



# INTERNAL AUDIT TEAM

Toronto and Area Region

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## IT Asset Management Report (Issued May 2021)

### Toronto Catholic District School Board

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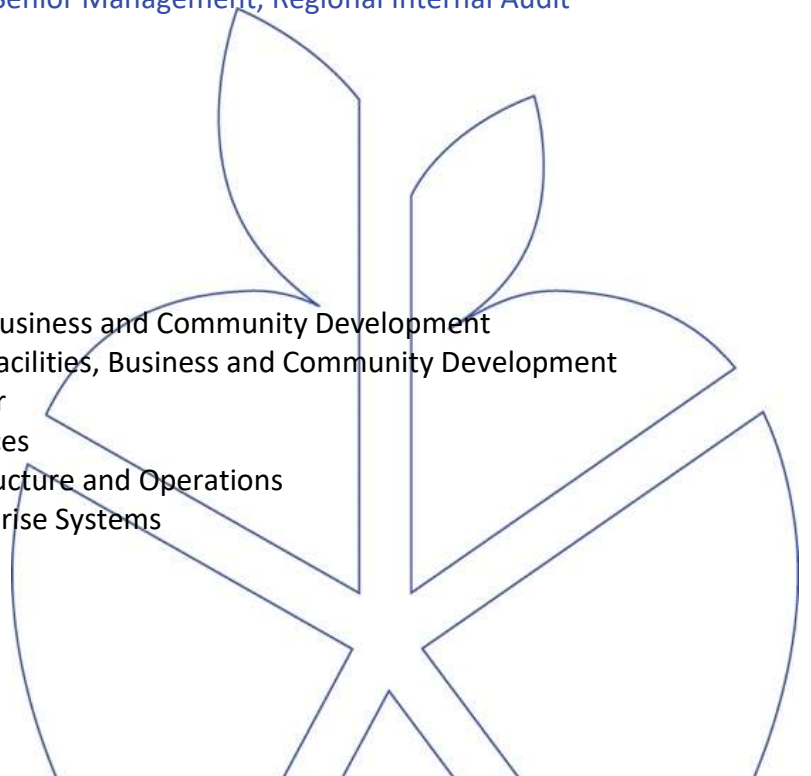
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## INTRODUCTION

As part of the multi-year regional internal audit plan, the Regional Internal Audit Team (RIAT) conducted an audit of processes and internal controls supporting the management of IT assets at the Toronto Catholic District School Board (“TCDSB” or “the Board”).

## AUDIT OBJECTIVE AND SCOPE

The objective of the audit was to assess the design and operational effectiveness of internal controls and processes supporting the management of IT assets at the school (staff and students) and Board levels. The asset types captured in the audit include laptops and desktops; mobile devices (e.g. tablets and Chromebooks); printers (excluding multifunctional copiers); large format displays (e.g. SMART Boards); and projectors.

For the in-scope asset types, the audit covered the following areas:

- Governance
- IT asset purchasing and receiving
- Asset tracking and monitoring
- IT asset security
- Return of IT assets when an employee leaves the Board
- Asset retirement and disposal
- Lost and stolen IT assets
- School-level interviews on the use of IT assets

## OVERALL SUMMARY OF RESULTS

Some of the strengths observed in the audit include:

- Purchases tested were properly authorized.
- Staff have access to an IT equipment catalogue. Management is working to decrease special requests for assets not included in the catalogue by proactively identifying needs and adding assets to the catalogue where warranted.
- Targeted physical inventory counts are conducted, as needed, on leased assets to confirm completeness and accuracy of records.
- Access to the IT asset database was appropriately restricted.
- IT assets in the warehouse were sufficiently secured.
- Principals and vice principals felt most IT assets are put to good use.

However, our engagement identified some key areas where processes and controls can be improved to strengthen internal controls and enhance operational efficiencies:

- Some IT asset management procedures, such as asset retirement and disposal, are not documented.

