

Enterprise Projects

Internal Audit Report

November 19, 2020



**Orange County
Public Schools**

Internal Audit

Linda J. Lindsey, CPA, CGAP, School Board Internal Auditor
Luis E. Aponte Santiago, CISA, Information Technology Auditor

Table of Contents

	Page Number
EXECUTIVE SUMMARY	1
DEFINITIONS	2
BACKGROUND	3
OBJECTIVES, SCOPE, AND METHODOLOGY	3
RESULTS AND RECOMMENDATIONS	5

EXECUTIVE SUMMARY

Why We Did This Audit

Our objective was to determine the efficiency and effectiveness of the Enterprise Project Management Office (PMO).

The primary purpose of the PMO is to ensure ITS programs and projects are delivered on time, within budget, and in keeping with customer expectations. Having an effective way of managing projects can help reach this purpose and have different positive project results. Among them, increase efficiency, reduce costs, better visibility of all projects status and have better outcomes.

This audit was included in the 2019-2020 Annual Audit Plan.

Observations and Conclusion

Audit Results at a Glance			
	Risk / Impact Rating		
Results and Observations	Significant	Moderate	Minor
IA - Internal Audit or M - Management	M - 1	IA - 1	IA - 1
D - Deficiency or O - Opportunity	O - 1	D - 1	D - 1

Our overall conclusion is that the PMO Office is partially in compliance with their own guidelines (*OCPS PMO PM Standards and Practitioner Guidelines*). We noted two instances where they weren't performing critical tasks that were cited in the *Guidelines*.

We evaluated the PMO Office in the areas listed below:

- Policies and procedures
- Project management methodologies and practices
- Training policy and procedures

Results and Recommendations

We evaluated the areas listed above and performed various tests to determine compliance. Among those tests, we developed a Grading Scale based on the required number of documents or files per phase that a project needs to have. This scale identifies a definition for each grading scale¹, how to reach the scale, grading score² and the maximum and threshold scores per project³.

Based on the results of our audit, we made three recommendations:

- Make the project documents or templates cited on the OCPS PMO PM Standards and Practitioner Guidelines readily available.
- Promote and provide oversight of the usage and adherence to the OCPS PMO PM Standards and Practitioner Guidelines when starting a new project.
- Redesign the Canvas course so it measures basic knowledge of the PMO Office procedures or implement an On-Boarding Session for new hires and new consultants where they can have an on-hands "training" session where all the OCPS project management procedures and protocols are discussed.

This report has been discussed with management and they have prepared their response which follows.

¹ Excellent, Good, Acceptable, Deficient and Poor

² Excellent = 5, Good = 4, Acceptable = 3, Deficient = 2 and Poor = 1.

³ Based on the number of required files or documents a project has (e.g. – if a project has all 23 files but each file was scored a 3, the total amount on the grading scale is 69, which according to our grading scale is considered an "Acceptable" project).

DEFINITIONS:

Risk / Impact Ratings

Minor	Low risk with a financial impact of less than one percent and/or an isolated occurrence limited to local processes (low impact and low likelihood)
Moderate	Slight to moderate risk with a financial impact between one and five percent and/or a noticeable issue that may extend beyond local processes (low impact and high likelihood or high impact and low likelihood)
Significant	High risk with a financial impact greater than five percent and/or a significant issue that occurs in multiple processes (high impact and high likelihood)

Observations Categories

Deficiency	A shortcoming in controls or processes that reduces the likelihood of achieving goals related to operations, reporting and compliance
Opportunity	A process that falls short of best practices or does not result in optimal productivity or use of resources

Criteria for Observations Sourced to Management

- Internal audit was informed of the issue prior to starting detailed testing
- Management identified, evaluated, and communicated the issue to appropriate levels of the district
- Management has begun corrective action with clear, actionable plans and targeted completion dates

Comment #1 on this report is sourced to management.

BACKGROUND:

According to their intranet webpage, the Project Management Office (PMO) provides program, project, and portfolio management, data governance and management, quality assurance, business process mapping standards, and organizational change management services to ensure the successful delivery of large, complex district-wide ITS initiatives. The primary purpose of the PMO is to ensure ITS programs and projects are delivered on time, within budget, and in keeping with customer expectations. ITS and the district benefit from the rigor of a project management process that comprehensively addresses all customer delivery requirements in the most efficient manner.

