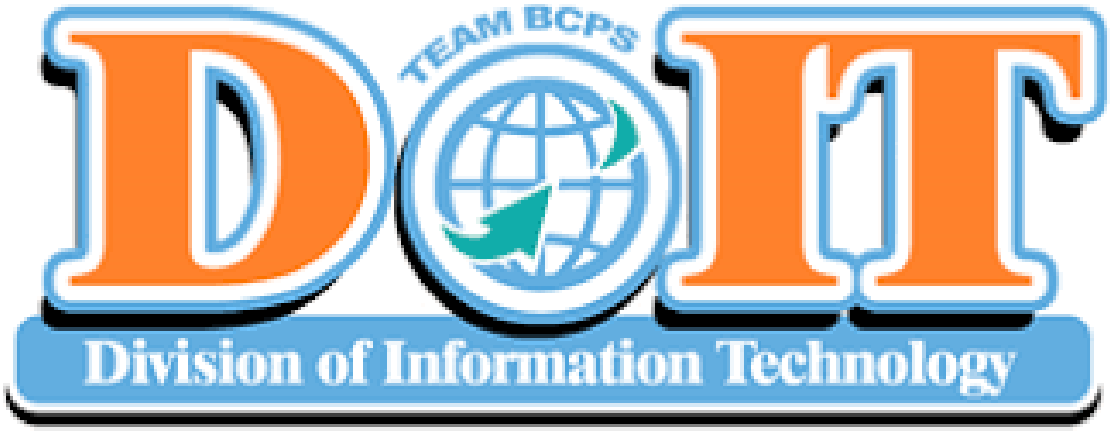
Internal Audit Report

Division of Information Technology

Instructional Technology: Maintenance of Student Data Audit

June 2023



Baltimore County Public Schools
Office of Internal Audit

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Report Highlights

Instructional Technology: Maintenance of Student Data

June 2023

Objective

To determine that student data is properly maintained and stored, as well as, properly reported, both internally and externally.

Background

The Division of Information Technology (DoIT), supports software needs of BCPS.

Audit Period

FY 2022 & FY 2023

Summary of Results

There were no reportable issues noted:

- The Office of Internal Audit determined that student data is properly maintained and stored, as well as, properly reported, both internally and externally.

Audit Rating

Satisfactory

The Department of Information Technology received a satisfactory audit rating for the maintenance of student data process:

- Controls are largely operating in a satisfactory manner and provide some level of assurance.
- The risks were effectively managed.
- There were no high-rated or medium-rated issues identified.

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BACKGROUND

Organizational Status & Information

The Division of Information Technology (DoIT), supports software needs of BCPS. DoIT supports approximately 450 applications that store student data. The primary student service applications are Focus, Schoology, and SPS by Powerschool (SPS).

COMMENDATIONS

Application Maintenance

DoIT obtained SOC2[1] reports from the vendors that include data security and encryption information. Vendors also provided DoIT disaster recovery plans that include back up requirements.

Student Data Transfer

DoIT obtained SOC2 reports from the vendors that include student data encryption specification requirements during transfer. In addition, the SOC2 reports include access and authentication controls implemented on the transfer of student data.

On an ongoing basis, to verify the accuracy of the transmitted student data, DoIT relies on User Acceptance Testing (UAT). Users (e.g., teachers, principals, parents) regularly review the student data transferred between the systems. If the student data is not accurate in the system, the user will report the issue to the help desk. Each issue reported to the help desk is reviewed by someone within DoIT to determine the cause. If there is an issue with the transfer of data, DoIT will make the necessary changes to ensure that student data is properly transferred between systems.

Student Service Application Support

DoIT provides student service application users with timely responses for help desk tickets related to Focus, Schoology, and SPS.

Reporting

DoIT, with the assistance of the Department of Research, Accountability, and Assessment, has a process in place to verify the accuracy of the data reported from the student service applications.

[1] Per the AICPA, a SOC2 report is a report on controls at a service organization relevant to security, availability, processing integrity, confidentiality or privacy. These reports are intended to meet the needs of a broad range of users that need detailed information and assurance about the controls at a service organization relevant to security, availability, and processing integrity of the systems the service organization uses to process users' data and the confidentiality and privacy of the information processed by these systems.

