



CTCLINK DG4 LESSONS LEARNED

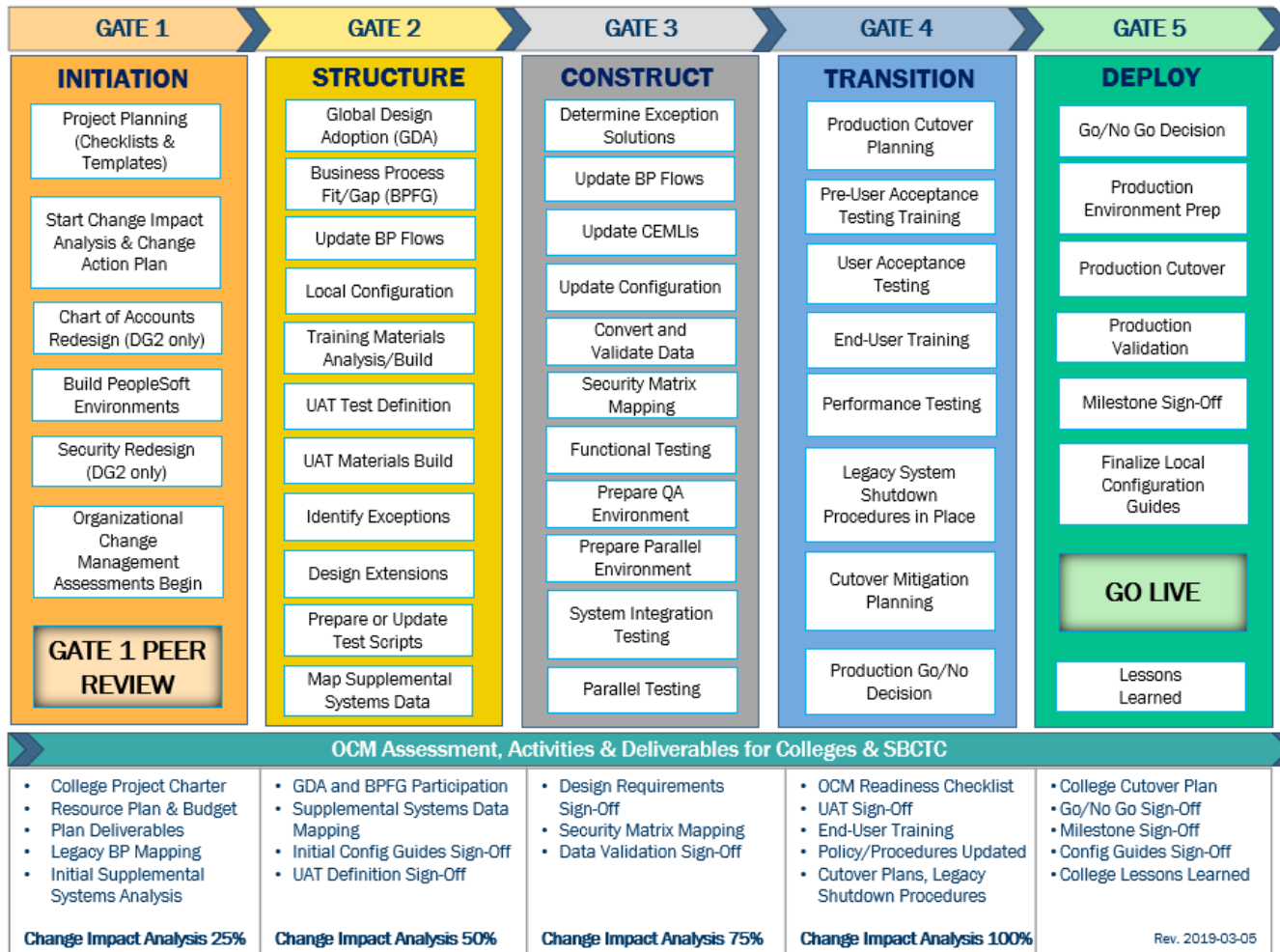
April 2021, rev. 2021-04-27

| | |
|--|----|
| ctcLink DG4 Lessons Learned | 1 |
| Introduction..... | 2 |
| Summary of Lessons Learned | 5 |
| Next Steps..... | 6 |
| APPENDIX A: Lessons Learned | 7 |
| APPENDIX B: ctcLink Project Team Identifies the Adjustments Needed to Improve the Deployments of DG5 and DG6 | 24 |
| APPENDIX C: SBCTC Customer Support..... | 28 |

Introduction

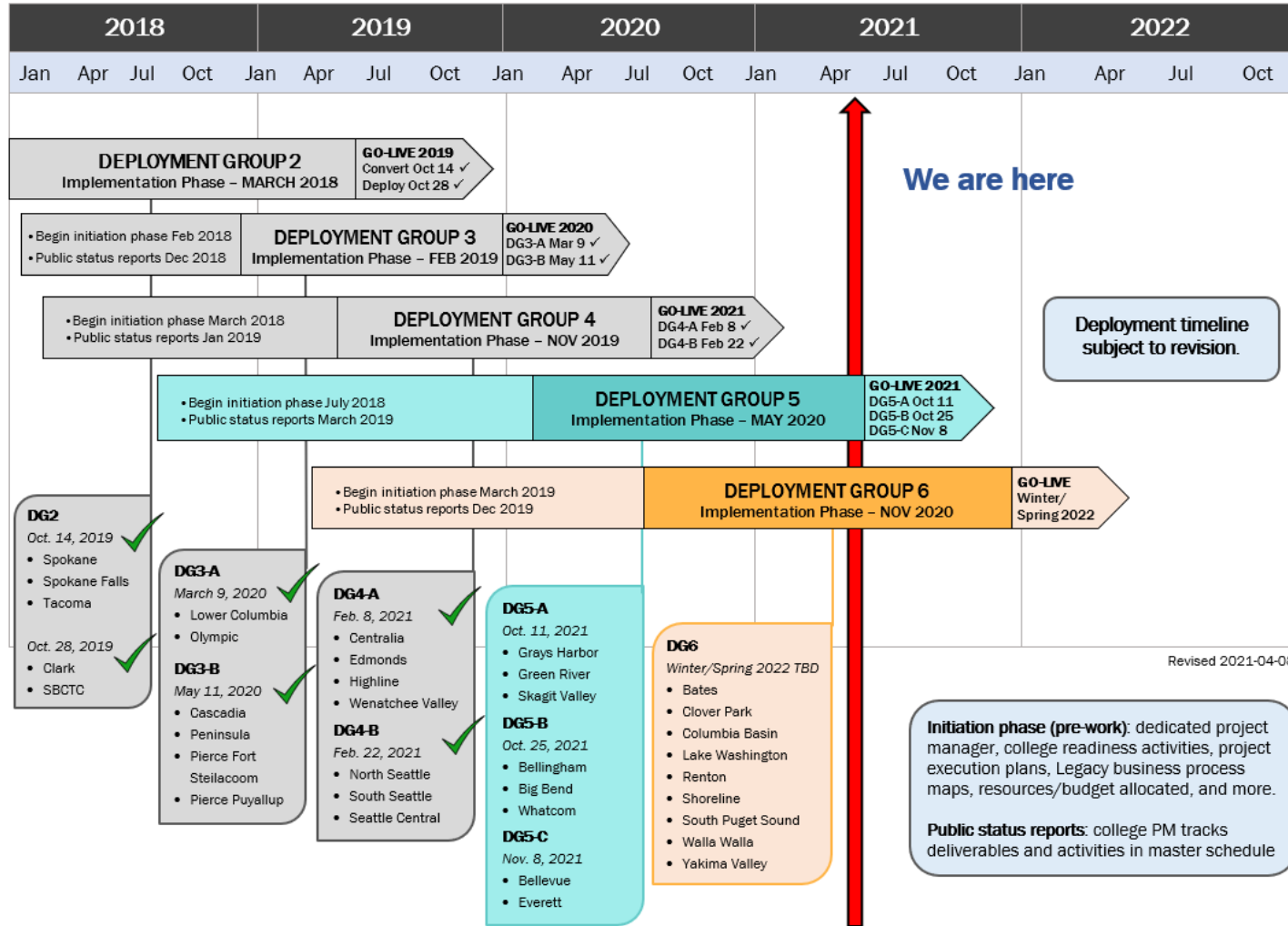
The ctcLink Project Methodology allows for continual improvement during and after each Deployment Group's move to production. The Quality Gates illustrated below allow the ctcLink Project team to access each activity based upon discussions with colleges, feedback from college and project staff, and surveys to understand where there may have been challenges within the Gates and opportunities for improvement for future Deployment Groups.

