Internal Audit

University Bookstore
Year-End Inventory

October 16, 2015

Office of Internal Audit
DATE: October 16, 2015

TO: Ray Presnell, Springfield Bookstore Director

FROM: Donna Christian, Director of Internal Audit and Compliance
       Tami Reed, Senior Internal Auditor

cc: Dr. Dee Siscoe, Vice President of Student Affairs
    Clifton M. Smart III, University President

RE: INTERNAL AUDIT: UNIVERSITY BOOKSTORE YEAR-END INVENTORY

BACKGROUND
The Missouri State Bookstore provides the campus and surrounding community with textbooks, Bear Wear clothing, and other educational/personal merchandise. The Bookstore has been serving the community as a University-owned operation since 1905. A total of fifteen full-time employees support the bookstore, including the Director, five departmental managers, four supervisors, four buyers, and one customer service specialist. In addition, seventeen part-time members support the operations, and over 100 student employees assist the full-time staff members during various periods. BookLog System software supports the operational/business functions, such as point of sale, inventory control, text, and general merchandise, as well as other functions. Since an automated interface is not in place between BookLog and Banner (the University’s accounting system), monthly journal transaction support is provided to Financial Services by the Bookstore. Below are recent sales and inventory data:

<table>
<thead>
<tr>
<th>FYE June 30</th>
<th>Sales (retail)</th>
<th>Inventory (cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$15,279,233</td>
<td>$3,948,774</td>
</tr>
<tr>
<td>2014</td>
<td>$15,571,547</td>
<td>$4,007,757</td>
</tr>
<tr>
<td>2013</td>
<td>$15,776,401</td>
<td>$4,735,104</td>
</tr>
<tr>
<td>2012</td>
<td>$15,169,936</td>
<td>$3,864,269</td>
</tr>
<tr>
<td>2011</td>
<td>$15,092,110</td>
<td>$3,698,825</td>
</tr>
</tbody>
</table>

The Bookstore continues to be a fiscally successful operation. It has not only been able to contribute to the direct needs of the students, faculty and staff, but it also financially contributes to the University’s operating fund through budget transfers.

OBJECTIVE AND SCOPE
To review inventory procedures and test the annual physical count of the Missouri State Bookstore. The physical count was performed on June 26, 2015, adjusted only by two days of sales to arrive at a year-end inventory balance for the University’s June 30, 2015 financial statements.
SUMMARY
Historically, the benchmark retail sales metric documented by the University of Florida report from Dr. Hollinger has been used in our analysis; the “2012 National Retail Security Survey Report” (NRSSR) documented the average shrinkage rate at 1.38%. For fiscal year 2015, the Bookstore year-end inventory shrinkage rate was calculated as 0.435% of retail sales, which is within a reasonable shrinkage rate. Internal Audit has previously recommended and continues to recommend to Bookstore management that inventory reconciliations take place monthly to prevent extensive and time consuming reconciliations at year-end.

The point of sale system, BookLog, continues to contribute to accounting errors such as incorrect cost of goods sold calculations, average costs inconsistencies, and inaccurate costs in the ending inventory balances. The degree and frequency of the errors noted warrants a closer look at the current system with consideration of replacing it with a more reliable system. This report also addresses recommendations concerning student accounts receivables, textbook sales to wholesalers, and cash register controls.

We wish to thank the University Bookstore staff and management for their support during this review.

