



Office of the Washington State Auditor
Pat McCarthy

Accountability Audit Report

ctcLink System

**Administered by the State Board
for Community and Technical Colleges**

For the period July 1, 2017 through June 30, 2018

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**Office of the Washington State Auditor
Pat McCarthy**

October 31, 2019

Jan Yoshiwara, Executive Director
State Board for Community and Technical Colleges
Olympia, Washington

Report on Accountability

Thank you for the opportunity to work with you to promote accountability, integrity and openness in government. The State Auditor's Office takes seriously our role of providing state and local governments with assurance and accountability as the independent auditor of public accounts. In this way, we strive to help government work better, cost less, deliver higher value and earn greater public trust.

Independent audits provide essential accountability and transparency for government operations. This information is valuable to management, the governing body and public stakeholders when assessing the government's stewardship of public resources.

The attached comprises our independent audit report on the ctcLink system's application and general control environment. We appreciate the opportunity to work with your staff and we value your cooperation during the audit.

Sincerely,

Pat McCarthy
State Auditor
Olympia, WA

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AUDIT RESULTS

This report describes the overall results and conclusions for the areas we examined related to the ctcLink system application and general controls.

In the areas we examined, the system's controls were not adequately designed and implemented to provide reasonable assurance of the completeness, accuracy, and availability of data.

As referenced above, we identified areas in which the State Board for Community and Technical Colleges (Board) could make improvements. These recommendations are included with our report and in a separate communication as findings.

Because public distribution of certain tests performed and the related results could increase the risk to the Board's information technology (IT) security, distribution of that information has been limited to management and the governing body of the Board and is kept confidential under RCW 42.56.420.

About the audit

The Board coordinates the state's system of 34 public community and technical colleges. In this role, the Board is responsible for enterprise resource planning (ERP) system software used by all the colleges for their accounting and financial transactions. Beginning in 2010, the Board embarked on a project to replace its legacy financial system with a new system called ctcLink. The Board hired a consulting firm to configure the system to fit the business needs of the community and technical colleges and to implement the system at all of the colleges.

The ctcLink system was implemented at Tacoma Community College, Spokane Community College and Spokane Falls Community College in 2015. Those colleges experienced numerous issues with the system, so implementation at the remaining colleges was delayed. The consulting firm hired to configure and implement the system filed for bankruptcy in 2017. Since then, the system has been managed by Board staff and contractors.

The approved budget for the project is about \$145 million, and actual expenses as of June 2019 are reported to be about \$114 million. Although currently within budget, the system still has not been implemented at 31 colleges. The next phase of implementation is planned for October 2019.

Management is responsible for ensuring information technology (IT) systems are designed, implemented and maintained to provide reasonable assurance of security, availability and processing integrity. This includes establishing controls over acquisition, development and maintenance of technology assets relevant to these objectives.

This report contains the results of our independent accountability audit of the ctcLink system from July 1, 2017, through June 30, 2018.

This audit was conducted under the authority of RCW 43.09.310, which requires the Office of the Washington State Auditor to examine the financial affairs of all state agencies. Our audit involved performing procedures to identify and obtain evidence about the ctcLink system's key input, processing and output controls, along with related general IT controls.

Our audit focused on the following areas:

- Input controls related to residency status, tuition fees and waivers, payroll, and personnel records. Input controls are application controls designed to ensure data entered into an information system is complete, accurate, and valid.
- Processing controls related to tuition calculations, payroll calculations, and tuition waivers. Processing controls are activities designed to ensure a process is predictable, stable, and consistently operating at the target level of performance with only normal variation.
- Output controls related to statements to students, cash reconciliation reports, and interfaces with the state's Agency Financial Reporting System (AFRS). Output controls are application controls designed to ensure reports and data exports from an information system are accurate and available only to authorized users.
- General IT controls related to program change controls, backup and recovery, data conversion, and electronic access to the application, database, and program libraries. General IT controls are designed to ensure proper development, integrity, and security of system and computer operations.