CTCLINK QUALITY GATES & MILESTONES



The Deployment Groups timeline below illustrates the progress the ctLink Project has made since 2018 and displays on the red line where we are in the deployment of ctLink, focusing now on DG5 and DG6 Deployment Groups.

ctcLink DEPLOYMENT GROUPS AND TIMELINE



Revised 2021-04-08

Initiation phase (pre-work): dedicated project manager, college readiness activities, project execution plans, Legacy business process maps, resources/budget allocated, and more.

Public status reports: college PM tracks deliverables and activities in master schedule

The Washington State Board for Community and Technical Colleges (SBCTC) ctcLink Project Team is committed to continuous improvement. After each Deployment Group is implemented into ctcLink Production, the ctcLink Project Team identifies the issues encountered and documents the corresponding improvement strategies to be implemented for the next deployment group. This document represents the deployment group 4 lessons learned.

Deployment Group 4 (DG4) consists of five community college districts, representing seven colleges: Centralia College, Edmonds College, Highline College, Seattle Colleges (North Seattle, Seattle Central, and South Seattle), and Wenatchee Valley College. While the DG4 colleges prepared to go-live together, they went live over two deployment groups two weeks apart in February 2021.

Improvements were made to the DG4 ctcLink implementation activities based on lessons learned from DG3 colleges. In addition, real time changes were made in real time in response to suggestions from DG4 colleges. These real time improvements were possible due to the close and frequent interaction between the ctcLink Project Team and college project managers (PMs) and subject matter experts (SMEs).

The DG4 lessons learned were collected to improve the implementation of ctcLink for DG5 and DG6 colleges. The DG4 lessons learned are represented collectively as a deployment group rather than by individual college and college SME. Lessons learned were collected from a variety of sources both during implementation and post go-live:

- Surveys of college participants in global design adoption, BPFs, and Security training;
- Ongoing meetings with college PMs and SMEs;
- DG4 PM meetings;
- All PM March 2021 Meeting;
- Executive Sponsor Meeting;
- Key Informant Interview with ctcLink Project Leads; and
- ctcLink Project Team.

Overall, the ctcLink conversion process works and the implementation activities are continually fine-tuned for each deployment group. The Moran Technology Consulting, ctcLink Project Quality Assurance, November 2020 report offers context for the DG4 Lessons Learned:

DG2 and DG3 were, by most accounts, successful implementations. There were hiccups that are being addressed but overall, the solution works. As the project has seen the deployments go smoother each time, there can be a belief that future deployment groups will have a much easier implementation. However, while the solution and the conversion processes improve each time, there is one aspect that does not change – the amount of work necessary to be completed by each college in order to have a successful implementation. There are a large number of college core business processes that will be substantially changing with ctcLink, requiring a significant commitment by each and every college in order to execute a successful implementation. - *(Moran Technology Consulting, ctcLink Project Quality Assurance, Monthly Report – November 2020.)*

The lessons learned in this report are summarized in the first section and detailed in the following section. They are organized by the following major themes:

- Work Packages (e.g., Business Process Fit Gap (BPF) Sessions, Data Validation, and User Acceptance Testing)
- BPF
- Student Financials
- Finance

- Security
- Training
- Go-Live Weekend
- ctcLink Project Management
- Legacy
- College Project Management

The last section offers the direct feedback from the ctcLink Project Team about the adjustments they identified to improve the deployments of DG5 and DG6.

Summary of Lessons Learned

Work Packages

- Provide context and a preview for the homework in the work packages, e.g., for BPF, Data Validation, and UAT.
- Improve consistency in communication and expectations for the work package homework, especially in Data Validation.
- Put work package reference materials in the Reference Center.
- Incorporate Data Validation Cycle 4 activities into UAT.
- Help college PMs plan better with 30 and 60 day look ahead with the schedule.

BPFs

- Add opportunities for college one-on-one sessions.
- Provide detailed preview of the schedule so that colleges can plan better to get the work completed.
- Provide an overview of the interconnectedness of the PeopleSoft pillars and functionality.
- Communicate the availability of the ctcLink Learning Environment.

Student Financials and Finance

- All areas of SF need to be tested before go-live, even if it is a subset of the data.
- Help colleges anticipate what they will need to do post go-live with student financials and finance.
- Had an issue where Finance GL extracts were unexpectedly pulling duplicate period between the detail and open balance conversions.
- One of the college's banks did not have the requirements to support PeopleSoft and found out late in the implementation.

Security

- It was hard for college personnel to retain the security information knowledge about security.
- The colleges did not understand the workbooks.

Training

- Need to add training on month-end closing processes and improve training, in general.

