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BACKGROUND

The overarching goal of the 60x30TX higher education strategic plan is that at least 60 percent of Texans ages 25-34 will hold a postsecondary credential by 2030. Education and workforce partners in regions across the state are collaborating to support students and meet the goals of 60x30TX. An important component of this work is sharing and examining data from K-12, higher education, and workforce, all of which operate and report under different federal and state systems. In order to facilitate more systematic use of data and the development of productive data partnerships, Educate Texas seeks to highlight effective practices and partnerships.

Partners in El Paso, specifically The University of Texas at El Paso and El Paso Community College have collaborated for over a decade to share data with the goal of increasing student success and ensuring that students earn degrees and credentials. This case study, written by subject matter experts in El Paso who were instrumental in implementing auto graduation and reverse transfer, shows how one partnership used data to drive student success.

This report was commissioned by Educate Texas in alignment with the Texas Higher Education Coordinating Board’s 60x30TX Plan. We extend our thanks to the Texas Higher Education Coordinating Board for providing thought leadership and guidance.

“Improving institutional data utilization to support completion is a promising strategy and has positive implications for 60x30TX. It is clearly an achievement when we can remove barriers for students and reduce administrative burdens through automation.”

-David Gardner, Deputy Commissioner and Chief Academic Officer, Texas Higher Education Coordinating Board
INTRODUCTION

The optimal outcome for attending an institution of higher education is to complete a credential. Whether the credential earned is a certificate, an associate degree, or a bachelor’s degree, a graduate’s earning potential increases. Ideally, graduates will also contribute to their communities and the workforce.

Inspired by the state’s 60x30TX goals, together with long-standing commitments to postsecondary educational attainment, many colleges and universities are redoubling efforts to facilitate student completion. Initiatives such as auto-graduation (auto-grad) and reverse transfer and are compelling because they streamline processes and support student achievement. They also align student pathways with institutional incentives by building partnerships in which two- and four-year institutions regularly communicate about degree requirements and data sharing. This, in turn, enables students to understand and fulfill course sequences and to transfer between institutions at the appropriate time. Auto graduation and reverse transfer can create heavy staffing burdens. The key to implementing these processes with minimal staffing changes is automation and regular communication.

This case study is designed as a how-to guide for colleges and universities interested in automation. This resource is built from the successful experience of two institutions – El Paso Community College (EPCC) and The University of Texas at El Paso (UTEP) – and the lessons learned from El Paso are highlighted. It also benefits from the experiences and collaboration of Tarrant County College, Lone Star College System, and Blinn College.
HOW TO USE

THIS CASE STUDY

This case study was written from the perspective of EPCC and UTEP’s experience. These institutions started with reverse transfer, collaborated to implement automation for reverse transfer, and later turned attention to auto-graduation. However, other schools may have different experiences. Some institutions may choose to address reverse transfer first while others may start with auto-graduation. Although this case study begins with reverse transfer, it may be appropriate for the reader to begin in the middle, with auto-graduation, and return to reverse transfer. Choose to begin with the process that is right for you, based on your institution’s current goal.

This document is designed to be agnostic to the specific systems institutions have in place to manage student information and degree audit functionality. It attempts to describe steps or functionality that may be available across different systems and platforms. It can be helpful for collaborating institutions to use the same systems but it is not necessary.
Local institutions of higher education must establish relationships that actively contribute to the development of their regions. A holistic P-16 educational strategy that includes support from local institutions and the community is essential. When productive partnerships exist, higher educational institutions become key assets for regional economic development. Embedded within this type of partnership is the opportunity to develop innovative practices like reverse transfer and auto-graduation.
THE ROLE OF PARTNERSHIPS

A successful reverse transfer program relies on the existence of a strong partnership between four-year and two-year schools. While it may be possible to implement a reverse transfer process absent this relationship, the sustainability of the effort is more difficult. It is much more likely that reverse transfer will continue to succeed if the institutions are connected.

Mindful of this observation, we offer that the first step to building a reverse transfer and auto-graduation program is to establish a relationship, if one doesn’t already exist, with key departments and leadership between the two-year and four-year institutions. In some areas, there may be several schools that transfer to a four-year institution. Start by building a relationship with the school that has the largest transfer population; this is the primary feeder school. Also consider the largest population of students that would benefit from reverse transfer.