Sincerely,

Donna Christian, CPA, CGFM
Director of Internal Audit and Compliance

Senior Internal Auditor: Tami Reed
Audit Fieldwork Completed: October 8, 2015
OBSERVATIONS, RECOMMENDATIONS, AND MANAGEMENT RESPONSES

1. PHYSICAL INVENTORY COUNT AND SHRINKAGE

Internal Audit observed and tested the annual physical inventory at the Bookstore. The Bookstore inventory totaled $3,948,774:

<table>
<thead>
<tr>
<th>Department</th>
<th>Value (Cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Textbooks</td>
<td>$1,744,361</td>
</tr>
<tr>
<td>Used Textbooks</td>
<td>1,111,772</td>
</tr>
<tr>
<td>Total Textbooks</td>
<td>2,856,133</td>
</tr>
<tr>
<td>Greeting Cards</td>
<td>4,354</td>
</tr>
<tr>
<td>Clinique</td>
<td>40,974</td>
</tr>
<tr>
<td>Clothing</td>
<td>333,455</td>
</tr>
<tr>
<td>Electronics</td>
<td>325,416</td>
</tr>
<tr>
<td>Food</td>
<td>42,858</td>
</tr>
<tr>
<td>Gifts</td>
<td>17,361</td>
</tr>
<tr>
<td>Graduation</td>
<td>39,928</td>
</tr>
<tr>
<td>Greek</td>
<td>39,917</td>
</tr>
<tr>
<td>Souvenirs</td>
<td>149,926</td>
</tr>
<tr>
<td>School and Art Supplies</td>
<td>78,678</td>
</tr>
<tr>
<td>Tradebooks</td>
<td>19,774</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$3,948,774</strong></td>
</tr>
</tbody>
</table>

Internal Audit verified inventory counts of items valued at $354,819 of the $3,948,774. After completion of the physical inventory, the inventory amounts in the Bookstore’s BookLog system was compared to the inventory value recorded in the University’s Banner system for June 30, 2015. For this year the BookLog system balance of $3,948,774 was $55,441 (wholesale cost) higher than the Banner recorded inventory or an increase of 0.50% of retail sales. This is the inverse of the typical year-end inventory comparison. After considerable review by Internal Audit and Bookstore staff, several issues totaling $102,271 were identified within the BookLog system that caused the BookLog system inventory to be higher. After considering the $102,271 the end result is a shrinkage of $46,830 ($102,271 - $55,441) which is 0.435% of retail sales and below the average shrinkage rate of 1.38% in the NRSSR study and considered acceptable.

The Bookstore has made great strides to improve their control over inventory at a department level, allowing the capability to determine the inventory overage or shrinkage by department. However, some individual departments still have inventory differences that should be investigated. For example, the new textbooks (department with the largest inventory and sales) has a $58,504 inventory overage. It is probable that some used textbooks have been rang up and processed as new textbooks which may contribute to this difference. The Bookstore management and textbook staff should continue to analyze transactions to minimize and eliminate these errors.

As previously recommended in the last three audits, to improve inventory monitoring and reduce the amount of time spent at the end of the year searching for errors that occurred throughout the
entire year, bookstore management should periodically reconcile the inventory amount in the BookLog system to the Banner system. The last reconciliation performed was in October 2014 and differences noted at that time (approximately $17,000) were not resolved.

**Recommendation:**
Continue to review processes, inventory and BookLog detail and perform periodic reconciliations between BookLog and Banner.

**Management Response:**

*Bookstore management understands the importance of performing this process and that the results of an accurate, monthly reconciliation are an excellent measuring tool and give us some foresight of our year-end inventory results. Monthly reconciliations will be conducted as recommended.*

2. **BOOKLOG SYSTEM**

Areas of concern continue to exist with the Bookstore’s point-of-sale and inventory management system, BookLog.

The Bookstore initiated the BookLog system in July 2003. Bookstore management has considered replacing this system; however, a request for proposal for a new system has not been completed.

The BookLog system is not always properly calculating the average cost of inventory items. The valuation of the ending inventory is determined by using the average costs methodology in BookLog, and when this calculation is not accurate, the cost of goods sold and inventory values are incorrectly reported. A scan of the fiscal year 2015 detailed reports indicated the following instances where the cost of an inventory item sold was not properly calculated:

1. There was a total of 4,657 inventory items where the cost assigned by the BookLog system was zero at the time of the sale, even though actual costs associated with these items totaled $69,117. As a result, the cost of goods sold was understated by $69,117. Since this problem was previously noted, the zero-cost items of $69,117 was adjusted in the year-end journal entry and is not reflective of the inventory difference noted in #1 above.