Go-Live Weekend

- Have no more than three colleges go-live during any one conversion weekend. There are many conversion activities from Legacy to ctcLink PeopleSoft that occur sequentially by college and step/task. Each additional college adds complexity to performing the tasks. With more than three colleges, the quality of the conversion process is compromised.

ctcLink Project and Legacy

- Don't implement additional applications during the same month as go-live or integrate those into the ctcLink UAT activities.
- Lists of tasks for the conversion weekend are very helpful.
- Include ctcLink project staff in the meetings between Legacy staff and the colleges regarding the transition and shutdown activities.

College Project Management

- Announce office closures early to allow college departments to plan.
- Make sure consistent and appropriate people are involved in the work packages: The work packages were often conducted by smaller groups of people at the colleges. Many were approaching the activities as tasks to “check off.” Then, when go-live occurred many people were not exposed to the system and had to learn the processes prior to go-live.
- Colleges said they would have benefited from more deliberate and frequent collaboration/collaborative learning.
- Make sure there is a procedure or process for how internal training materials will be created and distributed.
- Include supervisors and administrative support in the training for the department personnel.
- The college support plan should be practiced prior to go-live and have multiple entry points.
- The college IT staff who will offer support (Tier 1/helpdesk related to ctcLink) should take the self-service training, including for the mobile app, so they are aware of its functionality.
- Communicate with students about upcoming ctcLink early so they know what to expect.
- Help the college community anticipate seeing their own confidential information in the system.
- Conduct a practice drill of the security management plan prior to go-live.
- Make sure that the UAT commence as soon as possible – since the steps are interconnected, one delay can delay multiple activities.
- Hire business analysts.
- Develop a stabilization plan for 90 days post go-live.

Next Steps

| DG4 LESSONS LEARNED MEETINGS | STATUS/DATES 2021 |
|--|---------------------------|
| Moran Technology Consultants review draft DG4 Lessons Learned report | April 2021 |
| Present Lessons Learned to ctcLink Steering Committee | Scheduled: April 20, 2021 |
| Post Lessons Learned report deliverable to OCIO website | April 20, 2021 |
| Present Lessons Learned to All-PM Meeting | Scheduled: May 5, 2021 |
| Share/Post Final report with current & future Deployment Groups | April 2021 |

APPENDIX A: Lessons Learned

Work Packages

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|---|---|-------------------------------------|--|
| Provide College PMs with summary information early about individual sessions and workshops within each work package, e.g., one-page hand-outs. | For each session or workshop in the work package provide the summary information in advance. | College PM Executive Sponsor | The ctcLink college advisor has put together a summary for BPGF and Data Validation processes for DG5 and DG6. |
| Having documents in Reference Center has been really helpful – one place to direct people to, always up-to-date. DG4 Canvas course – the supplemental files all linked in one place in canvas so the PMs have one place to go to for information is helpful. | Have all materials available in the Reference Center so they are easily accessible to college staff. Have information for college PMs in a written format in the Canvas course. | College PM | All documentations for the work packages after BPGFs are now in the Reference Center. |
| At times, college PMs and SMEs were overwhelmed with unexpected homework, unexpected additions, or changing format of the homework. "It felt like sometimes they were chasing their tail – thought it was one way and then found out the next day it was different – created some stress." | Need consistency in communication and expectations for homework for the work packages among the different pillar teams with the SBCTC ctcLink project team. | Executive Sponsor and College PMs | Leverage ctcLink PMO team to improve communications, especially around Data Validation activities. Make the materials consistent in the Reference Center. |
| <ul style="list-style-type: none"> • Concurrent Cycle 4 and UAT Tasks Timing: Having simultaneous cycle 4 validation and UAT sprint activities in different environments led to confusion and setbacks for SMEs. • Production Workshop Scheduling: Timing of production workshops is critical to a successful dry-run and is also a dependency for SF parallel; | Separate the timing of the Cycle 4 and UAT Tasks. | ctcLink PM, College PM | For DG5, cycle 4 data validation will be merged and built in to UAT activities. This work has started for HCM. Other pillar areas are part of future planning. |

| | | | |
|--|---|-------------------|--|
| <p>time between class workshop and cycle 4/UAT activities needs to allow enough space for SMEs to complete the work; time between enrollment requirements and AARs needs to allow enough space for college activities as they also overlap with UAT and go-live prep activities.</p> | | | |
| <p>Provide a schedule for the college PM so it is clear what activities the college needs to plan for and engage in for each work packages. Make sure dates are aligned in the documents (e.g., project schedule, Canvas, ctcLink Reference Center)</p> | <p>Create a separate project plan for the purposes of the college project manager. More documentation as the what the different work packages involve and what is college facing.</p> | <p>College PM</p> | <ul style="list-style-type: none"> • A 30-day and 60-day look ahead is now provided to PMs for each deployment group for planning purposes. These schedules are presented to the PMs weekly. In the presentation, items that college PMs need to take note of for planning are pointed out. • For DG5, the ctcLink College Advisor is being more deliberate about discussing details of the schedule during college PM meetings. |

Business Process Fit/Gap

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|--|--|------------------------------|---|
| <p>Need additional guidance from the ctcLink Project team about how to configure ctcLink. College PMs asked how other colleges configured specific elements.</p> | <p>Recommend that more examples and direct advice from other already deployed colleges were incorporated to the BPFG sessions.</p> | <p>Survey College PM</p> | <p>ctcLink Project Team has implemented a new process to post sample homework assignments/templates for DG5 & DG6 24 hours in advance of the BPFG session, if the final homework assignment is not ready.</p> |

| | | | |
|---|---|--|--|
| <p>The ctcLink Project staff need to be flexible. There are times when certain topics need additional time with an individual college.</p> <p>The colleges are overwhelmed by the number of BPFPG activities, sessions, follow-up session, and homework.</p> | <p>More one-on-one college support in BPFPG.</p> <p>Scheduling of BPFPGs should be more spaced out and considerate of the multiple demands to the college SMEs' time.</p> | <p>Survey, Executive Sponsor, College PM</p> | <p>The ctcLink Project Team added follow-up sessions. There are now weekly follow-up sessions. CS Core has specific follow-up sessions for certain configuration homework, and will add sessions as necessary. Individual college follow-ups for BPFPGs allowed the project team and SMEs to identify potential configuration and conversion issues to course-correct in a timely manner.</p> <p>The sessions for each pillar have been spread out so that most weeks have only 1 or 2 sessions to attend. Extending the time any more will compromise the timing of the project.</p> |
| <p>Planning for BPFPG is a significant project management item. The college PMs and SMEs did not understand the scope of BPFPG. PMs need more information to plan for this. Colleges needed more of an emphasis on the business process work. "The dual purpose for BPFPGs (configuration homework and change-impact) dilutes effectiveness of both goals."</p> | <p>Communication prior to the BPFPG sessions about the steps expected of the homework, what will happen in the sessions, and time requirements. Having a more detailed preview will help in planning since ctcLink is not the only priority at the college.</p> | <p>Survey College PM</p> | <p>Pillar PMs have reviewed all the homework assignments and provided estimated ranges to the college PMs.</p> <p>Presentations will be available no later than 7 days in advance. Homework files will be available the day of the session.</p> <p>SME list provides detailed descriptions of each SME position listed. College PMs should identify the staff at their college who fit these SME categories.</p> <p>At-a-glance schedule was created.</p> <p>Once college staff are added to the DG Canvas Course, they have access to all the information about the BPFPG sessions.</p> <p>Canvas courses provide links to QRGs. Presentation materials are posted 7 days in advance.</p> |
| <p>College PMs and SMEs do not fully understand the interconnectedness and</p> | <p>Provide an overview and explanation of the</p> | <p>Survey</p> | <p>New cross-pillar (and, in some cases, cross-modular) sessions were added based on DG4</p> |