In many ways, we are lucky to be located in El Paso. Unlike most other regions in Texas, the unique location of EPCC and UTEP has benefits. Because of our close proximity, we share the same population of students. However, the process of relationship-building and maintenance cannot be taken for granted. Our partnership is firmly grounded in the El Paso Collaborative, a partnership that has been built over many years and which includes The University of Texas at El Paso, El Paso Community College, and local school districts – all committed to improving the P-16 pipeline in our Paso Del Norte Region. The collaborative has guided our efforts for over 25 years. Today, constant communication, resource sharing, and support for each other’s efforts play a major role in our collective success, and of course, the success of our students.
Support from the administrative level is key. Both institutions realized that increasing the number of students and graduates required working together toward a common goal and desired outcome. The primary reason that this initiative continues to grow is that the leaders of both institutions support it and have ensured participation and commitment among key administrators and departments that serve as the leadership teams, including:

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DEFINE INSTITUTIONAL POLICIES AND DEVELOP DATA SHARING AGREEMENTS

Partners should create an institutional policy or procedure so that students, staff, and faculty are aware of the requirements and process for those students that complete degree requirements and are awarded a degree without applying for graduation. This policy should address who will be eligible, what the overall process is and the outcome. Not all institutions have students apply for graduation, but this will need to be done prior to starting the process.

Formalize the relationship between the two- and four-year schools in a data sharing agreement. It could be a simple addition to an existing general articulation agreement as long as it covers the data sharing and process generalities. Thus, the data sharing information may be written into a new or existing agreement. There may not be a need to add anything but check with the appropriate offices.

As partners develop a working relationship, institutional leaders need to identify what resources will be needed, if any, to conduct degree audits, build the technology infrastructure as needed, and maintain ongoing transcript evaluation.
DEVELOPING PARTNERSHIP PROCEDURES

Our institutions established a leadership team that agreed to outcomes. This resulted in a directive to the vice presidents at each institution, asking that each administrative area listed above meet and identify steps to complete the process for a successful reverse transfer program.

This partnership was developed over the course of an academic year and refined in subsequent years. Partners began by developing and implemented the data sharing processes and procedures to facilitate auto graduation and reverse transfer. Then, partners refined the processes based on lessons learned from early implementation. Each subsequent year the partnership was re-examined and refined.

Early in our implementation, reverse transfer efforts were a manual process, limited to one person reviewing all data output and degrees. The process was labor intensive and very few students were identified as completing associate degrees. The process experienced a notable transformation with the involvement of our Information Technology team. Each institution identified the person/department that would be responsible for each intricate part of the process.

All of these items were discussed and taken into consideration prior to establishing the final process. Each institution needed to be aware of items that would affect the other institution, as well as how their processes worked, to have productive meetings and outcomes. Although the group considered every scenario that could be identified at the time, we still experienced situations that needed review or required changes. Nothing is final and periodic review of processes is required.
PARTNERSHIP
DISCUSSION TOPICS

Our Desired Outcome
To increase the number of graduates at EPCC and have more students transfer with a credential that could lead to the completion of a bachelor’s degree.

Data Analysis
Over 70 percent of the students at UTEP have one or more transfer credits from EPCC. Students were attending both institutions.

Target Population and Parameters
Based on our goals and data analysis, we identified our target population and set parameters. This will be discussed further in the case study.

Transfer of Data Between Institutions
How it would be done, how often, who was responsible, and the timeline for each institution to provide information. Data points and methods of data capture were all discussed so that the alignment of information was correct and precise.

Policies and Procedures
We developed a process for reviewing data components once a year and examined rules and regulations for both institutions, with emphasis on regulations that may affect the federal, state, and institutional policies and procedures for students.

Transcript Procedures
We decided that all transcripts would be sent through Electronic Data Interchange (EDI) and clarified that general education curriculum courses would be flagged with specific notations to facilitate the articulation process.

Early Transfer Scenarios & Student Identification
We discussed factors that may prompt students to transfer early and how to identify them later for reverse transfer.