2. The review by Internal Audit and Bookstore staff identified $102,271 of cost of goods sold that were over reported during the year as noted in #1 above. These differences were not included in the year-end journal entry, but provide an explanation of the inventory variance.

   A. Inaccurate gross margin reports have been generated by BookLog and submitted to Financial Services. Monthly a report generated by BookLog, summarizing all sales, cost of goods sold and the gross margin calculations by department is submitted to Financial Service. Using the BookLog database, the cost of goods sold was recalculated based on the average cost at the time of sale, and a difference between the BookLog generated reports and the recomputed reports was $29,166.

   B. Over 7,000 inventory items sold showed an average cost assigned by BookLog at the time of the sale was greater than or equal to the retail sales price. As a result, the cost of goods sold associated with these sales was over reported by $62,517.

   C. An analysis of new textbook sales was performed which segregated books sold with unusually low profit margins. In this review, some instances were noted in which the cost of the textbook was incorrect resulting in $2,844 of over reporting of costs of goods sold. Additionally, some books were noted as having a correct cost but assigned a lower and incorrect retail sales price which could result in loss revenue to the Bookstore and
should be further reviewed. Since there are over 25,000 line items of new textbook sales on the report, it was unrealistic to review all items. Only calculations of some of the top sellers was performed.

D. A review of clothing costs was also reviewed and several instances were noted in which the costs of an item was obviously overstated. For example there were seven t-shirts sold at $34.99 with a cost of $200.27 per shirt, appearing to be a keying error in inputting the cost in BookLog. These type of errors noted in clothing totaled $7,744.

To ensure the cost of goods sold and inventory values are correctly reported, management should consult with BookLog system personnel to determine the exact cause of these errors, as well as train bookstore staff to ensure data is accurately entered into the BookLog system.

Recommendations:

As we previously recommended in last year’s audit, management should consult with BookLog system personnel to determine the exact cause of these errors, and periodically review the detailed sales report to determine if significant errors are identifiable and make any adjustments accordingly. Additionally, management should continue to review reliable systems to replace BookLog.

Management Response:

*Bookstore Management has reported these errors to BookLog on numerous occasions and will continue to work to resolve them. Due to change in management, progress toward obtaining a new inventory management/POS system has been delayed. A committee has been reestablished and will work with Financial Services to produce an RFP and determine funds available.*

3. **STUDENT ACCOUNTS RECEIVABLE**

An unwritten policy has been established allowing students to charge up to $500 to their university accounts receivable (AR). An exception is made during the first two weeks of each semester to allow students to charge all textbooks to their AR without dollar limitations. After the first two weeks of the semester, textbooks are subjected to the same $500 limitations as other merchandise. Each night the student charges in the Bookstore’s BookLog system are transferred to the student’s AR in the University’s Banner system. At the time of the transfer if a student’s total bookstore charges exceed $750 a hold is placed on charging anything through the Bookstore’s BookLog system. If the student needs to purchase another textbook, Bookstore management can override the hold. The hold should not be overridden for purchases other than textbooks.

Internal Audit reviewed 25 students with excessive charges to test compliance with the policy. Of the 25 students, 13 students were allowed to charge non-textbook purchases (clothing, food and supplies) in excess of $750 because the hold placed on their account was overridden by bookstore personnel. Additionally, some students were allowed to purchase computers without enforcing the $500 purchase limit. Also, 8 of the 13 students maintained total AR balances between $2,000 and $9,400.