| | | | |
|--|---|--------------------------|--|
| impact of the functions within ctcLink PeopleSoft. | interconnectedness of the PeopleSoft Pillars and functionality. This is especially true for Student Financials, Financial Aid, and Finance. | College PM | <p>PM feedback. For DG5 and DG6, the ctcLink project team added cross-pillar sessions from four sessions for DG4 colleges to 7 sessions for DG5 and 8 sessions for DG6 colleges. The sessions include the following:</p> <ul style="list-style-type: none"> • Departments • SF/AR Conversion Approach: A Fork in the Road • Service Indicators & Student Groups • Billing. Charge Codes & Speed Types, • Lifecycle with GL • Item Types • 3Cs, Message Center & Uploading Documents • Managing Special Populations |
| Training and introductory courses to BPGF would be more beneficial by incorporating hands-on walk-through in the environment, such as a sandbox. | Communicate the availability of learning environment to more than PMs. Publish info to make it more visible. | College PM Survey | A Learning Environment is available for all colleges to use. The college PMs have the login information. This was made available with DG4. A link to the Learning Environment has been added to DG5 and DG6 Training web pages. |

Finance

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|--|---|---------------------------|---|
| One of the colleges in DG4A needed to change banks within months of go-live. | Hold recurring meetings involving all the stakeholders (college, bank, ctcLink project staff, and the Agency staff). When an issue like this is uncovered, it will help meet all deliverables within the tight timeline to go-live. | Executive Sponsor and FIN | <p>The FIN team is now using this approach for the DG5 and DG6 colleges to ensure that this process is smoother and discovery of any issue with a bank is early in the project to maximize lead time to correct. (FIN #2)</p> <p>The DG5 and DG6 colleges are already aware of this risk and recommendation to coordinate the new integration with the banks and that they can accept ACH transactions.</p> |

Student Financials

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|---|---|---|---|
| <p>Student Financials had many issues but then there was a break-through between Dry-Run and Go-Live for DG4A Colleges.</p> | <p>Identify what SF fixes colleges will need to make post go-live, regardless of the methodology, and help them plan for that amount of time. This will allow colleges to plan more effectively for post go-live activities.</p> | <p>ctcLink project leader College PM</p> | <p>After go-live, the ctcLink Project Team will provide support for posting changes and removing charges for go-live term enrollment. (FIN#1)</p> |
| <p>Colleges do not trust that SF will be accurate and want to see everything as a part of data validation and UAT; do not assume it will be correct at conversion.</p> <p>SF parallel - lessons learned.</p> <p>Need fee pay status converted to student groups so different tuition can be tested, e.g. Running Start (data that is term specific). They could manually assign - but it would be good if they could see that process working correctly on everyone.</p> <p>Item Types touch different pillars and it is important that everyone is aware of what is going on with Item Types. (FA#1)</p> | <p>Ensure that all areas of SF are tested before go-live, even if using a subset of data or a different environment or process.</p> <p>Move SF Parallel Testing earlier in the timeframe so that it is not overlapped with UAT in two different environments.</p> <p>The SF parallel testing needs to match the level of documentation utilized for payroll parallel testing.</p> <p>Create a guide for how to read term fee waiver report. (SF#2)</p> <p>More alignment is</p> | <p>College PM; ctcLink Project Leader; ctcLink Project Team</p> | <p>The ctcLink Project Team has made staffing changes. The team also changed the SF Parallel testing to be much earlier on the schedule so that it will become much more deliberate and documented process in DG5 and DG6. SF processes will be in the Reference Center for DG5 and DG6.</p> <p>Finance and SF teams need better communication. There is some room for improvement in the following areas: BPFG follow ups (when they are scheduled), Hand off of joint homework that is collected (this is more the edits to the original homework), and better collaboration of what the expectation/outcome for the colleges is for both the SF and FIN team during conversion/go-live. (FIN #6)</p> <p>Enhance the training for course and class fees so that there is greater team knowledge (SF#6)</p> <p>The features of the Running Start Design bolt-on break more delivered functionality/features than its currently worth. It should be used in a</p> |

| | | | |
|--|---|-------------------|--|
| | needed with SF on FA Item Types. | | different way. (SF#7). Some changes have been made on how/who the transfer of FAPC information to ensure all item types are mapped for conversion and dual processing and to ensure any new FA item types get created as needed for the upcoming deployment groups. I will say that we even improved on this from DG4A to DG4B. |
| Commitment control seemed to be the cause of most of the FIN/SF conversion hiccups and errors. Many of the chart strings that were uploaded in commitment control were missing accounts which caused errors in AP, Payroll, and when the SF came over into the GL. | Have a complete budget ready for upload the first few days after conversion, and take the time to understand the new PS accounts, they are not always a 1 to 1 crosswalk. Incorporate time for learning into the recommended college 90-day post go-live plan. | Executive Sponsor | Include Commitment Control relationship to SF UAT Tests to help colleges improve their understanding of this dependency and plan for it at go-live. The Finance GL extracts were unexpectedly pulling a duplicate period between the detail and open balance conversions. This must be fixed before executing the Finance extracts programs based on the issues encountered during DG4. (TECH#5) Better Communication with the SF team. There is some room for improvement in the following areas: BPFG follow ups (when they are scheduled), Hand off of joint homework that is collected (this is more the edits to the original homework), and better collaboration of what the expectation/outcome for the colleges is for both the SF and FIN team during conversion/go-live. (FIN#6) |