OBJECTIVES, SCOPE AND METHODOLOGY:

Objectives

The objectives of this audit were to determine:

- Whether the PMO uses an established project management framework;
- Whether their project management methodologies and practices include procedures with tasks to cover and/or mitigate strategic, operational, schedule, and costs risks that could jeopardize the projects;
- The adherence to and effectiveness of the PMO's methodologies and practices, and;
- The existence of a training process and how personnel and new project managers are trained on district project management procedures.

Scope

The scope of the audit included projects active during FY 2019-20. We also reviewed a sample of other projects.

The PMO Office provides program, project, and portfolio management, among other things, to ensure the successful delivery of large, complex district-wide ITS initiatives.

We analyzed projects from FY 2019-20.

Methodology

Our audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* of the Institute of Internal Auditors and included such procedures as deemed necessary to provide reasonable assurance regarding the audit objective. Internal Auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

We are required to note any material deficiencies in accordance with Florida Statutes, School Board Policy and sound business practices. No material deficiencies were noted in this audit. We also offer suggestions to improve controls or operational efficiency and effectiveness.

We included specific steps in our audit procedures to determine what controls exist to prevent material errors or irregularities. We will be alert to indicators of fraud. Specifically, we performed the following:

- Interviews with the ITS department, Project Management Office personnel and contractors (if applicable)
- Test controls and procedures related to the PMO's established methodologies and practices. by selecting a sample of projects and review their project files through the development phases
- Qualitatively evaluate the content of project management files for the selected sample
- Obtaining and reviewing training related evidence and/or documentation

This audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

No material deficiencies were noted.

We reviewed a sample of 12 project files for adherence to PMO methodologies and qualitatively evaluated their documents.

RESULTS & RECOMMENDATIONS:

Overall Conclusion: During the course of the audit, we were informed by the PMO Office management that they were updating their Guidelines and they acknowledge any situation as a result of this action. Comment #1 is sourced back to this acknowledgement.

Our overall conclusion is that the PMO Office is partially in compliance with their own guidelines (*OCPS PMO PM Standards and Practitioner Guidelines*). We noted two instances where they weren't performing critical tasks that were cited in the *Guidelines*. Our detailed findings and recommendations follow.

1) Process group documents or files that are cited in the *OCPS PMO PM Standards and Practitioner Guidelines* as a “component of the process” were unavailable. *Significant Risk or Impact*

Best Practice:

Have the documents [templates] or files that are part in the creation of each process group deliverables readily available.

Audit Result:

The PMO Office uses methodology that includes procedures to address strategic, operational, cost and schedule risks. According to Section 9.2 Planning Process of the *Guidelines*, there is a table that lists all the possible plan components that could be integrated into the project plan. When asked about the availability of these documents for our review, the PMO Office told us that they were not available. The documents were the following:

- The Stakeholder Management Plan and the Communication Management Plan (for communications processes, delivery methods and management reporting requirements);
- The Human Resources Management Plan (for project structure, roles and responsibilities);

The PMO Office was aware of a situation that raised from our review of their Project Management Guidelines, due to the fact that they were in the process of updating them when the audit started.

- The Procurement Management Plan (to administer project-related procurements);
- The Risk Management Plan;
- The Communication Management Plan (to ensure communication between project managers, the PMO and the organization);
- The Cost Management Plan and Cost Performance Baseline (for managing and controlling project costs); and
- The Schedule Management Plan and Schedule Baseline (for controlling the project schedule to ensure deliverables are on time and the overall project deadline is met).

Additionally, qualitative & quantitative risk analyses are not considered when developing the PMO Project Risk Register (for identifying, monitoring and controlling risks). However, the Project Manager addresses and review with the team any potential risk that could alter the cost of the project (quantitative).

Recommendation:

Make these documents readily available or include them as templates within the SharePoint drive. For the qualitative and quantitative risks analyses, two columns could be created on the Risk Register: one to address the cost of the risk (whenever possible) and another one to determine if the risk has the potential to make what is being developed not work as expected.