FERPA
The process to secure FERPA release and interpretation of the policy had to be discussed and settled upon. You must come to a common interpretation of FERPA and document both the process to share information and the outcome. Both institutions decided to utilize the Apply Texas Application as the primary source of signed release of information. We also decided to permit use of a common paper application, which included a statement of release to share records with the institution. An opt-in question allows both institutions to share educational information without further release forms.
WHAT IS REVERSE TRANSFER?

Postsecondary transfer occurs when a student takes courses at one institution of higher education and moves to another institution to complete a degree. When an institution accepts credits accrued at another institution and applies them toward a degree program, the credits are considered transferable and applicable. Transfer is commonly conceptualized as the process of transferring credits to continue pursuing a postsecondary degree in one of the following ways: from a two-year school to another two-year school; from a two-year school to a four-year school; or from a four-year school to a four-year school. It is less commonly used to describe the process of transferring credits from a four-year school to a two-year school. This practice is called reverse transfer.

The option to transfer credits from a four-year school to a two-year school can support student degree completion, efficient course-taking, and enhance affordability. Two-year schools often provide more affordable educational options, which may be located closer to home and may offer more intimate class settings that students prefer. In some cases, two-year schools offer programs not available at the university. However, two-year schools do not offer all the classes a student needs to earn a bachelor’s degree.
Reverse transfer is a particularly important option in degree plans that are highly sequential, and that require a large number of specialized or upper-division credits. In these cases, it may not be possible or advisable to follow or use traditional 2+2 degree plans which encourage students to complete most of their general education and lower-division classes in their first two years, at the two-year school, before transferring to a four-year school to complete major and upper-division requirements. For some sequential degrees, especially in areas such as STEM and fine and performing arts, students need to take major classes in a specific order and intersperse general education courses throughout the course of the four-year degree (rather than completing general education courses in the first two years).

If students take all lower-division courses before transferring to the four-year school, the student may end up in a difficult situation in future semesters, having to take a full-load of highly demanding upper-division classes in a single semester. In other cases, the four-year degree may require very specific course topics that the two-year school does not offer. Taking other courses at the two-year school would mean that the coursework would likely not fulfill degree requirements for the bachelor’s degree, and the credits would be lost. In these cases, it may be best for students to transfer to the four-year institution before completing an associate degree.

Students may concurrently enroll at the two- and four-year schools and/or reverse transfer credits from the four-year to the two-year school. If the student transfers credits from the four-year school to the two-year school and fulfills degree requirements, the student will be awarded an associate degree while working toward his/her bachelor’s degree. Earning an associate degree can have a very positive impact on students, especially first-generation students, empowering them to continue pursuing additional postsecondary credentials.
## BENEFITS OF REVERSE TRANSFER

### FOR STUDENTS

Reverse transfer ensures that students take the courses necessary for their degree plans, when they need to take them. It also reduces concerns about transfer credit applicability, as students are taking the courses required to complete their degrees. Finally, students with reverse transfer degrees enhance their lifetime earnings potential. The US Bureau of Labor and Statistics reports that 2017 median weekly earnings increased from $774 to $836 for students with an associate degree, compared to students with some college but no degree.

### FOR TWO-YEAR SCHOOLS

For states that “credit” two-year schools with degree completion, or states that use performance-based funding models, it is important to be credited with students’ progress, including the completion of their associate degrees.

### FOR FOUR-YEAR SCHOOLS

Participation in reverse transfer programs helps to build relationships with two-year schools. It also helps promote student success, which ultimately may result in shorter time-to-degree, higher degree completion rates, and happier students. Finally, some states may require participation in reverse transfer programs. The state of Texas passed HB 3025 in 2011, which requires four-year schools to participate in reverse transfer programs by sending transcript information to two-year schools.
AUTOMATING REVERSE TRANSFER AT THE FOUR-YEAR INSTITUTION

STEP 1
Identify Student Population

STEP 2
Define Degree Requirements

STEP 3
Conduct Degree Audit

STEP 4
Interpret Results
STEP 1: IDENTIFY STUDENT POPULATION

The four-year school must identify the population of students who will be monitored for reverse transfer. This typically requires a meeting with the two-year school to understand the group of students the two-year school would like to review. Does the two-year school only want to review students who have likely completed an associate degree? Or should all students’ data be sent to the two-year school every semester? In addition to answering these questions, it is also important to identify other eligibility criteria.