Security

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|---|--|--|--|
| The college IT people need a more comprehensive understanding of how security roles work in ctcLink. It seems they do not understand the security | Incorporate information into security training regarding how the | ctcLink project leader College PM | The workbooks have been improved. ctcLink project team makes sure the workbooks are clean at the start of the process. The ctcLink Project team has committed to ensuring that |

| | | | |
|--|---|--|--|
| <p>workbook and often did not follow through on the security-related assignments.</p> <p>ctcLink Project staff noted that while more security training was provided, colleges did not retain the information throughout the implementation phase--especially information delivered in the first session. A number of college participants asked basic questions that were covered in the first session as part of their post-Go Live questions during and even after support. Need a better way to give a 'refresher' of the basic understandings just before Go Live, as a lot of the information about security builds upon other information.</p> <p>(SECURITY#1, #2)</p> | <p>security workbooks are designed and how they work</p> <p>Develop one-pagers--quick start guide is more helpful that links to the environments, timeframe, expectations, and links to resources.</p> <p>Provide a crosswalk of commonly used PS pages / centers by general employee classifications (e.g., registrar, admissions recruiter, financial aid loan administrator, etc.) and security needed would be helpful to the colleges.</p> <p>Provide individual sessions to go over security with each college.</p> | | <p>the configurations are linked to the workgroups and that ctcLink Support is not changing the role name without communicating change.</p> <p>Drop-in sessions for DG5 and DG6 colleges are added with instructions linked directly to recorded videos that show SMEs what they are supposed to do.</p> <p>Documentation now exists for the modules in the CS Pillar that identifies what security roles are best for the common functions of each common college position, e.g., admissions processor, registrar, etc.</p> |
|--|---|--|--|

Training

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|--|--|--------------------------|---|
| <p>Need training on the submodules and month end closing processes. There were a few trainings but nothing that actually went through step by step what to do. The QRG is 22 pages long and is extremely intimidating. Colleges found out in the process of closing that not all</p> | <p>Add training on submodules and month end closing processes.</p> | <p>Executive Sponsor</p> | <p>The ctcLink Customer Support will work with SBCTC operations to look at how to improve QRG. Looking to develop an ILT for submodules and month-end closing processes post go-live DG5 and DG6.</p> |

| | | | |
|---|--|-------------------|--|
| those steps are required to close. There needs to be some better guidance in this area. The first month end was a mess, but a lot of that was the mad dash to clean up our budget errors in commitment control. | | | |
| Improve the training | Need to hire instructional designers to redesign the ctcLink training. | Executive Sponsor | The recommendation has been shared with the training team. |

Go-Live Weekend

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|--|--|----------------------|---|
| <p>The ctcLink Project Team was overtaxed with two go-live weekends within two weeks of one another.</p> <p>AAR Batch processes ran inconsistently long over the conversion weekend, delaying the end time for CS Core Manual Configuration and Clean. Suggest a review AAR performance for future deployments. (TECH#2)</p> <p>Legacy data cleanup was ineffectively completed by colleges prior to conversion execution, causing CS Core Team rework during the conversion execution window. Suggested improvement would be a deliberate hand-off step between colleges and functional team prior to each conversion cycle (and Go Live) to verify that requested clean up (legacy/production) is complete. This step is most critical for enrollment conversion</p> | Have no more than three colleges go-live during any one sub-deployment group | ctcLink Project Team | <p>The Project team will do analysis once the DG5 and DG6 go-live schedule is finalized and create off-time for Project team members when they can take time and address basic human needs.</p> <p>Many of the conversion activities from Legacy to ctcLink PeopleSoft occur sequentially by college and step/task. Each additional college adds complexity to performing the tasks. With more than three colleges, the quality of the conversion process is compromised, as we found during DG4-A.</p> |

| | | | |
|---|--|--|--|
| <p>success. (TECH#3)</p> <p>Allow for time for unexpected errors as happened in DG4: The Finance GL extracts were unexpectedly pulling a duplicate period between the detail and open balance conversions. This must be fixed before executing the Finance extracts programs based on the issues encountered during DG4. (TECH#5)</p> <p>The security conversion of user data was successful, however some underlying security elements differed from the latest Production configuration. Analysis must be done to compare and determine what elements that change in Production must be committed to GLD or a division of security object migration must occur so as to avoid any overwrites in future. (TECH#6)</p> <p>Go-Live Student Coding Files - New conversion processes for International Residency, Selective Admission, Bachelors, WorkFirst, Worker Retraining, and Apprenticeship students. This greatly reduced the amount of manual cleanup required by college SMEs immediately after go-live. (CS Core#7)</p> | | | |
|---|--|--|--|

Legacy

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|--|---|----------------------|--|
| Meeting with the college PMs and SMEs to review legacy transition/shutdown activities was very useful. In addition, sending daily email reminders of upcoming activities helped to ensure a smooth transition. | <p>The week before go-live schedule individual college meetings to review the legacy shutdown/transition procedures. This would provide college SMEs the opportunity to clarify any outstanding questions. (Legacy #7)</p> <p>Verify legacy extract scheduling parameters with the project team before each conversion execution. (Legacy #8)</p> | ctcLink Project Team | <p>For DG5 and DG6, add a step to verify the conversion parameters with Legacy prior to each conversion cycle to avoid issues that occurred during DG4 Dry Run of bad parameters impacting data sourced for conversion.</p> <p>Include ctcLink project staff in the meetings between college staff and Legacy department to ensure colleges have a comprehensive understanding of what to expect and address questions as they emerge.</p> |

ctcLink Project Management

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|--|---|----------------------|--|
| Without adding capacity, three new applications were planned to be live the same month as DG4 on ctcLink. When issues arose, it took the attention away from DG4 go-live with ctcLink. Project staff became overwhelmed. | Do not implement additional applications (e.g., OAAP, CampusCE, and Budget Planning Tool) during the same month as a go-live. | ctcLink Leadership | If additional applications must go live during the same time as PeopleSoft, integrate and plan UAT into the PeopleSoft UAT activities. |
| In HCM, there are many tasks and items to remember during the configuration and cut-over activities. | HCM Team internal checklist and Manual config task list - Use the internal checklist and configuration task list during dry run and | ctcLink Project Team | The lists will be very helpful in making sure each team member does not need to remember any task. They just need to follow the checklist item and configuration task list which is a living document which gets updated for each deployment group. This checklist has been very |

| | | | |
|---|----------------------------|------------|--|
| | go-live. | | helpful in reducing the issues. (HCM#1) |
| Cycle 1 Conversion - Allowing SMEs to validate one subject area provided a less overwhelming introduction to the cycle validation process. However, converting bio/demo information without enrollment information, which is a key component to the conversion priority logic, significantly reduced the accuracy of the conversion. This supports the decision to remove this cycle moving forward. (CS#4) | Remove Cycle 1 Conversion. | ctcLink PM | The Data Validation Cycle 1 conversion has been removed. |