RESULTS

There were no reportable issues noted. The Office of Internal Audit determined that student data is properly maintained and stored, as well as, properly reported, both internally and externally.

AUDIT RATING

Satisfactory

The Department of Information Technology received a satisfactory audit rating for the maintenance of student data process:

- Controls are largely operating in a satisfactory manner and provide some level of assurance.
- The risks were effectively managed.
- There were no high-rated or medium-rated issues identified.

See **APPENDIX B** for the audit rating definitions.

OBJECTIVE, SCOPE & METHODOLGY

Objective

To determine that student data is properly maintained and stored, as well as, properly reported, both internally and externally.

Scope

The audit period is FY 2022 & FY 2023.

Methodology

To achieve the audit objectives, we performed the following:

- Planned the audit in cooperation with the Department of Information Technology staff to ensure an understanding of BCPS' maintenance, storage, and reporting of student data.
- Interviewed key personnel knowledgeable of the maintenance, storage, and reporting of student data.
- Evaluated risks and controls over maintenance, storage, and reporting of student data.
- Performed detailed tests to support our conclusions:
  - Reviewed the Focus, Schoology, and PCP contracts, SOC 2 Reports, and Disaster Recovery Plans for the following:
    - The disaster recovery plan is specified.
    - Data security and encryption is included.
    - Student data is encrypted during transfer.
    - The transfer of student data includes strong access and authentication controls.
  - Determined the processes implemented to verify the accuracy of the transmitted student data.
  - Reviewed the DoIT process to verify the accuracy of data reported.
  - Reviewed the DoIT help desk requests for Focus, Schoology, and SPS.

APPENDIX A – Issue Rating Definitions

Issues will be rated high, medium, or low based on these factors:

1. Level of financial impact.
2. Extent of violation of external laws, regulations, and restrictions.
3. Lack of documented policy, procedure, or noncompliance with a policy in an important matter.
4. Lack of internal controls or ineffective controls and procedures.
5. Fraud, theft, inappropriate conflicts of interest or serious waste of school system resources.
6. Significant opportunity exists for real gains in processing efficiency.
7. Poor cost controls or potential for significant savings and/or revenue generation.
8. Condition places the school systems reputation at risk.
9. Ineffective reporting and/or communication structure results in financial risks and/or inefficient operations.
10. Post audit implementation review reveals little or no effort to implement an action plan in response to a previous audit finding.

APPENDIX B – Audit Rating Definitions

Audit Rating	Definition
Unsatisfactory	**Design** - Design of controls is ineffective in addressing key risks **Documentation and communication** - Non-existent documentation and/or communication of controls/policies/procedures **Operation/implementation** - Controls are not in operation or have not yet been implemented **Compliance** - Significant breaches of legislative requirements and/or departmental policies and guidelines **Risk management** - Risks are not being managed **Issues/deficiencies** - Most issues were rated as high and urgent corrective actions are necessary
Needs Improvement	**Design** - Design of controls only partially addresses key risks **Documentation and communication** - Documentation and/or communication of controls/policies/procedures is incomplete, unclear, inconsistent, or outdated **Operation/implementation** - Controls are not operating consistently and/or effectively or have not been implemented in full **Compliance** - Breaches of legislative requirements and/or departmental policies and guidelines have occurred **Risk management** - Risks are not effectively managed which could result in failure to ensure school objectives are met **Issues/deficiencies** - Some high-rated and/or medium-rated issues were identified
Satisfactory	**Design** - Design of controls is largely adequate and effective in addressing key risks **Documentation and communication** - Controls/policies/procedures have been formally documented and are up to date but are not proactively communicated to relevant stakeholders **Operation/implementation** - Controls are largely operating in a satisfactory manner and are providing some level of assurance **Compliance** - No known breaches of legislative requirements and/or departmental policies and guidelines have occurred **Risk management** - Risks are largely effectively managed **Issues/deficiencies** - No high-rated or medium-rated issues identified