In keeping with general auditing practices, we did not examine every function or aspect of the system. Instead, based on our audit objectives, the areas examined were those input, processing and output controls, and related IT general controls, representing the highest risk to processing integrity and availability of the system.

SCHEDULE OF AUDIT FINDINGS AND RESPONSES

2018-001 The design of the ctLink system did not include an appropriate level of design review, resulting in the system missing critical data validation elements.

Background

The State Board for Community and Technical Colleges (SBCTC) advocates for, coordinates and directs Washington's system of 34 public community and technical colleges (colleges).

SBCTC contracted with a consulting firm, Ciber Inc., to design and implement the ctLink software, which was intended to replace the administrative system used at all 34 colleges. SBCTC piloted ctLink at three colleges in August 2015, with plans to roll the system out to successive groups of colleges over time. However, the pilot colleges have experienced significant problems with the system.

In April 2017, Ciber Inc. filed for bankruptcy. SBCTC has continued working to fix the issues but has not implemented the system at other colleges, although it plans implementation at the next group of colleges in the Fall of 2019.

Our review of ctLink considered the processes and controls implemented by SBCTC and the colleges to ensure data entered into the ctLink tuition revenue system was complete and accurate to ensure accurate billing and receivable records.

Description of Condition

Our review areas where controls were inadequate:

- Waiver codes were set up in advance. However, users could change the predetermined waiver amount or percentage without independent review or approval. This increases the risk of unauthorized changes to waiver amounts.
- The system did not have edit checks to ensure the effective date of the waiver was applied to the student account in the correct term. This increases the risk of applying a waiver to a term for which the student is not qualified for the waiver and the error not be detected in a timely manner. This error could result in a loss of revenue for the colleges.
- Waivers were posted in batches. The system did not include a reconciliation process so college staff could verify the number of students and the waiver type(s) processed. Without this control, college staff could not ensure

college waiver activity and the related student account balances were correct. Additionally, any errors might not be detected in a timely manner.

- Class fees, course fees and tuition schedules were established by SBCTC. They were then manually entered in ctcLink yearly by the colleges. The system did not have a control in place to ensure the class fees, course fees, or tuition schedules were consistent with the approved fees. The system also did not require secondary review of these entries. The lack of control increased the risk of errors in class fees, course fees or tuition schedules not being detected in a timely manner.
- Employee salary was automatically assigned based on the employee's job number and position number. However, payroll staff could manually change an employee's salary even if the new amount exceeded the established range for the job number and position number. The ctcLink system did not alert college staff of this potential error nor require a secondary approval for this salary exception. Lack of a systematic control increased the risk of error or unauthorized changes to salary not being detected in a timely manner.

Cause of Condition

SBCTC did not identify system requirements during the design of ctcLink in the areas of waivers, tuition and fees that would ensure the data entered into the system was accurate and complete.

Effect of Condition

As a result of the control weaknesses noted, there is an increased risk of errors related to tuition, waivers and fees.

Recommendations

We recommend SBCTC modify the ctcLink system to implement the following controls:

- Systematically require a secondary review when changes are made for the following areas:
 - Waiver codes
 - Employee salaries exceeding the established ranges for the job number and position number
 - Input of class fees, course fees or schedules

- Establish programmed system edits to ensure the effective date of a waiver is applied to only the term in which the student is eligible
- Establish a validation process to ensure accuracy and completeness for all waivers processed by batch, including but not limited to: Fresh Start and senior waivers

For future system development projects, we recommend SBCTC ensure data entry completeness and accuracy are integrated in the system design.

SBCTC's Response

We thank the State Auditor's Office for their work and concur with this finding. As noted below, steps have been taken to address design issues and processes put into place that ensure data accuracy and provide secondary review.