For UTEP and EPCC, we decided to identify only students who had likely fulfilled the associate degree, and to send those students’ information to EPCC for review. While degree requirements are certainly important – this will be discussed in more detail – additional considerations determine whether a student is eligible to receive an associate degree and include:

- Does the student meet the EPCC residency requirements for an associate degree? That is, has the student completed the minimum number of hours at EPCC that are required to earn a degree at EPCC? As institutions of the Southern Association of Colleges and Schools (SACS), both UTEP and EPCC are required to ensure that students have completed at least 25 percent of credits applied toward the degree at our institutions. This means that students must have completed at least 15 hours of a 60-hour associate degree at EPCC.

- Is there a time limit? For example, a student must have earned credits at EPCC within the last five years to be eligible to earn an associate degree.

- Have students agreed to participate in reverse transfer? For UTEP and EPCC, we request the student’s permission to share information when the student applies to either school.
Once the parameters of the population have been defined, they must be translated into criteria for a population selection. You won’t immediately know who has completed the requirements for an associate degree, so begin by identifying all students who meet most other criteria, and then figure out which students likely have fulfilled the associate degree requirements. At UTEP, we look for students who:

- are enrolled at UTEP and who attended EPCC in the past
- consented to sharing information with EPCC and being monitored for reverse transfer
- have not yet earned an associate degree from EPCC
- attended EPCC within the past five years
- earned at least 15 hours at EPCC
- completed at least 60-hours total and
- earned new lower-division coursework since the last time we examined the data

Note that the first data run will pick up every student who meets the criteria above, without considering this item. However, for future runs, it will be beneficial to reduce your population to students who may have earned additional credits that could fulfill associate degree requirements (through the completion of additional lower-division coursework).

Next, you need to create a population selection (a popsel). A popsel is a process through which you may select a specific group within a larger population. While nearly all student information systems have a method for functional users to create popsets without the support of technical staff, more complex popsel statements are sometimes easier for technical staff members to write. At UTEP, our technical team wrote a Standard Query Language (SQL) statement to select our population. SQL is a standard programming language used to manage data in relational databases. To go this route, you will need to sit down with your technical team and translate the query requirements into specific parameters. Start by identifying where the requirements live within your student information system. For example:

- If the student attended EPCC in the past, does the student have a prior college record from EPCC? If not, exclude the student. Find out where prior college information is stored in the student information system.

- Has the student earned at least 60 lower-division credits? This information is often located in an academic history form in the student information system.
Now, identify how this information may translate into a database field name. You will need to query the database to compile a population selection. If you are working with technical staff members, they may need help identifying the appropriate database field and value for each requirement. In some cases, menu options or search functions within the student information system may easily provide the database field name. Identify the way your student information system is set up to allow you to translate end-user form fields into database field names.

Repeat this step for each criterion identified, until the staff member writing the popsel is comfortable. After the popsel statement is written, test it to ensure that it returns a list of students. Review the list to determine whether each student meets your requirements.

**Identify Your Student Population**
STEP 2: DEFINE DEGREE REQUIREMENTS

Our institutions decided that the two-year school only wants to review students who are likely to have completed an associate degree. If this is not an option within your partnership, the four-year school would simply transmit transcripts for students in the population selection (described in the previous step). However, we recommend strongly that the four-year school consider facilitating this transmission for the two-year school.

The four-year school will need to program the two-year school’s degree requirements into its degree audit system. But before doing that, the four-year school will need to understand the two-year school’s degree requirements. This may include reviewing the two-year school’s catalog, meeting with partners from the two-year school to discuss degree requirements, and deciding which degree plans will be used. Programming the two-year schools’ degree requirements into the four-year degree audit systems requires help from staff who programs new degree plans into the degree audit system at the four-year school. It is helpful to include that staff member in meetings and conversations at the start, so they can ask the appropriate questions.