- Due to a system conversion, the Board's central system for recording IT assets was frozen in May 2018. Therefore, the listing of IT assets provided during the audit was outdated and processes and controls to update records for transactions that took place after this point could not be tested. The RIAT has provided suggestions to enhance the completeness and accuracy of the new system.
- Network scans and physical inventory counts are used to verify IT asset records, but these controls do not cover all in-scope asset types. In addition, the results of the scans/counts are not always documented and retained.
- Risk management does not update the Information & Communication Technology (ICT) Services Division when IT assets are lost or stolen.
- On occasion, schools dispose of IT assets without involving ICT. This creates a risk of improper disposal and records not being updated.
- Coordination of IT assets with Human Resources (HR) could be improved, including obtaining advanced notification of new and departing employees, as well as including in new employee orientation time to provide IT equipment and sharing of key IT information.
- The checklist for returning IT assets is usually only sent to departing employees with a Board-issued iPhone; not every employee.
- Based on interviews with a sample of principals and vice principals, large format displays (e.g. SMART Boards) were often underutilized or not being used to full potential.

Refer to the "Observations and Recommendations" section for detailed recommendations related to the above observations.

We would like to thank management and staff for their support and assistance during this engagement.

## **ADDITIONAL WORK UNDERTAKEN DUE TO COVID-19**

The release of this audit report was delayed due to the urgent priorities created by the COVID-19 pandemic (immediate shift to a remote workforce and moving all students to virtual learning in April 2020). At the Audit Committee meeting held on June 22, 2020, the Audit Committee passed the following motion directing the RIAT to complete additional work on IT Asset Management:

*"...that there be an external review by the Internal Audit Team of the current undertaking of issuing 9,000 devices out to the public domain, and to review whether the systems and procedures in place ensure that the assets are accounted for, and that they will be returned to the School Board within a timeline."*

Therefore, the release of the original IT Asset Management Audit Report was delayed to allow for a review of device distribution to students during COVID-19. The details and findings from this additional review are outlined in the Addendum to this report, starting on page 14. Responses to the original report, obtained in July 2020, were updated prior to issuance.

## **LIMITATIONS ON USE OF INTERNAL AUDIT REPORT**

This report is intended primarily for the information and use of the individuals on the distribution list on the cover page of this report and should not be provided to any other party without the consent of the Senior Manager, Regional Internal Audit, Toronto and Area Region.

## BACKGROUND

Responsibility for IT asset management resides primarily with the IT Infrastructure and Operations department of the Information and Communication Technology (ICT) Services Division, which reports to the Chief Information Officer.

The TCDSB Multi-Year Strategic Plan (MYSP) 2016-2021 contains goals related to IT Assets, including:

- Support investments in technology that continue to foster digital literacy, creativity, innovation and collaboration. As such the board invests annually in technology to support 21st Century skills.
- Provide all students with equitable access to learning and technology and strive to close the opportunity gap so that the most vulnerable students achieve their full potential.

In alignment with the MYSP, the board invested \$1.3 million in elementary and secondary schools in 2017-18 for yearly lease costs (many, not all, of the computers are leased). In addition, the board invested \$285K to purchase equipment related to coding and robotics.<sup>1</sup>

At the time of the audit, the Board was in the process of developing an Information & Technology Strategic Plan that is aligned with the MYSP, where possible, and captures IT assets. This plan is now complete and was presented to the Board in December 2019.

The TCDSB employs an IT asset database to record and track most IT assets. At the time of the audit, ICT was in the process of implementing a new system for this purpose that is expected to have additional functionalities. This implementation was expected to be completed by August 2019. As a result of this conversion, the existing database was frozen at May 2018, with all future changes to be captured in the new system.

Overall, the Board's IT asset database has approximately 48,000 IT assets at approximately 200 locations. According to the IT asset database, as at May 2018, TCDSB had the following quantities of in-scope assets:

IT Asset Type	Quantity
Desktops	10,468
Laptops	11,764
Mobile devices	22,073
Networked Printers	2,290

Note that large format displays and projectors are not included in this table, as these assets are tracked at the school level, rather than centrally.

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<sup>1</sup> <https://www.tcdsb.org/Board/MYSP/Documents/MYSP-NOV-Nov-8-2017-2018-Report-Back-Calendar-2018.pdf>

## OBSERVATIONS AND RECOMMENDATIONS

Our observations are grouped into the following areas:

- A. Governance
- B. Tracking and monitoring of IT assets
- C. Lost or theft of IT assets
- D. Disposal of IT assets
- E. Return and redeployment of IT assets
- F. School-level interviews

### A. Governance

#### Observation #1 – Policies and Procedures

Some aspects of IT asset management, such as purchasing, are well documented through policies and procedures.