The State Board has general oversight authority of the community and technical college system. Under State Board leadership, the college system identified the need to replace its 35-year old administrative system with an enterprise resource planning system. "ctcLink" is the implementation of a single, centralized system of online functions to give students, faculty, and staff anytime, anywhere access to a modern, efficient way of doing their college business. It's more than just new software, as its implementation requires the 34 colleges to align their core business processes with the delivered software solution, making for streamlined, standardized practices across the college system.

In 2016, as a result of difficulties experienced by the pilot colleges at Go-Live in 2015, the ctcLink project underwent an independent assessment to determine the state of the technical and functional aspects of the system (Independent Verification and Validation Assessment). Implementation activities were put on hold as the project team focused its efforts on remediation and stabilization of the pilot colleges.

The purpose of having a pilot deployment is to identify configuration and process issues before widespread implementation. While the Go-Live was more difficult than anticipated for the pilot colleges, invaluable lessons were learned which have caused changes in the configuration of the software, changes in business processes, changes in the implementation approach, and changes in training. The lessons learned have informed plans for future deployments.

Overall, ctcLink is functioning successfully as programmed. Students are registering, getting financial aid and paying tuition; employees are getting hired and paid; and goods are being purchased, vendors getting paid and colleges are receiving payments.

SBCTC acknowledges that the design of the system at pilot college Go-Live did not include critical data validation elements. Issues have come up since that initial August 2015 Go-Live date that have caused us to identify, develop, and implement solutions that address the conditions and recommendations cited in this finding. The comments below specifically address each condition and recommendation, including solutions that have or will be implemented:

- ***Recommendation to systematically require a secondary review of waiver codes.*** *Consistent with this recommendation, the authority to make waiver code changes moved from the local colleges to the State Board in December 2017. This provides for internal State Board review by both the technical Enterprise Resource Planning (ERP) Functional Analysts and the Accounting and Business Services unit. Clients at the colleges provide a third level of review.*

At pilot college Go-Live in 2015, waiver code and waiver item type functionality allowed clients at the colleges to adjust and edit waiver item types without SBCTC knowledge. This generally resulted in an error in system processing which required SBCTC intervention. College staff also had the ability to “correct history,” overwriting prior configuration and causing errors “downstream.”

After review and discussions, with the goal of developing a global solution, the ability to configure waiver codes and item types was moved from college clients to the SBCTC. In December 2017 a new business process was implemented wherein a client files a ticket requesting either an adjustment to an existing item type/waiver code or a new item type/waiver code and attaches an Item Type Request form and/or Waiver Request form. This process allows the technical and accounting experts to verify that the setup of the item type/waiver code is accurate, has the correct effective date and the correct general ledger reference and other fields. The local “correct history” capability was also removed. This business process change has significantly lessened the errors in system processing and ensures compliance and accuracy of the applied waiver item types and codes.

- ***Recommendation to systematically require secondary review of the input of class fees, course fees or schedules.*** *Data entry of class and course fees is a joint responsibility of the SBCTC and local colleges. The SBCTC adopts a tuition and fee schedule based upon parameters established by the Legislature. Local colleges have statutory authority to establish additional fees.*

Course and class builders on campus are responsible for business processes that set course and class fees for each term. Tools are available at the

SBCTC's reference center and courses available in Canvas (the college system's learning management system) for college clients to access training on this functionality.

At this time, course and class builders are unable to make changes in the system until required training is completed and passed. Colleges verify that course and class builders are sufficiently trained for this business process. The SBCTC has a suggested business process in place to verify the accuracy of the tuition fee schedule once it has been manually entered by the clients at the college. Once the tuition fee schedule has been released, colleges can request SBCTC technical assistance to review the manually entered schedule. Training and this secondary review help verify the accuracy of tuition fee schedules.