2) Adhere to section 9.6.2 Folder Management of the OCPS PMO PM Standards and Practitioner Guidelines. *Moderate Risk or Impact*

Best Practice:

Oversee the usage and adherence to section **9.6.2 – Folder Management** of the *OCPS PMO PM Standards and Practitioner Guidelines* for each project.

Qualitative and quantitative risk analyses were not considered when developing the PMO project risk registers.

According to section 9.6.2 – Folder Management of the OCPS PMO PM Standards and Practitioner Guidelines, each project requires six folders to store all official project documentation.

Internal Audit Report Enterprise Projects

Audit Result:

The OCPS PMO PM Standards and Practitioner Guidelines (Guidelines), identifies and describes Project Management Process groups required for OCPS projects. In the same Guidelines, it is established that all official project documents are to be stored in six required folders based on the type of document and phase the document belongs to. The folders and phases are:

- Discovery
- Initiation
- Planning
- Executing
- Monitoring & Controlling
- Closing

For each process group or phase, there is a brief process description, the purpose of the process, and required deliverables. The required deliverables for each phase are:

1 - Discovery
Business Case
Spend Analysis (Funding Requirements)
Requirements Documentation

4 - Executing
PMO Meeting Agenda Minutes
PMO Executing Process Exit Approval
Issue Item Action Log

2 - Initiating
PMO Project Charter
PMO Stakeholder Register
PMO Kick-Off Presentation
PMO Initiation Process Exit Approval

5 - Monitor & Controlling
PMO Change Management Request
PMO Change Log
PMO Monitoring and Controlling Exit Approval

3 - Planning
PMO Change Management Plan & Process
Project Schedule
PMO RACI Chart
PMO Risk Register
PMO Communication Plan Template
PMO Planning Process Exit Approval

6 - Closing
Lessons Learned - Survey Results
Project Contract Close Out Form
PMO - Project Close Out Form
PMO Closing Process Exit Approval

These required deliverables (23 in total) are mandatory for all PMO portfolio projects, and they should be created and filed in their corresponding folder in the PMO SharePoint site.

These required deliverables are important because they are a supporting part of the overall project management processes that provides a methodical approach for organizing each project so that they meet the needs of the project sponsors successfully and consistently.

The six required folders are Discovery, Initiation, Planning, Executing, Monitoring & Controlling and Closing. Among these six folders, a total of 23 documents or files are needed.

In total, each project should have six folders and 23 files or documents, at a minimum.

These required deliverables are important because they support a project management processes that provides a methodical approach for conducting each project to meet the needs of project sponsors successfully and consistently.

We selected a sample of 12 projects to verify the department's compliance with this section (9.6.2 – **Folder Management**) of the *Guidelines* and performed the following tests:

- Verified that the six required folders were in each project file.
- Determined that the group processes or phases within each development cycle have the appropriate documentation and were signed-off at the completion of each phase (if applicable).

The results of our procedures indicated that 3 out of 12 projects we evaluated (25%) did not have the six required main folders in their respective SharePoint drive.

We also performed a qualitative assessment of the contents of each project file. To summarize the results of this assessment, we developed a *Grading Scale* based on the required number of documents per phase/ per project and our assessment of the quality of each document. The *Grading Scale* contains five grades - Excellent, Good, Acceptable, Deficient and Poor – and sets a maximum and minimum threshold score per project (maximum score is 115 and the minimum threshold score is 23):

The grading scale with definitions and descriptions is in the chart on the next page.

Twenty-five percent of the projects we assessed did not contain the six required main document folders.

To qualitatively assess the contents of project files, we developed a Grading Scale.