College Project Management

| Lessons Learned Description | Recommendation | Source | ctcLink Status |
|--|---|--|---|
| DG4 Colleges waited until they had all of the detailed information to plan service and office closures. Their colleges needed more notice to understand when the offices would be closed. Planning should incorporate the last dates to make changes in the Legacy system and a corresponding plan to incorporate changes after go-live that were made between dates of no changes in the Legacy system and ctcLink go-live. | <p>Announce office closures related to go-live activities early in the quarter before go-live.</p> <p>Make decisions and communicate early about when services and changes in Legacy will stop temporarily close.</p> <p>Don't wait until all of the detailed information is known. If needed adjust later. This is change management - people need to be informed early that they can't do business as usual during the transition period.</p> | <p>College PM</p> <p>Executive Sponsor</p> | This topic will be covered at the DG5 and DG6 weekly PM meeting. Planning for and announcing office closures and process pauses is in the DG5 and DG6 Executive Sponsor Resource Guide. |
| Be deliberate in choosing the people | Deliberately select the | College PM, | When planning for each session and workshop |

| | | | |
|---|---|--|--|
| <p>who are participating BPF, Data Validation and UAT. Deliberate people (and consistency) is particularly important for the Student Financials related work packages. This will help prepare these employees to go-live with ctcLink as well as identify and plan for specific issues to mitigate issues at and post go-live.</p> <p>Production Workshops List of SME Participants - Participants from colleges were not solidified prior to workshop, resulting in continuous additions for SMEs who did not attend workshop kickoffs, training during workshops, etc. (CS #15, FIN#3, FIN#5)</p> <p>UAT was conducted by smaller groups of people at the colleges. Many were approaching the UAT activities as tasks to check off. Then, when go-live occurred many people were not exposed to the system and had to learn the processes post go-live. In addition, many who completed the UAT did not transfer that knowledge in a comprehensive way to the post go-live activities.</p> <p>The work packages of the implementation phase should not be completed by few people, such as a SWAT team – involve more people and there will be a broader distribution of the work with back-up. This will require an investment of resources and time. If this is done, there will be a lot less shock and transition at go-live. It will</p> | <p>most appropriate people to participate in BPF, Data Validation and UAT, especially in Student Financials, based on job function and work responsibilities.</p> <p>Colleges would benefit from using the UAT process as practicing business processes for post go-live. College folks should incorporate as many people in the UAT process and use the UAT process as an indicator of what they need to prepare for during the first two weeks of go-live. This will require including many more people in the UAT process.</p> | <p>College Executive Sponsor, ctcLink Project leader, ctcLink Project Team</p> | <p>for each work package, the ctcLink project team advises college project managers through who should attend.</p> <p>The ctcLink project team has included more knowledge sharing, roles, and responsibilities in the UAT activities. In addition, the timing for parallel testing was adjusted to align with UAT.</p> <p>This topic will be address at the DG5 and DG6 weekly PM meeting. This will also be addressed in the associated orientation/kick-off meetings.</p> <p>Testing team will be reporting UAT & parallel testing stats together to provide better data on college completion.</p> |
|---|---|--|--|

| | | | |
|---|--|----------------------------------|--|
| also redistribute the work. | | | |
| As colleges get close to go-live everyone becomes involved and begins to create their own documentation to share, videos, etc. | As a part of the college training plan, develop a process for how the materials will be created. Communicate early and often the protocols from the plan around specific departments making their own documentation to share. | College PM | This topic will be covered at the DG5 and DG6 weekly PM meeting. Training and materials are available earlier for each deployment group. |
| <p>College PMs did not feel like they had a plan post go-live for the stabilization activities.</p> <p>The trainings that were given the 1st two weeks after deployment offered a detailed picture of what our SF/FIN processes look like – in real life. Taking trainings for two weeks straight, back to back, all day, was extremely overwhelming, and we could not digest all the new information. Also, in our office we have a couple people who work in both SF/FIN and the trainings always overlapped, so college personnel had to choose what trainings to go to (and they weren't recorded). SBCTC should be more aware of this and arrange the trainings accordingly.</p> | <p>Include 90-Day Stabilization Plan Template as part of the project management plan.</p> <p>Add additional training during implementation and UAT, modeled after the post go-live two-week training.</p> <p>Make sure the SF and FIN training is held different times from each other so the same people can attend both.</p> <p>Include in the post go-live plan that grade rosters do not shut down after grades are posted when the grades have not yet been entered. While this is a PeopleSoft feature; it is a big switch from Legacy. Although it is</p> | College PM and Executive Sponsor | <p>ctcLink Customer Support Team convenes a structured schedule for two-weeks post go-live. It is important to attend the sessions so that college personnel can see the interconnectedness of the business processes in ctcLink.</p> <p>College personnel were encouraged to follow the schedule because the sessions were held concurrently with the timing of the college's business processes and how the system works—so people needed to participate as the sessions were offered.</p> <p>Minor improvements will be made for DG5 and DG6, especially in the timing of post go-live training for SF and FIN.</p> <p>ctcLink Project team will be asking DG4 for sample templates they created. The ctcLink project team can post and share this info with DG5 & DG6.</p> |

| | | | |
|--|--|-------------------------------------|---|
| | included in the training, it is worth planning for because it requires building new processes. | | |
| <p>Collaboration is the best strategy to engage learners across the college, especially gathering SMEs around a specific topic both from across colleges and within colleges.</p> <p>Departments representing special populations should be included where possible so they can make sure the students they represent are considered in the different work packages.</p> | <p>DG5 and DG6 Colleges are encouraged to find ways for the college SMEs to collaborate in learning the ctcLink system and sharing information during the ctcLink preparation work packages. Make sure Disability Support Services and other special populations departments, such as TRIO, Library and Tutoring Center.</p> | College PM | <p>DG5 colleges have organized SME groups around each of the pillars, i.e., Student Finance, Finance, CS, HCM, and Financial Aid. These groups are coordinated by the college project managers.</p> <p>Recommend to include post go-live deployment groups to support collaborations as well as exploring developing Knowledge Networks.</p> |
| <p>Provide a schedule for the college PM so that it is clear what activities the college needs to plan for and engage in for each work package. College PMs need this so they can plan early to manage the project.</p> <p>Make sure dates are aligned in the documents (e.g., project schedule, Canvas, ctcLink Reference Center)</p> | <p>Create a separate project plan for the purposes of the college project manager. More documentation as the what the different work packages involve and what is college facing.</p> | College PM, College Advisor | <p>A 30-day and 60-day look ahead is now provided to PMs for each deployment group for planning purposes. These schedules are presented to the PMs weekly. In the presentation, items that college PMs need to take note of for planning are pointed out. For DG5, the ctcLink College Advisor is being more deliberate about discussing the details of the schedule with the college PM in their meetings.</p> |
| <p>Make sure supervisors and support people are trained and ready to respond and assist their team members. ("First tier is your supervisor.")</p> <p>Faculty often rely on support staff to provide assistance for business</p> | <p>Update the college training plans to include training for supervisors and administrative support. People in these positions will need to help their teams' transition to ctcLink, e.g.,</p> | College PM Executive Sponsor | <p>The need for strong training and support plans will be covered at the DG5 and DG6 weekly PM meeting, planning to present it 4-6 weeks prior to beginning of the work package. This lesson learned will also be shared by the ctcLink College Advisor as they meet with the college PMs.</p> |