However, other procedures under IT asset management are not documented (primarily shared verbally) including asset tracking and monitoring; asset retirement and disposal; physical inventory counts; and acceptance of donated assets. While there is a procedure for return of assets by employees departing the Board, it does not define the length a leave of absence should be before assets must be returned.

**Risk:** When policies and procedures are not clearly documented, knowledge could be lost if key staff leave the Board. This could also lead to inconsistent practices and a lack of accountability, particularly where a process is decentralized.

**Recommendation:** All processes and controls key to the IT asset management lifecycle should be clearly captured in policy and/or procedure documents (as applicable) and communicated to relevant staff.

#### ***Management Response and Action Plan:***

***Management will document the procedures related to the IT asset lifecycle including asset tracking and monitoring; asset retirement and disposal; physical inventory counts; and acceptance of donated assets.***

***Position Responsible: Senior Manager, Field Support***

***Target Implementation Date: December 2021***

## B. Tracking and Monitoring of IT Assets

### Observation #2 – IT Asset Database

At the time of audit fieldwork (December 2018), ICT Services was in the process of implementing a new system to record the IT assets held by the Board. Due to this conversion, records had not been updated since May 2018. Therefore, the listing of IT assets provided during the audit was outdated. We were unable to test that processes and controls were in place to ensure that IT asset records were being completely and accurately updated for transactions that occurred after May.

However, the RIAT was able to conduct some testing on the records as at May 2018 and observed the following:

- IT assets no longer in use are deleted from the database, with no historical record remaining.
- Equipment purchased by and shipped directly to schools (rather than to the central warehouse) is not always captured in the database for central tracking. This includes most large format displays and projectors.
- The database was not always updated when an asset was returned on the departure of an employee (i.e. to reflect that the asset was now unassigned or reassigned to another employee).

**Risk:** The IT asset database does not completely or accurately reflect the IT assets held by the Board (current and historical). This could impact any decisions made based on these records. In addition, for the asset types that are decentralized, information is not readily available for central reporting and decision making (such as whether access to these asset types are equitable).

**Recommendation:** Implement measures in the new system to ensure that both current and historical IT asset records are complete and accurate. Such measures may include:

- The addition of an asset status field, providing statuses such as “assigned”, “unassigned”, “missing” and “disposed”. This will provide additional information to assist in retaining historical information (changing status of asset, rather than deleting), etc.
- Regularly reconciling IT asset purchases from vendors to the IT asset database to ensure all purchases are captured.

#### ***Management Response and Action Plan:***

***Since the original audit, management has implemented a status field in the current assets database that will allow us to keep the asset records for historical purposes.***

***Going forward, ICT Services will work with Materials Management to develop process to get monthly purchase records from every hardware vendor and reconcile that data into the new asset management system to ensure all purchases are captured.***

***In addition, ICT Services will be hiring a new IT Asset Management Officer to oversee the process and the asset management database.***



***Position Responsible: Senior Manager, Field Support and Supervisor, ICT Office***

***Target Implementation Date: June 2022***

### **Observation #3 – Inventory of IT Assets**

Management uses network scans and targeted physical inventory counts as controls to verify the accuracy and completeness of the IT asset database. Network scans identify all Windows-based IT assets used by the Board. The targeted counts are primarily on leased assets.

However, these controls do not typically capture many of the IT asset types included in the scope of the audit, such as Apple desktops and laptops; mobile devices (iPads and Chromebooks); printers; and audio visual devices. While the Board does have some inventory information for these devices through other tools such as AirWatch and Chrome Management Console, this data is not aggregated into a single tool.

In addition, documentation is not always retained to evidence that the scan/count was reconciled to the IT asset database.

**Risk:** As these controls do not cover all IT asset types used by the Board, records for the other asset types may not reflect what is actually on hand, thus impacting any decisions made based on these records. Where no evidence is retained of the reconciliation, there is no trail of any resulting changes to the database (i.e. changes made are unsupported).

**Recommendation:** Explore the current tools used to manage devices not captured by these controls and determine whether scans are possible with existing or additional tools. Further, determine whether these can be integrated with the IT asset database. Alternatively, consider conducting physical inventory counts of these devices at a sample of schools.

Ensure evidence is retained for both existing and new controls.

