that DTI properly conducted and documented impact assessments, authorizations, tracking, testing, and customer communication for each of these change requests. As stated above, we recommend DTI strengthen internal controls for emergency change management procedures and communication of testing requirements with customers.

DTI Management Response

In response to the Inspector General recommendations, the Division of Technology and Innovation will be implementing the following changes before the end of the 2022 calendar year:

- 1. Regarding emergency requests, FDOE is updating the Operations and Maintenance Standards to reflect the process for emergency requests. This update is expected to be completed by October 31, 2022.
- 2. Regarding communication to the customer about the customer's role in regression testing, FDOE is updating the service level agreement template and the communication standard relating to user acceptance testing. These updates are expected to be completed prior to initiation of planning activities for fiscal year 2023/24 or by November 30, 2022.

Closing Comments

The Office of the Inspector General would like to recognize and acknowledge the Division of Technology and Innovation and staff for their assistance during the course of this audit. Our fieldwork was facilitated by the cooperation and assistance extended by all personnel involved.

To promote accountability, integrity, and efficiency in state government, the OIG completes audits and reviews of agency programs, activities, and functions. Our audit was conducted under the authority of section 20.055, F.S., and in accordance with the International Standards for the Professional Practice of Internal Auditing, published by the Institute of Internal Auditors, and Principles and Standards for Offices of Inspector General, published by the Association of Inspectors General. The audit was conducted by Robert Rittwage and supervised by Bradley Rich, Audit Director.

Please address inquiries regarding this report to the OIG's Audit Director by telephone at 850-245-0403. Copies of final reports may be viewed and downloaded via the internet at https://www.fldoe.org/about-us/office-of-the-inspector-general/audit-reporting-products.stml. Copies may also be requested by telephone at 850-245-0403, by fax at 850-245-9419, and in person or by mail at the Department of Education, Office of the Inspector General, 325 West Gaines Street, Suite 1201, Tallahassee, FL 32399.