| | | | |
|--|--|---------------------------------|--|
| processes. | supporting faculty with grading, grounds people with entering time, etc. Make sure they have the security roles to help. | | Schedule the topics for the PM meetings in advance to include these important improvements. |
| Make sure people can get support in a coordinated way with multiple entry points: ctcLink office email, IT email and support line, open Webex | Make sure the college is very clear in communicating where to go for help and how to report issues. | College PM | This topic will be address at the DG5 and DG6 weekly PM meeting. This lesson learned will also be shared by the ctcLink College Advisor as they meet with the college PMs. |
| At some colleges, students reported they were not included in the messaging and announcements of ctcLink. | Partner with faculty and students in getting the messages about ctcLink out to students. Use multiple modes of communication; be creative and use what already works at your college. | College PM Executive Sponsor | Ideas and processes to plan for and announce office closures and process pauses is in the DG5 and DG6 Executive Sponsor Resource Guide and ctcLink Student Communication Resource Guide. The guided includes templates, timing, and examples of student communication. |
| Upon seeing their own confidential information in ctcLink, some employees were concerned that everyone else can see it as well and want to know who can see it. The answer to “who” can see what information largely depends on the security roles assigned to the employees. Therefore, it is recommended that employees be prepared to see this change and understand who can see their information before going live with ctcLink. This has created concern in previous deployment groups during go-live. | Communicate with college community about what confidential information they will see in self-service. The communication should include the security safeguards in place and that this information was also in Legacy; it just wasn't easy to access. | College PM | The ctcLink project team published a ctcLink Explainer blog post on March 18, 2021 to communicate about what self-service looks like and its benefits. Communications to the college community should include information about what to expect when the college is live with ctcLink. |

| | | | |
|--|--|--|--|
| <p>IT staff who support ctcLink need to have a basic understanding of the self-service areas of ctcLink so they can address end user questions.</p> | <p>College IT Tier 1 support staff should take all the self-service training, including self-service in the mobile app, so they are aware of what exists and how to navigate how to get there.</p> | <p>College PM</p> | <p>This topic will be addressed at the DG5 and DG6 weekly PM meeting. This recommendation will be shared by the College Advisor in the meetings with DG5 and DG6 PMs.</p> |
| <p>Colleges created their security management plans prior to go-live. However, they did not implement it until post go-live. During the go-live process, it was awkward and mistakes were made. More context of the security roles, including hands-on training, understanding materials in terms of current business processes when future state of business processes is not always clear.</p> | <p>Practice implementing the security management plans prior to go-live. Make sure the security management plan creates a shift in the way the college thinks about access to information prior to go-live. Incorporate information about how the security workbooks are designed and how they work, into the security training. Identify the key areas people need to access and roles needed: Student center, advising center, faculty center...</p> | <p>College PM, College Advisor, ctcLink Project Leadership Survey</p> | <p>DG4 had they had more time to test security. They were able to clean things up and improve configuration challenges. The ctcLink project team had more conversations with the individual functional teams, specifically with Campus Solutions. (TECH#6)</p> <p>This topic will be addressed at the DG5 and DG6 weekly PM meeting. The College Advisor will spend more time discussing these recommendations in the meetings with DG5 and DG6 PMs.</p> |
| <p>Some departments waited toward the end of the UAT Sprint timeline to begin the UAT activities without understanding the interconnectedness of the UAT activities. This delayed completion of the UAT activities past the due dates.</p> | <p>Begin UAT activities as early as possible in alignment with the project schedule.</p> <p>While staffing the UAT activities, it is important to align as many staff with the Sprint scope as possible.</p> | <p>College PM College Executive Sponsors</p> | <p>Build a deadline into the Project schedule for configuration changes.</p> <p>A clearer message needs to be communicated to the colleges regarding purpose and outcomes of UAT, so all of the configurations tested and approved by the colleges align with the project schedule. (FIN #3)</p> |

| | | | |
|--|---|--------------------------|---|
| <p>The colleges' ctcLink project teams were hesitant to hire additional people. The colleges had budget concerns that influenced decisions not to hire business analysts. Once the colleges really got in the "thick" of the ctcLink work, it was too late to hire and train people to help with the work. People were overburdened with work. The Business Analysts and PMs are needed long term, not just related to preparing to go live.</p> | <p>Hire the people needed to support the ctcLink project at the college:</p> <p>Business Analyst</p> <p>Faculty Advocates</p> <p>Additional staff for the pillar leads and SMEs to do the work of ctcLink</p> | <p>Executive Sponsor</p> | <p>The recommendation to hire Business Analysts has been brought to ctcLink Executive Leadership Committee (cELC) from the ctcLink Steering Committee at least twice since Fall 2019 during discussions about the College Roles & Alignment document.</p> |
| <p>Colleges realized that their support plan for post go-live needed improvements.</p> | <p>Take the time really develop and practice the post go-live college support plan</p> <p>Include time to do real time improvements post go-live in the college's 90 post go-live plan.</p> | <p>Executive Sponsor</p> | <p>Colleges can use the UAT processes to test their support plans.</p> |

APPENDIX B: ctcLink Project Team Identifies the Adjustments Needed to Improve the Deployments of DG5 and DG6

Adjustments Identified for Deployments of DG5 and DG6

| CAMPUS SOLUTION CORE | FINANCIAL AID | STUDENT FINANCIALS |
|--|---|---|
| <ul style="list-style-type: none"> • Cycle 1 Conversion - Allowing SMEs to validate one subject area provided a less overwhelming introduction to the cycle validation process. However, converting bio/demo information without enrollment information, which is a key component to the conversion priority logic, significantly reduced the accuracy of the conversion. This supports the decision to remove this cycle moving forward. • Concurrent Cycle 4 and UAT Tasks - Having simultaneous cycle 4 validation and UAT sprint activities in different environments led to confusion and setbacks for SMEs. • Production Workshop Scheduling - Timing of production workshops is critical to a successful dry-run and is also a dependency for SF parallel; time between class workshop and cycle 4/UAT activities needs to allow enough space for SMEs to actually complete the work; time between enrollment requirements and AARs needs to allow enough space for college activities also overlapping with UAT and go-live prep. • Production Workshops List of SME Participants - Participants from colleges were not solidified prior to workshop, resulting in continuous additions for SMEs who did not attend workshop kickoffs, training during workshops, etc. | <ul style="list-style-type: none"> • We definitely want to be more aligned with SF on FA Item Types. We have already made some changes on how/who we will get FAPC information from to ensure all item types are mapped for conversion and dual processing and to ensure any new FA item types get created as needed for the upcoming deployment groups. I will say that we even improved on this from DG4-A to DG4-B. | <ul style="list-style-type: none"> • Support for Posting charges/removing charges for go-live term enrollment after go-live. (non tuition calculation - Tuition calc). • Have a guide with notes on how to read term fee waiver report. • Enhancing course/class fee teaching. There is greater team knowledge, particularly to some of the built impediments to delivered functionality. • Running Start design - Features of this bolt-on break more delivered functionality/features than it's currently worth. Using it a different way will be beneficial. |

