Goal 4C: Hartnell College will maintain a current, user-friendly technological infrastructure that serves the needs of students and employees.

Plan:

1. Continue implementation of AB 1546 /student success projects
2. Creation of tools for enrollment management
3. Implement Online Education Initiative project
4. Continue implementation of faculty contract process
5. Complete server room consolidation project
6. Complete Spring Forward project
7. Complete virtualization and computer replacement of all computer labs
8. Complete Advocate discipline tracking system
9. Complete Academic Works scholarship management system
10. Complete Student Accommodation Manager (SAM) software system

11. Improve wireless speed and coverage

12. Replace classroom teaching station computers and document cameras

13. Replacement of district phone system

14. Integrate Hartnell’s Colleague system with Follett Bookstore

15. Electronic roster implementation

16. Create a dedicated wireless network for online interpreters for the hearing-impaired

17. Upgrade storage and disaster recovery systems

18. Upgrade the virtual server infrastructure

19. Enhance documentation of ITR processes and procedures
**Goal 4C:** Hartnell College will maintain a current, user-friendly technological infrastructure that serves the needs of students and employees.

**Progress:**

1. Continue implementation of AB 1546 /student success projects

With the passing of Assembly Bill 1546, many new student success initiatives have been initiated by the district. ITR has completed many projects for the new law, and efforts continue to implement projects related to the passing of the bill. ITR coordinated with Student Affairs and Academic Affairs this past year to implement the following systems and processes:

- Implemented probation dismissal processing
- Implemented loss of BOG grant processing
- Added a new catalog cycle to the degree audit system
- Prepared the self-service student planner for student rollout
- Implemented dismissal appeals programs and processes
- Created reports for dismissed students with good semester waivers
- Implemented and updated procedures for state reporting requirements

2. Creation of tools for enrollment management

ITR created enrollment management tools to identify students that were not retained during a primary term. The resulting data sets from the tools were used to identify retention as the preeminent enrollment strategy for the upcoming cycle. The data details were used to survey the withdrawn students to determine reasons for withdrawing. During the next cycle, focus groups will be created from survey respondents to mitigate withdrawal reasons.

Enrollment Management dashboards were created this past year to show 10-year section counts, 5-year comparisons of FTES, headcount and enrollments, as well details such as graphs of daily FTES, enrollment, and withdrawal counts. The reports are web-based and are updated each morning.
3. Implement Online Education Initiative project

The state legislature has implemented the Open Education Initiative (OEI) that provides a singular platform for students to access to take approved online courses from proven faculty members. Hartnell is a pilot school for the OEI initiative, offering several classes in the statewide-selected software tool, Hartnell has committed to piloting two OEI courses in the spring 2018 semester, and ITR has facilitated this pilot by implementing the statewide Student Information System (SIS) adapter, Glue, which allows Hartnell to participate in the OEI course exchange program.

A steering group has been formed, consisting of constituents from faculty, admissions staff, financial aid staff, scheduling and curriculum staff, distance education committee members, and of course, ITR staff. This group will lead the district through the implementation into the spring 2018 semester, coordinating statewide agreements in the areas of financial aid, admissions, faculty and technology.

4. Continue implementation of faculty contract process

ITR, in conjunction with Academic Affairs and HR, continue to improve the automated process for creating adjunct faculty assignments and contracts. Computer programs were created to automatically generate the adjunct contracts in MS Word, and new reports were created to check for accuracy. The next phase of the process has begun, which will implement electronic mailing and signing of contracts, eliminating the need for paper handling and storage of contracts.

5. Complete server room consolidation project

Work continued this past year to complete the server room consolidation project which consisted of moving the server equipment in building E into the server room in the Library building, reducing monitoring and electricity costs for cooling and power backup by having systems in one location. The old server room has been cleared, and has since been renovated into office space. The final step in the project was completed this past year: sealing of the room for gas exposure, and installation of a zero ozone oxygen-depleting extinguishing gas for fire suppression.