Internal Audit Report Enterprise Projects

GRADING SCALE	DEFINITION	COMPLETENESS [HOW TO REACH THIS]	GRADING SCALE SCORE	MAX SCORE	GRADING SCALE SCORE THRESHOLD
Excellent	This grading scale is reached when the project folder has all the applicable files needed on each section [23 files if the project is closed/completed - this, according to the <i>PMO Project Status Summary Audit</i> (for files/sections)] and the information in these files are correct, accurate and have some sense to the project.	The information on the project folder is complete, correct and/or accurate and has the appropriate authorizations [sign-offs] according to current phase of the project [this will determine the files within the sections of the <i>PMO Project Status Summary Audit</i> that the project needs to have] .	5	115	93
Good	This grading scale is reached when the project folder has all the applicable files needed on each section [23 files if the project is closed/completed - this, according to the <i>PMO Project Status Summary Audit</i> (for files/sections)] but they are missing key attributes/indicators [signatures, dates, amounts, etc.]. The information is there, but is not complete.	The information on the project folder is complete, correct and/or accurate and has the appropriate authorizations [sign-offs] according to current phase of the project [this will determine the files within the sections of the <i>PMO Project Status Summary Audit</i> that the project needs to have], but is missing key attributes/indicators like signatures, dates, amounts, etc.	4	92	70
Acceptable	This grading scale is reached when the information on the project folder is not neither perfect or incorrectly developed. It could be consider a project with "room for improvement".	The information on the project folder is somewhat complete, but missing a few files. The one's in the folder are not completely accurate. Also, it could be missing key attributes/indicators like signatures, dates, amounts, etc.	3	69	49
Deficient	This grading scale is reached when the information in the project folder exists, but there are substantial files [most of them] missing and the one's in the folder are not quite correctly developed [not following the appropriate files section of the <i>PMO Project Status Summary Audit</i>].	The information on the project folder is not complete and a considerable number of files are missing. The one's in the folder are not completely accurate. Also, it could be missing key attributes/indicators like signatures, dates, amounts, etc.	2	48	24
Poor	This grading scale is reached when the information on the project folder could be considered to be disputable [not correct] with a lot of errors or is non-existent [empty folder or nothing created - an empty project folder].	There is a few to zero files on the project folder and that the information is not complete, not correct nor accurate and doesn't have the appropriate authorizations [sign-offs], if any.	1	23	0

Internal Audit Report Enterprise Projects

In summary, we assessed 104 documents out of 223 and concluded that these projects partially complied with the *Guidelines*. This is based on the results of our Qualitative Analysis of each document (104 files in total) for the 12 projects we reviewed:

PROJECT	CURRENT PHASE	FILES ACCORDING TO PHASE	TOTAL FILES AVAILABLE [ANALYZED]	FILES NOT AVAILABLE	QUALITATIVE GRADING SCORE
College Career Resources	Closing	23	10	13	Acceptable
DataView Phase II	Closed	23	3	20	Deficient
Digital Resources	Cancelled	1	1	0	Good
Donor	Closing	23	8	15	Acceptable
Fingerprinting Project	Closed	23	17	6	Good
Fuel Management System	Executing	16	14	2	Acceptable
Medicaid	Closing	23	4	19	Deficient
Moving SharePoint Components to O365	Planning	13	2	11	Poor
OCPS Data View	Closing	23	18	5	Good
ProgressBook Upgrade	Closing	23	0	23	Poor
SAP Modernization	Executing	16	13	3	Acceptable
Service Request System [EasyVista]	Executing	16	14	2	Acceptable
		<u>223</u>	<u>104</u>	<u>119</u>	

On the 12 projects selected for sample, 47% of the documents that should have been in the files were not available. The project with the highest percentage of non-compliance (0%) was ProgressBook Upgrade and there were two projects that had the highest compliance percentage at 87% (Service Request System and Fuel Management System).

Our assessment grades were distributed to our sample as follows:

QUALITATIVE GRADING SCORE	PROJECTS	PCT
Excellent	0	0%
Good	3	25%
Acceptable	5	42%
Deficient	2	17%
Poor	2	17%
	<u>12</u>	<u>100%</u>

Recommendation:

Promote and maintain oversight on the usage and adherence to the OCPS PMO PM Standards and Practitioner Guidelines when starting a new project.

3) Conduct formal training on project management procedures for the PMO personnel. *Minor Risk or Impact*

Best Practice:

Have all personnel (new hires and consultants) obtain training in the district's project management procedures and protocols.

Audit Result:

The PMO Office has a training course on Canvas for their personnel and new project managers on OCPS project management procedures and protocols. However, that Canvas course requires only an acknowledgement of the guidelines and standards and does not reflect whether the personnel gained any comprehension of OCPS project management procedures and protocols or even whether they really read them.