#### ***Management Response and Action Plan:***

***Management is exploring inventory management tools for Audio/Visual equipment, Chromebooks, and iPad that can be used to feed information into a central IT Asset Database. Until a more automated process is available, management will develop and begin using a manual spot checking process led by the new IT Asset Management Officer.***

***Position Responsible: Senior Manager, Field Support and Supervisor, ICT Office***

***Target Implementation Date: June 2022***

## C. Loss or Theft of IT Assets

### Observation #4 – Communication of Lost or Stolen Assets

When an IT asset is reported to Risk Management as lost or stolen, this is not communicated to ICT Services.

**Risk/Impact:** The listing of IT assets may be inaccurate, including equipment that is no longer held by the Board. Furthermore, a school may request and receive both a reimbursement from Risk Management and a replacement asset from the IT budget.

**Recommendation:** Establish a communication protocol where Risk Management informs ICT Services when a claim is filed for lost or stolen IT assets. Serial numbers should be provided as part of this communication to allow for updating of records.

***Management Response and Action Plan:***

***ICT Services will work with the Risk Management team in Business Services to develop an integrated process for reporting lost or stolen IT Assets.***

***Position Responsible: Senior Manager, Field Support***

***Target Implementation Date: December 2021***

## D. Disposal of IT Assets

### Observation #5 – Procedure for IT Asset Disposal

Most IT assets ready for disposal are either:

1. Returned at end of lease;
2. Identified and disposed of by ICT Services when requested repairs are cost prohibitive; or
3. Flagged by school staff through completing an Asset Equipment Disposal Form and creating a ticket for the IT Service Desk to arrange for pickup and disposal.

However, a school may occasionally use another method of disposal such as arranging for a courier to bring IT assets directly to the warehouse for destruction (i.e. no ticket created) or by using means outside of TCDSB practice, such as a recycling drive. Given the other disposal methods that could be used, the RIAT could not determine the complete population of disposals for testing.

**Risk:** Where schools do not use one of the usual channels to dispose of IT assets, there is a risk of improper disposal or incomplete update of the IT asset database.

**Recommendation:** Document and communicate to school administrators the procedure for IT asset disposal, including the Asset Equipment Disposal Form.

***Management Response and Action Plan:***

***ICT Services will document and develop an on-going communication plan for proper IT asset disposal which will be communicated to all school and central administrators.***

***Position Responsible: Senior Manager, Service Desk/Telephony***

***Target Implementation Date: December 2021***

## **E. Return and Redeployment of IT Assets**

When an employee leaves the Board, IT assets must be returned, the condition assessed, and the assets reassigned or disposed.

### **Observation #6 – Coordination with Human Resources**

Management noted that there is room for improved coordination between ICT Services and Human Resources (HR), as it relates to IT assets:

- ICT Services is not always aware of new employees in advance of their start date, so it can be difficult to prepare IT equipment timely.
- HR's new employee orientation does not currently include IT related activities, such as time on the agenda to provide IT equipment or sharing of key IT policies, procedures and other information.
- ICT Services is not always notified of employees leaving the Board. This notification is currently the responsibility of the employee's manager and does not always occur.

**Risk:** IT assets may not be returned or deployed to new employees timely, thus causing downtime or unnecessary purchases. In addition, new employees may not be aware of key IT policies and procedures.

**Recommendation:** ICT Services should work jointly with HR to improve coordination as it relates to IT assets, including:

- Development of a protocol to inform ICT Services of new employees, terminations and retirements.
- Updating new employee orientation to include IT related activities, such as time on the orientation agenda to provide IT equipment and providing a package that includes IT related information.

***Management Response and Action Plan:***

***ICT Services will work with Human Resources to develop an integrated process for new employees and terminations as it relates to IT assets. This process will include information sharing during the new employee orientation.***

***Position Responsible: Senior Manager, Service Desk/Telephony***

***Target Implementation Date: June 2022***

**Observation #7 – Return of IT Assets**

While there is a documented procedure and checklist available to facilitate the return of IT equipment for staff departing the Board, this is not always provided to the employee even when ICT Services becomes aware of a departure. The checklist is usually only sent to employees with a Board-issued iPhone.

**Risk:** Where a checklist is not provided, all or part of an employee's IT assets may not be returned or the return may not be timely. This may cause a delay in the redeployment of assets or funds being used to purchase replacement equipment.