- ***Recommendation to establish programmed system edits to ensure the effective date of a waiver is applied to only the term in which the student is eligible. As noted above, authority to create, change, and apply waiver codes and waiver item types was shifted to the SBCTC in December 2017. The Waiver Request form includes a field for colleges to specify the effective date for the waiver implementation. This request, including the basis for the request and effective date, is set up by the Student Finance support unit at the SBCTC and approved by the SBCTC's Accounting and Business Services unit. This three-step process provides for secondary review and approval of changes and ensures accurate application of an effective date.***
- ***Recommendation to establish process to ensure accuracy and completeness for all waivers processed by batch. Colleges can manually or batch-post SBCTC approved waivers. As this functionality remains a locally controlled business process, the SBCTC has provided additional training and continues to work with clients to improve local business processes and protocols. Additional training and experience gained by college staff, combined with shifting the authority to configure/change item type and waiver codes to the SBCTC, has resulted in a significant decrease in the batch-post issues.***
- ***Recommendation to systematically require a secondary review when changes are made to employee salaries exceeding the established ranges for the job number and position number. As noted in the conditions, college payroll staff have authority make changes to employee salaries, including the ability to set a salary that exceeds the established range for the position. The following safeguards are in place:***

- *Each college sets an upper cap to limit the amount paid to an employee in any one pay check.*
- *The system issues a warning/alert when classified employees are paid outside of the assigned pay range.*
- *To ensure accuracy, each payroll is reviewed, verified, and signed by the designated authority at each college. This is a locally defined process that typically includes a comparison to the previous payroll, with any changes noted and understood by the designated authority.*
- *SBCTC created segregation of duties matrixes and queries for the colleges to utilize which show potential conflicts. If there is a potential conflict, the college would change roles/business processes or document other mitigating controls in place that would make the conflicting roles not a “segregation of duties” conflict. These reports will be available with the Deployment Group 2 roll out in October of 2019.*

Auditor’s Remarks

We thank the Board for its cooperation and assistance throughout the audit. We appreciate the steps the Board is taking to resolve this issue.

SCHEDULE OF AUDIT FINDINGS AND RESPONSES

2018-002 The State Board for Community and Technical Colleges did not perform adequate testing of the ctcLink system, resulting in several types of processing errors.

Background

The State Board for Community and Technical Colleges (SBCTC) advocates for, coordinates and directs Washington's system of 34 public community and technical colleges (Colleges).

The ctcLink system is software developed to replace the administrative system used at all 34 colleges. SBCTC piloted ctcLink at three colleges in August 2015, with plans to roll the system out to successive groups of colleges over time. However, the pilot colleges have experienced significant problems with the system, which SBCTC has been working to fix. Because of the problems, SBCTC has not implemented the system at other colleges, although it plans implementation at the next group of colleges in the Fall of 2019.

Description of Condition

Our review of processing controls for the calculation of tuition, waivers and refunds identified the following errors:

- When students were enrolled in a combination of upper and lower division classes that had different rates, the system did not accurately calculate tuition. To address this error, college staff identified students who were enrolled in a combination of upper and lower classes, and then used the Tuition Recalculation Worksheet function in ctcLink to determine the correct tuition for these students. However, students sometimes enrolled in classes before the tuition rates for that quarter were finalized. The Tuition Recalculation Worksheet used the existing rates at the time of enrollment, and did not update when the finalized tuition rates were different, resulting in calculation errors.
- Mandatory fees were calculated incorrectly when they were charged based on enrolled credit hours and the student exceeded the maximum amount of hours subject to the fees.
- International insurance charges were incorrectly re-applied to students' accounts after they were manually removed.
- When a waiver was applied to a student account that had already been paid, and the process of applying the waiver created a credit in the student

account, the ctcLink system did not allow the student payment to be refunded.

- Fresh Start is a waiver program that allows students to complete their high school diploma requirements at the community college while accumulating college credit. It waives the cost of tuition, mandatory fees, and textbooks. The waivers were processed in a batch, and the system applied the waivers to incorrect school terms.
- Senior citizens qualify to have tuition waived if they meet all criteria of the senior waiver. The senior waivers were processed in a batch and the system incorrectly applied the waivers to more students than expected, including unqualified students who were not senior citizens.