Adjustments Identified for Deployments of DG5 and DG6

| FINANCE | HUMAN CAPITAL MANAGEMENT |
|---|---|
| <ul style="list-style-type: none"> ● The Finance team first uses this schedule tool during dry run and then adjusts with findings so that we are better prepared for go-live. If there are items we find in go-live, we carry those over to the deployment. <ul style="list-style-type: none"> ● We are now using this approach for the DG5 and beyond colleges to ensure that this process is smoother and if there are any issue with a bank that we are aware of them with plenty of time to correct. ● We have requested a deadline be built into the Project schedule for configuration changes. A clearer message also needs to be communicated to the colleges of the purpose and outcomes of UAT, so we can hopefully have all of the configuration tested and approved by the colleges in alignment with the project schedule. ● Looking at a better way to get the right people at critical activities (BPFs, UAT, and Validation). Maybe communicating who should be at or performing these activities. ● Better communication with the SF team. There is some room for improvement in the following areas: <ul style="list-style-type: none"> ● BPF follow-ups (when they are scheduled) ● Hand off of joint homework that is collected (the edits to the original homework) ● Better collaboration on expectations/outcomes for the colleges for both the SF and FIN team during conversion/go-live. | <ul style="list-style-type: none"> ● HCM Team internal checklist and Manual configuration task list - We usually use it during dry run and go-live. However, with multiple small groups of go-live cutover plan and common dry run approach, we are now updating these documents for dry run to mimic our approach for go-live. So that there is no confusion during cut-over. ● HCM Team internal Dashboard during cut-over: With more than two (2) go-live weekends and extended working hours it is very important that the project team member gets some rest. So we are going to do some analysis once the schedule is finalized and create off-time for project team members when they can take some rest or have some personal time. ● Collaboration with Customer Support - Will continue to provide the help and guidance required by support based on any lessons learned from the DG4A and B post go-live support sessions. |

Adjustments Identified for Deployments of DG5 and DG6

| SECURITY | TECHNICAL | LEGACY |
|--|---|---|
| <ul style="list-style-type: none"> ● Security Management Plan submissions. Many were submitted half complete. Not enough time to review their submissions and give helpful feedback. Only Seattle took the time to really work through their plans with us. ● Early training content retention. While we gave significantly more training, colleges at the end of the implementation phase did not retain security training knowledge delivered in the first session. During post go-live sessions and into post go-live support phase, a number of college participants asked basic questions which were covered in the first session. ● Need a better way to give a basic understandings “refresher” just before go-live. | <ul style="list-style-type: none"> ● Verify the mount point of the post conversion validation environment. ● AAR Batch processes ran inconsistently long over the conversion weekend, delaying the end time for CS Core Manual Configuration and Clean. Suggest a review AAR performance for future deployments. ● Legacy data cleanup was ineffectively completed by colleges prior to conversion execution, causing CS Core Team rework during the conversion execution window. Suggested improvement would be a deliberate hand-off step between colleges and functional team prior to each conversion cycle (and go-live) to verify that requested clean up (Legacy/production) is complete. This step is most critical for enrollment conversion success. ● Add a step to verify the conversion parameters with Ray prior to each conversion cycle to avoid issues that occurred during DG4 Dry Run of bad parameters impacting data sourced for conversion. ● The Finance GL extracts were unexpectedly pulling a duplicate period between the detail and open balance conversions. This must be fixed before executing the Finance extracts programs based on the issues encountered during DG4. ● The security conversion of user data was successful, however, some underlying security elements differed from the latest Production configuration. Analysis must be done to compare and determine what elements that change in Production must be committed to GLD or a division of security object migration must occur so as to avoid any overwrites in future. | <ul style="list-style-type: none"> ● The week before go-live, schedule individual college meetings to review the Legacy shutdown/transition procedures. This would provide college SMEs the opportunity to clarify any outstanding questions. ● Verify Legacy extract scheduling parameters with the project team before each conversion execution. |

Adjustments Identified for Deployments of DG5 and DG6

TESTING

Security

Security was a huge hurdle the first week and it was challenging getting issues fixed. Testing team worked on adding more security understanding for the users in the Reference Center for each flow to hopefully reduce this.

UAT Deadlines

Colleges didn't take advantage of the full time UAT is available, they waited until the last week or two of each Sprint after putting it off. We need to help SMEs and encourage them to have test momentum and work towards due dates.

OCM/SME Experience

Users were unclear on what they actually can do in the system and how their duties might change. They asked for things to mirror their access in Legacy rather than adapting to the new system after trainings and reading the Reference Center. Need to set expectations with SMEs and escalate to the college PM as needed.

College's not communicating internal business practices prior to UAT. This is their last stop for testing their business processes, so it is not conducive to their success or our bandwidth at this juncture. They hadn't discussed or thought through scenarios or inter-departmental dependencies. College discussion was happening during the open Webex.

Self-Paced Training Prior to UAT

College users approached the open UAT Webex as "training" rather than for troubleshooting and solution-oriented inquiries. It was apparent those who did no self-paced training and even if they did, they still wanted a type of "show-n-tell" in Webex.

APPENDIX C: SBCTC Customer Support

CUSTOMER SUPPORT

Implementation

Communicate with colleges at least one month prior to Go-Live about the CyberSource configuration process per-institution, managed between the schools and KeyBank.

The tuition calculation (SUB TUT) process was treated differently between DG4-A and DG4-B (which received two extra days of support). This was a significant issue and we thought halting go-live should have been considered. Enough time between each deployment is crucial.

Some end-users did not complete Canvas training courses prior to go live. From a Customer Support perspective, this made it difficult to troubleshoot when the SMEs didn't have basic content for PeopleSoft.

Configuration

General Configuration: Running Start Term Fee Configuration missing for some schools. Determine if it's in BPFH homework. Tender set up not properly (checkboxes missed for cashiers). Different Targets and Tenders in cashiering transactions.

Conversion Homework: A significant number of item types and chart strings not created even though clients indicated they included within homework. Establish a way to check this in advance. Having these in UAT for DG 5 and DG6 will be important.

Post Go-Live Activities

It is critical for all go-live DG staff actively follow and participate in the two-week post go-live scheduled activities.

Do not schedule Finance and Student Financials trainings at the same time as this makes it difficult for employees with "two hats" to attend.