**Recommendation:** Clarify with relevant staff the requirement to provide the procedures and checklist to all employees departing the Board.

***Management Response and Action Plan:***

***ICT Services will ensure a standard checklist is created for the deployment and return of IT assets assigned to employees. This process will be shared with and required by all staff who complete this work.***

***Position Responsible: Senior Manager, Service Desk/Telephony***

***Target Implementation Date: December 2021***

**F. School-Level Interviews**

**Observation #8 – Underutilization of SMART Boards**

The RIAT held interviews with the principal or vice-principal at a sample of five schools (three elementary, two secondary) to understand the usage of IT assets at schools. While it was noted that most IT assets were well used, most large formal displays (e.g. SMART Boards) were either underutilized or not being used to their full potential (used more as projectors rather than fully

interactive tools). The exception is when these large format displays are used for special programs such as multiple exceptionalities classrooms and Intensive Support Programs.

The primary reason given for the underutilization was that many teachers did not know how to use these tools, as they either attended training sessions several years ago and do not remember the content or did not attend training sessions due to other priorities.

**Risk/Impact:** The Board is not always obtaining value for money on purchases of large format displays. As these devices are not tracked centrally, there was no data available on the total number held at schools.

**Recommendation:** Develop a strategy to address the underutilization of large format displays (such as allocating funds for additional training, limiting purchases, etc.), considering both the costs and benefits.

***Management Response and Action Plan:***

***As part of the I&T Strategy the ICT Services is developing a sustainable IT Asset Refresh plan which will rationalize the use and purpose of IT assets including Audio/visual equipment such as large format displays.***

***Position Responsible: Senior Manager, Field Support***

***Target Implementation Date: March 2022***

## **ADDENDUM: REVIEW OF DEVICE DISTRIBUTION TO STUDENTS DURING COVID-19**

### **Introduction**

At the Audit Committee meeting held on June 22, 2020, the Audit Committee passed the following motion directing the RIAT to complete additional work on IT Asset Management:

*“...that there be an external review by the Internal Audit Team of the current undertaking of issuing 9,000 devices out to the public domain, and to review whether the systems and procedures in place ensure that the assets are accounted for, and that they will be returned to the School Board within a timeline.”*

As a result, the Regional Internal Audit Team (RIAT) completed a review of the processes and controls over device distribution to students during COVID-19.

### **Objective, Scope and Approach**

The objective of this review was to assess the adequacy of controls designed to support the distribution of devices to students during the closures caused by the COVID-19 pandemic. Specifically, the review covered the following areas:

- Oversight and governance
- The device distribution process, including requests, order fulfillment and delivery
- Return of devices
- Tracking and monitoring of devices distributed

This review engagement consisted of discussing the various process with management and verifying key controls to supporting documentation.

Note: This review was limited to the existence and design of the controls. An audit verifying the operating effectiveness of controls was not conducted.

### **Conclusion**

The Board has designed adequate controls and processes in the areas of oversight and governance, the device distribution process and tracking and monitoring of assets. However, current practices and controls need to be strengthened in the area of device returns, as 38.7% of the devices due to be returned at the end of the 2019-20 school year by students leaving the system have not been collected as of April 2021.

## Background

In March 2020, the Ontario government announced that all publicly funded schools would be temporarily closed due to the COVID-19 outbreak. It was later announced that schools would continue to remain closed, with remote learning (Learn from Home initiative) to start on April 6, 2020.

In response, the Board approved the procurement and distribution of iPads and Chromebooks in order to accommodate students who did not have access to technology or the internet. By October 31, 2020, the Board had ordered and distributed 12,600 devices to students. This had increased to approximately 19,100 by March 31, 2021. Devices were provided to students as follows:

- Kindergarten to grade 2, with internet at home: WIFI-enabled iPad
- Grades 3 and above, with internet at home: WIFI-enabled Chromebook
- All grades, without internet at home: LTE-enabled iPad.