Our review of processing controls for prepaid benefits, receivables and payroll identified additional errors:

- The system incorrectly calculated shift differential amounts when an employee took leave-without-pay and the shift differential was applied to their paycheck.
- The system incorrectly calculated prepaid benefit disbursements for employees' health benefits and sent incorrect payments to the Health Care Authority.
- Student receivable and third party vendor receivable statements generated by ctcLink displayed incorrect balances.

Cause of Condition

SBCTC did not adequately test ctcLink before implementing it at the first three colleges.

Effect of Condition

Inadequate testing led to calculation and processing errors, resulting in inaccurate student billings, payroll, employee benefits, and receivables.

Recommendation

We recommend SBCTC address the identified errors and implement a robust process for testing system formulas and calculations before implementing the system at more colleges.

SBCTC's Response

SBCTC concurs with this finding, that there was not an adequate testing process in place as ctcLink was implemented at the pilot colleges. This was a key lesson

learned from the pilot process. As described below, a robust testing and data validation plan has been in place since February 2018.

Testing for the production stack is performed in multiple environments before a change is implemented. Unit testing occurs in a development environment by the developer. Once unit testing is completed, a technical review is performed prior to code migration to the System Integration Testing (SIT) environment. During SIT, test scripts are identified and executed by the ERP Support team to test the system from an end user's perspective. (The ERP Support group is responsible for the day-to-day support of user colleges.) SIT generally entails a full regression test for software updates. Specific exit criteria must be met before the testing team recommends that the change is ready for user acceptance testing (UAT). A secondary code review takes place prior to migrating to the UAT environment.

During UAT, testing is generally performed by college testers and is designed to build confidence that college clients will be able to perform their jobs in the ctcLink system at implementation. Specific exit criteria must be met before the testing team can recommend that the change is ready for implementation. Final review and approval are conducted by the SBCTC Application Services Director prior to implementation into production.

The ctcLink project team has completely revamped the testing approach that was used during the initial pilot deployment. This new testing approach has been implemented as Deployment Group 2 (DG2) prepares for their migration to the ctcLink. System Integration Testing continues to be executed by SBCTC project staff with new and updated test scripts. College users test the ctcLink application during six two-week "Sprints," where the focus is testing on specific business processes prior to implementation. Users are required to test the system using their own scenarios that represent business conditions that occur as they currently do business.

Additionally, SBCTC has purchased a test automation software product. This software enables SBCTC to perform a complete automated regression test for any software update or code revision. Work on the Human Capital Management software is close to completion and work has started on both the Campus Solutions and Financial systems.

Auditor's Remarks

We thank the Board for its cooperation and assistance throughout the audit. We appreciate the steps the Board is taking to resolve this issue.

SCHEDULE OF AUDIT FINDINGS AND RESPONSES

2018-003 The Board did not have adequate documentation to provide reasonable assurance that the data converted from the legacy system to ctcLink is complete and accurate.

Background

The State Board for Community and Technical Colleges (SBCTC) advocates for, coordinates and directs Washington's system of 34 public community and technical colleges (Colleges). SBCTC piloted ctcLink at three colleges in August 2015. As part of this conversion, selected data from the legacy system was converted and posted to the new ctcLink system. This included data from the general ledgers in the Finance pillar; student enrollment history, transcript history, student financial transactions in the Campus Solution pillar; and employee information, job data, leave balance, and payroll history in the Human Capital Management pillar.

Description of Condition

SBCTC staff indicated that they validated the data and provided the data to the colleges for validation before conversion. SBCTC did not retain documentation to indicate which data the agency and college staff validated to determine the conversion was complete and accurate.

Cause of Condition

SBCTC did not have documented procedures for performing the data conversion validations nor for retaining the validation documentation for data that was converted from the legacy system to ctcLink.