Recommendation:

Re-design the Canvas course so it measures at least a basic knowledge of the PMO Office procedures or implement an On-Boarding Session for new hires and new consultants where they can have a hands-on "training" session where all the OCPS project management procedures and protocols are discussed.

We wish to thank all the PMO Office personnel (including contractors) for the cooperation and assistance we received in the course of this audit.

The Canvas course asks only for acknowledgement of the guidelines & standards and does not reflect whether the personnel gained any comprehension of them.



Department / School Name	ITS, Enterprise Projects
Administrator / Department Head	Marcel Harris
Cabinet Official / Area Superintendent	Robert Curran

Audit Result / Recommendation	Management Response Acknowledgement/ Agreement of Condition	Responsible Person (Name & Title) And Target Completion Date	Management's Action Plan
<p>Finding 1: Process group documents or files that are cited in the <i>OCPS PMO PM Standards and Practitioner Guidelines</i> as a “component of the process” were unavailable.</p> <p>Recommendation: Make these documents readily available or include them as templates within the SharePoint drive. For the qualitative and quantitative risks analyses, two columns could be created on the Risk Register: one to address the cost of the risk (whenever possible) and another one to determine if the risk has the potential to make what is being developed not work as expected.</p>	<p>Acknowledge that many of the documents cited were unavailable and this is begin resolved.</p> <p>Quantitative analysis is a concept of risk that is not relevant to all projects, especially those undertaken at OCPS. This would only apply if resources and their associated cost was fully under the management of the PM or the budget was fully under the control of the PM. OCPS uses a strong matrix organization where OCPS resources work on a project but their associated cost is managed by their functional manager. Risks often have no impact on that type of cost and are not even tracked. Most projects at OCPS are from purchases and any risks only result in delays not cost impacts as the vendor has provided a cost and invoices based upon milestones not hours. Delays only mean resources work on their main function until the delay is over. Only scope changes will result in cost impacts and the way</p>	<p>Marcel Harris 01/2021</p> <p>Completed</p>	<p>The OCPS PMO has created a full Methodology around projects that not only detail what and how all aspects, including planning and risk management, are done but implemented a tool for executing all PM activities seamlessly and effortlessly.</p> <p>Detailed information is found here: Welcome to the Project Management Office (PMO) (ocps.net)</p> <p>Risks: Use the built in functionality of PWA to document risks. The probability * impact to give it a score. If applicable, a cost will be assigned. This will not apply in all cases.</p>



	<p>OCPS does budgeting, these usually have no impact and even if they did, there is no way to understand the impact until the scope is understood. This is handled through Change Management.</p>		<p>Probability * <input type="text" value="20"/> % Impact * <input type="text" value="5"/> <small>The magnitude of impact s</small> Cost <input type="text" value="5000"/> <small>The cost impact should th</small></p>
<p>Finding 2: Adhere to section 9.6.2 Folder Management of the <i>OCPS PMO PM Standards and Practitioner Guidelines</i>.</p> <p>Recommendation: Promote and maintain oversight on the usage and adherence to the <i>OCPS PMO PM Standards and Practitioner Guidelines</i> when starting a new project.</p>	<p>Acknowledge that “folder management” was an issue.</p>	<p>Marcel Harris 01/2021</p> <p>Completed</p>	<p>Folders are no longer used at OCPS. All project information is stored in the Project Repositories in SharePoint and metadata is used to group the documents in a logical manner. This has allowed for PMs to store all information in a neatly categorized format without the need for PMs to manage folders.</p>
<p>Finding 3: Conduct formal training on project management procedures for the PMO personnel.</p> <p>Recommendation: Re-design the Canvas course so it measures at least a basic knowledge of the PMO Office procedures or implement an On-Boarding Session for new hires and new consultants were they can have a hands-on "training" session where all the OCPS project management procedures and protocols are discussed.</p>	<p>Acknowledge that training was lacking.</p>	<p>Marcel Harris 01/2021</p> <p>04/2021</p>	<p>The PMO Knowledge Repository is built to be an intuitive, self-guided information portal for the PMO Methodologies and processes. An Onboarding presentation has been created for new hires and formal MS Project training has been given to all PMs.</p> <p>Retool the canvas course to ensure that PM’s understand the methodologies</p>