For 12 of the 25 students reviewed, some of excessive charges were caused by the BookLog system not being interfaced with the University’s Banner system on real time. Information is only transferred between the two systems each night which allows students to manipulate the charging limits if charges are made all in one day. For example, we noted a student was able to charge $1,758 in one day in 7 separate transactions, none of which were textbooks. As Bookstore personnel consider various options for replacing the BookLog system, a real time interface with the University’s Banner system should be a consideration.
Additionally, a manager at the Bookstore said that on occasion his login and password for 
overriding holds has been shared with cashiers to expedite the checkout process during the rush 
time. This practice negates all controls established in the system.

**Recommendations:**
Establish a written policy documenting the allowable charges to a student’s AR, along with any 
limitations on balances due and specific guidance for exceptions. If management believes the 
dollar limitations are too strict, changes to limitations should be considered. In the future, 
management should never share login or passwords.

**Management Response:**
*Bookstore Management will establish a written policy and will communicate/educate employees 
of such. Staff has been informed that passwords are not to be shared.*

4. **TEXTBOOK SALES TO WHOLESALERS**

Textbook inventory management procedures could be improved. As of September 29, 2015, 
internal audit requested a listing of textbooks in inventory and the semester they were adopted for 
a class. Of the $3.3 million in textbook inventory, $313,620 was the value of text books in 
inventory that did not have a class adoption for the Fall 2015 semester. Additionally, over 
$100,000 of the $313,620 textbook inventory did not have any previous adoption record on file. 
This report is not regularly generated and monitored by bookstore personnel to reduce the 
amount of textbooks on hand.

Textbook inventory management and control is extremely important in bookstore management. In 
FY 2015, textbook sales were $9.8 million of the Bookstore’s sales totaling $15.3 million. There 
are three options for unsold textbooks: 1) return textbooks to the vendor for a full credit/refund if 
within time restraints, 2) sell textbooks to Wholesale book buyers for a discounted amount 3) sell 
textbooks through a Monsoon account (eBay).

While the textbook manager has established some procedures to manage the textbook inventory, 
regular management of text book inventory is critical to ensure the maximum amount of value is 
received for unsold textbooks. Additionally, the textbook manager reported some issues involving 
the BookLog software system makes returning textbooks very time consuming. In FY15, 
textbooks costing $287,895 were sold to Wholesale book buyers for $145,059, for a loss of 
$142,836. Recovering some of the costs of excess textbook inventory is definitely better than a 
total loss; however it is important to ensure all textbooks are returned to the publisher or vendor 
within the return timeframe to avoid any loss.

**Recommendations:**
Continually analyze textbook inventory based on the semester of adoption and ensure textbooks 
are returned to the vendors on a timely basis for full credit and minimize any overstocking loss.

**Management Response:**
*Bookstore Management has reviewed this information. The management team is striving to 
 improve all aspects of this type of purchasing and returning textbooks, therefore minimizing these 
issues.*

5. **BOOKSTORE CASH COUNT AND CASH REGISTER CONTROLS**

A. On June 26, 2015, the cash assigned to the Bookstore, including all cash in the safe as well 
as all cash in the various drawers at all locations, was counted and verified. The following 
was determined:
• Total cash counted was $8,800. This agrees to the amount recorded in the University's accounting records and to the petty cash worksheet maintained by Financial Services.

• Our review of the cash logs at the bookstore showed that the prescribed procedures and controls are being followed:
  
  ➢ Cash in drawers are counted by the Manager each day and entered into the ‘BookLog Till’ (an application within the BookLog System to record cash in drawers and compare to cash sales per registers).
  
  ➢ Cash in safe is counted twice each day by two different employees. One count is performed in the morning and one in the evening. Each count is entered into the “BookLog Till.”

B. On September 29, 2015, Internal Audit inspected the three active cash registers in the front of the bookstore area. At that time, one employee was logged into two of the registers and had left the building for lunch. Other employees were using these cash registers under this log in.

Cashiers should log on and off while operating a cash register so all transactions they process are in their name.

**Recommendation:**

Ensure cashiers use their own log in information when operating a cash register.

**Management Response:**

*Bookstore Management will continue to monitor and train our student employees on the proper log-in and log-out procedures.*