Effect of Condition

SBCTC could not provide evidence of reasonable assurance that the data converted from the legacy system to ctcLink was complete and accurate.

Recommendation

For any future conversions to ctcLink, we recommend the SBCTC keep documentation showing how and what information was validated to provide reasonable assurance that the conversion is complete and accurate. We further recommend SBCTC keep documentation created as part of conversions to support future audits.

SBCTC's Response

SBCTC concurs with this finding. The issue of college data validation and documentation was a key lesson learned in the pilot deployments. As described below, data validation processes and formal sign-off requirements have been applied as SBCTC and the college system moves forward with deployment groups 2 through 6.

When deploying the ctcLink system at the pilot colleges, the implementation vendor did not retain a copy of the PeopleSoft system for reference at the point of conversion. Additionally, the pilot colleges were not required to formally sign-off on data validation activities.

After the implementation vendor filed for bankruptcy in spring 2017, the SBCTC decided not to engage a software implementation vendor and, instead, take direct control of the software/business process change implementation. As this occurred, SBCTC has tracked data validation approval by the deploying colleges for each test cycle and required a formal sign-off by each affected college for data validation prior to deployment.

As part of the cutover activities, system backups are taken of each college's data prior to commencing deployment activities and after the deployment activities have completed. This occurs prior to releasing the system to the users at each college. These backups are stored in a separate PeopleSoft instance, accessible for analysis for 30 days after Go-Live. Backups are retained for 24 months after Go-Live, should they need to be restored for access and/or analysis.

Auditor's Remarks

We thank the Board for its cooperation and assistance throughout the audit. We appreciate the steps the Board is taking to resolve this issue.

SCHEDULE OF AUDIT FINDINGS AND RESPONSES

2018-004 The State Board for Community and Technical Colleges did not design controls in the data interface process between ctcLink and AFRS to prevent and detect errors.

Background

The State Board for Community and Technical Colleges (SBCTC) advocates for, coordinates and directs Washington's system of 34 public community and technical colleges (colleges).

The ctcLink system is software developed to replace the administrative system used at all 34 colleges. SBCTC piloted ctcLink at three colleges in August 2015, with plans to roll the system out to successive groups of colleges over time. However, the pilot colleges have experienced significant problems with the system, which SBCTC has been working to fix. Because of the problems, SBCTC has not implemented the system at other colleges, although it plans implementation at the next group of colleges in the Fall of 2019.

Our audit evaluated the controls and functionality of ctcLink.

Description of Condition

All colleges in Washington are state agencies. Therefore, college financial data must be uploaded into the state's accounting system, the Agency Financial Reporting System (AFRS). College data is included in state financial reports, including the Comprehensive Annual Financial Report (CAFR), which is the state's financial statement.

After implementing ctcLink at the pilot schools, SBCTC realized that there was a problem uploading data into AFRS. To correct the issue, SBCTC created a manual process. In this manual process, SBCTC staff run queries in ctcLink to download transactions to enter into AFRS monthly. Using this process, SBCTC staff enter into AFRS about 1,600 to 2,200 transactions a month for each college.

SBCTC staff evaluate each transaction and then manually append a transaction code after the data is downloaded from ctcLink and before it is posted to AFRS. The manual process increases the risk of error due to the large number of transactions and the need for staff judgment to determine the correct codes. Further, there is no process in place to verify that the transactions uploaded into AFRS agree to those in ctcLink.

Cause of Condition

When designing ctcLink, SBCTC did not include an interface between the system and AFRS. To ensure the information in ctcLink was uploaded to AFRS, SBCTC implemented a manual process to transfer the data, which has a greater risk of error than an automated process would have.

Additionally, SBCTC's design process did not recognize the need for a reconciliation between AFRS and ctcLink. This further increased the risk of errors going undetected.