Costs associated with the Learn from Home initiative were funded by the Board. See the chart below for costs and other key data, provided by management, as at March 31, 2021:

School Year	Type of device	Payment Method	Count	Pre-tax Cost
2019-20	Chromebook and Chrome License	Purchase	7692	\$2,369,649
	iPad + Case	Purchase	400	\$263,180
	iPad + Case	Lease	4400	\$1,575,200
	iPad Bluetooth Keyboard	Purchase	600	\$18,600
	iPad	Lease Buyout	N/A	\$291,060
	<b>Total 2019-20</b>			<b>\$4,517,689</b>
2020-21	Chromebook with Chrome License	Purchase	11400	\$4,408,500
	iPad + Case + AirWatch License	Purchase	800	\$499,400
	iPad Bluetooth Keyboard	Purchase	540	\$16,740
	iPad	Lease Buyout	N/A	\$760,000
	<b>Total 2020-21</b>			<b>\$5,684,640</b>

Additional costs were incurred to have third parties configure and deliver these devices (directly to students at the outset of remote learning), totalling \$779,728 as of March 31, 2021.

In June 2020, the Board of Trustees approved a motion allowing students who were provided with a Chromebook or iPad to keep the device until the earlier of June 2021 or when they leave the TCDSB.

## REVIEW OBSERVATIONS

Details on the processes and key controls reviewed, as well as the observations and recommendations, are presented by scope area.

### A. Oversight and Governance

The Information and Communication Technology (ICT) Services Division established a framework of roles and responsibilities to manage the distribution of devices to students, as well as the return of these devices to the Board.

ICT Services is primarily responsible for fulfilling device orders, managing inventory centrally and tracking and monitoring devices. Superintendents and Principals are responsible for approving device requests, as well as managing student device pick-ups and returns.

The Student Access Needs Application (hereinafter referred to as “the app”) was developed within weeks of the initial closure to capture student device requests throughout the Board. As the pandemic continued, the app evolved to meet the needs of the users and now includes the vendor order process and recording of device returns. Information from the app is used to optimize inventory flow and minimize the amount of time required to get devices to students. Management provided a demonstration of the app to the RIAT to confirm that these primary functions were in place.

The RIAT verified the following key controls through review of supporting documentation:

- Management communicated roles and responsibilities to management, School Superintendents, Principals and parents.
- Training on the app was provided to Principals and School Superintendents.
- ICT Services provides students with IT support and instructional videos.

Overall, ICT management has provided clear oversight and governance over the distribution of devices to students by establishing processes and controls over the issuance, return and tracking and monitoring of these devices. In addition, management provided training to relevant staff and IT support to students who received a device.

### B. Device Distribution Process: Requests, Order Fulfillment and Delivery

#### *Device requests*

In response to the March 2020 province-wide school closures, each school’s inventory of devices was supplied to school staff first in order to ensure a smooth transition to online learning. For students requiring devices, these were purchased (Chromebooks) or leased (iPads) centrally by ICT.

In determining the need for devices and internet services, TCDSB corresponded with parents using a survey, emails and phone calls. The app was developed to record and manage device requests. The application went live at the end of March 2020 and the first central order was placed with the vendor on April 10, 2020.



Device requests are approved, through the app, by the Principal and Superintendent based on eligibility criteria determined by TCDSB. As a result of a global supply shortage, the secondary approval was established in May 2020 to help ensure that families most in need received devices.

By September 2020, the app was enhanced to limit device requests to students enrolled in virtual learning. Since then, Superintendents only need to approve requests fulfilled through the central ordering process (i.e. where there is no local inventory at the school).

The RIAT verified the following key controls through review of supporting documentation and a demonstration of the app:

- Guidance was provided to relevant stakeholders outlining the criteria to be used to determine device eligibility, supporting consistent approval of device requests across the Board.
- Requirement for approval by Principal and Superintendent (where necessary).
- Superintendents are notified daily of pending approvals (to ensure requests are actioned timely).

#### *Order Fulfillment and Delivery*

At first, ICT took the list of approved requests and placed orders weekly. As the pandemic progressed, orders were placed daily to speed up fulfillment.

To ensure fast delivery to students at the outset of the pandemic, management engaged Compugen and Dell to configure and deliver devices directly to students based on their address in the student information system (SIS). Where the address was not current, there were slight delays caused by following up to get the correct address. Total delivery costs incurred by TCDSB for this arrangement, between March 2020 and August 2020, was \$273,462. Starting September 2020, devices are shipped to the home school for pick up.