6. Complete Spring Forward project

The Spring Forward project involves refreshing the Colleague ERP system to modern standards, and training staff to
take advantage of the features of Colleague not currently being utilized. The project covers functional areas such as admissions and records, financial aid, catalog and scheduling, finance, and counseling. The two remaining projects were the Hartnell mobile app and the Hartnell portal.

The Hartnell mobile app went live during the spring 2017 semester, and work continues on the remaining project - the Hartnell portal. The portal implementation has been delayed due to a change in technology from the vendor, Ellucian. The delay involves changing the authentication method from Microsoft ADFS to Ellucian Ethos. The portal is expected to go live in time for spring 2018 registration, which begins in October of 2017.

7. Complete virtualization and computer replacement of all computer labs ITR completed its goal of converting all labs and student computers to virtual desktops. Virtual desktops in student labs allow for rapid deployment of new software requirements, easy maintenance of student software images, and improved support for problems occurring in student labs. All computer labs were virtualized this past year with the exception of one lab, which cannot be virtualized because it is used in operating system classes, which require full control over the computers.

The aging tower computers in the labs were replaced with thin-client computers, which take up less room on the student’s desktop - often installed on the back of a monitor. The thin clients connect to virtual desktops which means that the thin clients will need replacing less often than traditional computers.

8. Complete Advocate Discipline Tracking System

Hartnell’s former discipline tracking system and Title IX reporting was a manual, spreadsheet-based system that requires a large amount of effort to maintain and update case records. Annual reporting is a cumbersome process requiring the gathering of records from various departments and compiling them together into one report.

ITR, in conjunction with the Office of Student Life, has completed the implementation of the Advocate Discipline Tracking System. This a web-based information system allowing for reporting of discipline incidents and centralized incident tracking by all campus constituents. It includes options for incident reporting by faculty, staff, students, and community members. The system will allow for improved Title IX annual reporting, security incident reporting, and will
allow for historical information to be accessed with ease. The system went live during the fall 2016 semester.

9. Complete Academic Works scholarship management system

Student scholarships are managed by the Financial Aid office, the Hartnell Foundation, and Business Office through a manual process involving spreadsheets and paper forms. ITR worked with the three offices to complete the implementation of the Academic Works scholarship management system. The new system is a web-based product that allows students to apply for multiple scholarships all at one time, track the awarding process, and accept and receive the award. Scholarship donors will be able to track their donations and view the progress of their dollars through the awarding process. The system went live during the fall 2016 semester.

10. Complete Student Accommodation Manager (SAM) software system

Accommodations for disabled students are required to be tracked and reported to the state. Before the implementation of this software, this was done in spreadsheets and reporting was difficult. The new SAM software is a web-based system for tracking student accommodations. It provides the flexibility for the DSP&S department to create reports of accommodations given during a term, and to use that data for future term planning.

11. Improve wireless speed and coverage

Although the district will issue a request for proposal (RFP) for new wireless equipment in the spring 2018 semester, work has been ongoing to make improvements to the wireless capacity on all three campuses. ITR has been testing
equipment from three different vendors in anticipation of the RFP.

The wireless equipment at the King City campus has been completely replaced with new technology that offers better wireless performance and speed, and on the Alisal campus building C has been upgraded as well as several rooms in the A building. Additionally, the new STEM building was upgraded to provide better speed and access for STEM students, who place a high demand on computing resources.

12. Replace classroom teaching station computers and document cameras

A goal of the past year was to replace all classroom teaching station computers and document cameras with new equipment. Over the winter break, ITR completed the goal, replacing all classroom computers with new small form factor (SFF) PC’s, equipped with the modern Intel i7 processors. The SFF PC’s take us less space at the podium, replacing the large tower computers - some of which are 8 years old. New document cameras were also installed, replacing the 5 year old cameras, many of which were problematic for instructors.