Effect of Condition

SBCTC cannot show that the transactions entered in AFRS are complete and accurate. Our 2018 audit of the state CAFR found that the general ledger in ctcLink did not agree to general ledger balances recorded in AFRS.

Recommendations

We recommend SBCTC implement an automated process to accurately and completely upload the ctcLink financial transactions to AFRS. We further recommend SBCTC implement a reconciliation process to confirm the accuracy of the balances in both systems.

SBCTC's Response

SBCTC appreciates the opportunity to address this finding and thanks the audit team for their time and guidance.

SBCTC has worked this past year to develop an automated process of uploading financial data into AFRS. Following that year-long design and testing effort, the automated AFRS customization was implemented in April 2019. The upload process provided SBCTC the ability to extract college data, process errors and report data to OFM through June 2019.

On July 1, 2019, a new global Chart of Accounts system was implemented at the pilot colleges, significantly improving the systems' ability to consistently track and report revenue and expenses. With this implementation, SBCTC has worked to upgrade the ctcLink AFRS upload process. Testing is expected to be completed by the first week of October 2019 and moved into production a short time after. SBCTC continues to fine-tune this automated process and provide training for college clients that ensures data entered into the system is acceptable to AFRS.

After Go-Live, SBCTC converted and uploaded to AFRS at the end of each fiscal year all transactions from the pilot colleges. However, due to conditions noted above, pilot colleges decided not to close fiscal years and continued to adjust prior year records. In the fall of 2018, the closing process was run for fiscal years 2015-16, 2016-17 and 2017-18. SBCTC, working with OFM, then adjusted the records in AFRS to reflect all of the activity in ctcLink. Any additional adjustments made in ctcLink will be reflected in the fiscal 2018-19.

Through technical expertise, queries and reports, the SBCTC continues to support ctcLink and legacy college efforts to reconcile local records with AFRS.

Auditor's Remarks

We thank the Board for its cooperation and assistance throughout the audit. We appreciate the steps the Board is taking to resolve this issue.

SCHEDULE OF AUDIT FINDINGS AND RESPONSES

2018-005 The general ledger balances from ctcLink did not reflect actual cash balances from the banks.

Background

The State Board for Community and Technical Colleges (SBCTC) provides oversight and administrative support for all 34 community and technical colleges in Washington. Part of this support includes a common information technology (IT) system. In August 2015, SBCTC started replacing an older “legacy” system with a new system called ctcLink. The conversion started with three pilot schools, with plans to roll the system out to successive groups of colleges over time. However, the pilot colleges have experienced significant problems with the system, which SBCTC has been working to fix. Because of the problems, SBCTC has not implemented the system at other colleges, although it plans implementation at the next group of colleges in the Fall of 2019.

Payments and receipts are recorded in ctcLink. The system automatically generates the general ledgers entries for the colleges.

Description of Condition

During the audit, the colleges reported they cannot reconcile their cash general ledger balances in ctcLink to actual cash in the banks. In October 2018, Tacoma Community College reported a difference of over \$1.6 million and Spokane reported a difference of over \$18 million. Both colleges have indicated their reconciliation differences are increasing over time.

Cause of Condition

SBCTC and the colleges have not determined why the cash general ledger balances from ctcLink do not reflect the cash balances from the banks.

Not all cash transactions created general ledger entries in the Cash Management module. For example, deposits from merchant accounts and payments received on accounts receivables recorded in the Campus Solution module do not generate journal entries in the Cash Management module. To record the deposit in Cash Management, college staff have to identify these transactions and create an “external transaction.”

Further, ctcLink does not produce a report to show which general ledger transactions have or have not been reconciled. College staff also indicated that

ctcLink does not generate a journal entry when financial aid is applied to a student's account. Due to this deficiency, the colleges are instructed to create a monthly journal entry to debit expenses and credit cash for non-cash transactions.