In January 2021, management sent each elementary school at least five devices as inventory to quickly manage local needs. Additional devices were allocated for anticipated need based on review of socio-economic data. ICT monitors the local inventory (i.e. unassigned devices) and will redistribute as necessary. ICT also keeps two emergency kits to cover local outbreaks.

The RIAT verified the following key controls through review of supporting documentation and a demonstration of the app:

- Agreements with Compugen and Dell for configuration and delivery.
- The app was adjusted to show local inventory held by each school. As the devices are distributed, the Principal assigns the device by serial number to the student.

#### *Conclusion*

Overall, management has designed adequate controls over the request, ordering and delivery of IT devices to students. Controls include provision of guidelines to stakeholders; approvals; and the use of the app to record requests, order fulfillment, and device delivery/pick up. Third parties were engaged to assist in the configuration and delivery. As the pandemic evolved, management adapted to the changing situation by updating processes and controls.

## C. Return of Devices

At the end of the 2019-20 school year, management identified through the SIS that 574 students with devices were not expected to return to TCDSB schools the following year due to graduation, etc. The return of these devices was considered a priority.

RIAT confirmed, through review of supporting documentation from June and July 2020, that ICT sent general reminder notices and communications to Principals reminding them to follow up on devices due back. The onus is on the principals to engage in follow up activities. However, the RIAT was not provided with any examples of principal follow up efforts with individual students. Management noted that follow up was typically done verbally.

ICT has enhanced the app functionality, to allow principals to access the following information:

- (i) Demitted students
- (ii) Inactive students with an unreturned device

This will allow principals to target device follow up efforts on identified students. Management has sent communication to principals on how to use the app and to follow up with parents regarding returning the loaner devices.

### Observation A1 – Follow up Activities for the Return of Devices

As noted above, the 574 devices due back to the Board for students identified as leaving the system after June 2020 were identified as a priority for return (a full list of these devices was not provided to the RIAT). However, evidence provided shows that only 352 of these have been returned to date, leaving 222 (38.7%) outstanding as at the time of this review (April 2021). The RIAT estimates that the unreturned devices have a value of between \$93k and \$141k (depending on the mix of Chromebooks vs. iPads).

Management's primary strategy of reminding principals to collect these assets has yielded no additional returns since October 31, 2020.

**Risk:** Given the large number of devices distributed to students, if follow up efforts are insufficient there is a risk that many devices will not be returned representing a financial loss to the Board.

**Recommendation:** For assets not returned timely, principals should follow up directly with parents until collection. In addition, management should explore other options to assist in the return of devices.

***Management Response and Action Plan:***

***The additional upgrades to the App along with enhanced communications centrally from the ICT Services Division and further reminders from the responsible Superintendents to the schools will assist to strengthen the process to recover the devices expected to be returned.***

***Position Responsible: Senior Manager, Field Support***

***Target Date for Implementation: May 2021***

Overall, management has established some key controls over the return of student devices including the identification of IT assets to be returned using the SIS (with additional enhancements allowing principals to identify students through the app); the recording and tracking of returns in the app; and the reminders provided to Principals that follow up activities should be undertaken. However, additional efforts must be undertaken to increase collection of devices flagged for return.

## **D. Tracking and Monitoring**

As previously noted, devices out to students are primarily tracked and monitored through the app. However, devices that are lost, stolen and damaged, as well as their replacements, are tracked manually through spreadsheets. Management provided the spreadsheets to RIAT to verify this control. These showed that, as at the end of 2019-20, 16 of the devices provided to students had been reported as lost, 5 had been stolen and 127 were damaged. While there are plans to reconcile the data in these spreadsheets to the app to ensure that the correct serial number is recorded for each student, this has not occurred yet. However, in these cases, the app still shows that the student has a device, which mitigates the risk and will allow for follow up efforts to be made.

One of the improvements made in September 2020, was to assign a unique TCDSB order number to each device request, allowing an easier match of the order to the student in the app. The vendor provides the serial number and other data in advance for each device ordered, which is uploaded to the app to allow for specific identification order fulfillment, monitoring of the order status by the Principal, and avoidance of errors related to manual data entry.

Management uses data extracted from the app to review order details and local school inventory. An example of extracts showing this information was shared with the RIAT. Management meets weekly to review this data for decision making regarding inventories on hand and on order.

Overall, management has designed adequate controls to track and monitor the devices that were provided to students.