13. Replacement of district phone system

Hartnell CCD’s current phone system has been in service for over ten years. It is antiquated, no longer supported by the manufacturer, and procurement of repair parts has proven very difficult. ITR developed a Request for Proposal (RFP) was created and published in December of 2016. In January 2017, nine vendors responded to the RFP, and the three lowest bidders were selected to move forward to the vendor demonstrations phase. A vendor was selected in April 2017, and work began to implement the new system, which will replace all of the district’s telephone equipment with modern telephones and unified communications capabilities. The system will go live during the fall 2017 semester.

14. Integrate Hartnell’s Colleague system with Follett Bookstore

Before this past cycle, the Hartnell bookstore had to manually import data from our Colleague system regarding courses, sections, and enrollments. The bookstore uses the data to ensure the proper inventory and inventory counts of books are available during each semester.

During the spring semester of 2017, ITR embarked on a collaboration with the Follett bookstore to automate the
exchange of data between the two systems. The integration project was near completion at the end of this cycle, and
the anticipated go-live date is the first week of August 2017.

15. Electronic Roster Implementation

Hartnell management issued a directive that the district will move to electronic rosters, online faculty drop rosters, and
online attendance tracking beginning with the fall 2017 semester. The current system of printing rosters is antiquated,
with faculty required to turn in paper rosters with student drops to Student Affairs for manual entry.

ITR created custom forms in WebAdvisor (PAWS) to allow faculty to drop students online rather than utilizing the paper
forms and paper drop process. Electronic attendance tracking is automated through Canvas, the district’s online
learning management system (LMS). The system was piloted during the summer 2017 term, and will go live for the fall
2017 semester. Extensive presentations and trainings have been provided to faculty to ease the transition to electronic
rosters.

16. Create a dedicated wireless network for online interpreters for the hearing-impaired

As interpreters for hearing-impaired students have been in short supply, the DSP&S department is using virtual
interpreters that using video streaming to connect with a remote interpreter. The video streaming is performed on an
iPad with a wireless connection, and requires high bandwidth and low network traffic in order to be successful. ITR has
created dedicated wireless access points on a separate network for interpreter use. Each semester, a list of buildings
and rooms where a remote interpreter is needed is provided to ITR for use in placing the wireless access points. The
system has proved successful. Up to seven locations are anticipated for the fall 2017 semester.

17. Upgrade storage and disaster recovery systems

In June 2017, the Hartnell Board of Trustees approved the purchase of an all-flash storage array to replace the aging array at the Alisal campus which is used for offsite backup. The new array has been installed on the main campus, and our existing virtual desktop infrastructure will be migrated from an older hybrid array to the new storage array. This will increase the performance of the virtual desktop environment, and free up the hybrid array which will be moved to the Alisal campus.
18. Upgrade the virtual server infrastructure

Many of the servers that the district maintains have been virtualized, which means that the server is running inside of a large physical server that contains multiple virtualized servers. Examples of servers that have been virtualized are the Colleague ERP system which includes mobile and portal access, the Astra Scheduling system, the SARS appointment system, and various management systems for maintaining wireless, door locks, telephones, etc.

During the spring 2017 semester, ITR replaced 10 physical servers with new models to keep pace with the growth in virtualization. The physical servers currently hold over 100 virtual servers that in use by the district, and there is now room for growth. The new servers have a lower power usage, are more powerful, and are smaller in size than previous models.

19. Enhance documentation of ITR processes and procedures

This past cycle, ITR has embarked on a mission to document programs, procedures and policies in a text-searchable database that is shared by the entire ITR staff. The goal is to have troubleshooting, coding, program runs, reports, and other information documented in a step by step fashion so that any ITR staff member could perform the operation should the need occur.

Microsoft OneNote was chosen as the database to store the documents due its integration with other Microsoft products, and the exceptional searching capabilities that the program provides. This past year has seen the entry of several thousand pages of documentation, mostly regarding software, reporting, and troubleshooting. During the next cycle, the plan is to enter a significant amount of documentation regarding hardware, network infrastructure, and server virtualization.