Effect of Condition

The cash general ledger balances in ctcLink did not agree to the bank statement balances. This increases the risk that a misappropriation or loss of funds could occur and not be detected in a timely manner, if at all. Without resolving the differences, there is no assurance that all of the cash is accounted for accurately.

Recommendations

We recommend SBCTC work with the colleges to identify and correct the cause of the differences between the cash general ledger balance and the bank balances. We further recommend that SBCTC evaluate the process used to perform reconciliations to ensure adequate controls and reports exist to support timely reconciliation.

SBCTC's Response

SBCTC agrees with this recommendation and has worked closely with college clients to identify system, training and/or user errors that may have contributed to the variances reported by each college. As noted below, the SBCTC will continue this effort.

SBCTC has worked with pilot college staff to identify and correct issues causing variance between the cash general ledger balance and the bank balances. In December 2018, the SBCTC discovered and corrected a contributing issue centered around the configuration of charges and payments affecting student accounts in the Student Finance module. In addition, the configuration which controls the accounting date was also modified to make reconciling transactions simpler. Training was also developed and provided for college staff on how to reconcile the financial aid payments made on the students' accounts and the expenditures related to those payments, which causes a cash discrepancy if out of balance.

To help identify the cause of the variance between cash in the accounting records and bank statements, SBCTC asked each college to work with its accounting analyst to review each cash related transaction bank statements occurring in a two-month period. Working closely with college accounting staff those transactions were reviewed. While no system issue was identified through this process, opportunities for training were noted and provided.

Although through that in-depth review the SBCTC was unable to identify evidence that the system was contributing to the variance, in July 2019, two accounts were set up to separately track system activities and manual entries made by the pilot colleges. We believe this will help to isolate the cause of any variance.

In terms of reporting, the SBCTC reporting team has developed custom queries that pull various financial, student and human resource data to produce reports. The SBCTC has and will continue to work with college staff to identify and/or create the queries that help them perform reconciliations.

Auditor's Remarks

We thank the Board for its cooperation and assistance throughout the audit. We appreciate the steps the Board is taking to resolve this issue.

INFORMATION ABOUT THE BOARD

The State Board for Community and Technical Colleges is responsible for administering the Community and Technical College Act. The Board provides leadership and coordination for Washington's public system of 34 community and technical colleges.

The governing Board is made up of nine members who are appointed by the Governor. The Board has administrative responsibility over the operating and capital budgets for the colleges and administers the suite of administrative applications used by the community and technical college system. The Board allocates the state general fund appropriations and some federal and state grant awards to the colleges. In addition, the Board works with the colleges on policy issues, curriculum content, degree requirements and admissions policies. The Board has approximately 185 employees with offices in Olympia and an eLearning office in Spokane.

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Information current as of report publish date.

ABOUT THE STATE AUDITOR'S OFFICE

The State Auditor's Office is established in the state's Constitution and is part of the executive branch of state government. The State Auditor is elected by the citizens of Washington and serves four-year terms.

We work with our audit clients and citizens to achieve our vision of government that works for citizens, by helping governments work better, cost less, deliver higher value, and earn greater public trust.

In fulfilling our mission to hold state and local governments accountable for the use of public resources, we also hold ourselves accountable by continually improving our audit quality and operational efficiency and developing highly engaged and committed employees.

As an elected agency, the State Auditor's Office has the independence necessary to objectively perform audits and investigations. Our audits are designed to comply with professional standards as well as to satisfy the requirements of federal, state, and local laws.

Our audits look at financial information and compliance with state, federal and local laws on the part of all local governments, including schools, and all state agencies, including institutions of higher education. In addition, we conduct performance audits of state agencies and local governments as well as [fraud](#), state [whistleblower](#) and [citizen hotline](#) investigations.

The results of our work are widely distributed through a variety of reports, which are available on our [website](#) and through our free, electronic [subscription](#) service.

We take our role as partners in accountability seriously, and provide training and technical assistance to governments, and have an extensive quality assurance program.

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