In some cases, it may not be necessary for the four-year school to track all degree plans offered at the two-year school. Perhaps it is most important to identify students who have met requirements for the basic Associate of Arts or Associate of Science degrees. In other cases, there may be reasons for identifying the top five to 10 degree plans at the two-year school. The important thing to remember is that the more degree plans that are tracked, the more the partners will need to collaborate to sustain the partnership, and the schools must agree on enough degree plans for the outcome to be meaningful and positive for the two-year school. UTEP only tracks three EPCC degree plans: the general Associate of Arts, the general Associate of Science, and the general Associate of Arts in Teaching.
When reviewing degree requirements, it is important to consider how the four-year school’s requirements will transfer to the two-year school. In some cases, this is a new consideration. While both schools may be aware of how two-year credits transfer to the four-year school, there may be a lot of questions regarding how the four-year school’s credits will apply to an associate degree. Important considerations at this juncture include:

- Is there a common general education core curriculum. If not, how will general education courses transfer?
- Are there course attributes that must be considered for courses to transfer and apply to the associate degree?
- Is an upper-division course not transferable to a two-year school? In most cases, no, but is this true for your institutions? If so, are there enough lower-division credits that apply to the bachelor’s degree that can also apply to the associate degree?
- Are there common course substitutions for either the associate or bachelor’s degree that should be considered?
- Has the two-year school already programmed course articulation from the four-year school into its student information system? If not, this step is critical.

Finally, partners should discuss and understand all degree requirements. Ensure that both schools have a very clear understanding of the courses that comprise both the associate and bachelor’s degree. Within this conversation, it may become apparent that there is not sufficient alignment between the associate and bachelor’s degrees. This may introduce an ideal opportunity to more deeply review articulation and to identify opportunities for further aligning degree plans.
STEP 3: CONDUCT DEGREE AUDIT

The four-year school must program two-year programs into its degree audit system. Ideally, you will have already brought the appropriate degree audit team members into the conversation in Step 2. If so, those team members will already know which degree requirements need to be programmed.

A common concern we hear from colleagues is that the students and advisors on the four-year campus will “see” associate degree plans in their degree audit interface. This could certainly pose confusion. Most degree audit systems have flags/buttons/settings that permit the four-year school to limit visibility of the two-year school’s degree plans to administrators only, so that students and advisors are not confused.

Once degree plans have been programmed, you are ready to run students through your new degree rules and identify any students who may have completed an associate degree. Use your population selection (popsel) from Step 1 and run only those students through the new associate degree plans that have been created.

Most degree audit systems have a batch degree audit (also called a batch compliance) process. Begin by identifying how to access your degree audit system’s batch degree audit process. The staff member who helped program degree requirements into the system may be well-versed in batch audits and may be able to help.

When you run a batch degree audit, you are creating new degree audit records for the students in your popsel for associate degree plans, rather than for bachelor’s programs that students are pursuing at the four-year school. If you are running 10,000 students through a particular degree plan, you will be creating 10,000 new degree audit records. Depending on the resources available to run degree audit in your system, this may take anywhere from several minutes to several days. You will need to connect with your Information Technology or Enterprise Computing team and discuss how best to approach this process. Perhaps running the first 1,000 records of your popsel first is better, to see how long it will take to run, or perhaps running all 10,000 at once is okay, but it is advisable to run your batch audit on the weekend, when fewer users are accessing the student information system.
STEP 4: INTERPRET RESULTS

Once you have finished running your batch degree audit, you will have a large number of results in your degree audit system. While some degree audit systems have very sophisticated ways to query batch results and identify the students who met all of the associate degree requirements, most do not. Here again, you will likely need to lean on the support of your technical team to write a query. Your technical team should begin by identifying the degree audits you want to review:

- Look for the students that you ran in your popsel.
- Identify the degree audits that were created by your batch run. Do this by looking for the degree audits created by a particular user, on a specific date, or by looking for audits that correspond to the associate degree plans that you programmed in Step 3.

Once you have the correct set of degree audit results, create a report of the results. Most degree audit results have high-level indicators such as “Met All Requirements (Y/N).” Start by reviewing one-degree audit result. In Banner’s degree audit system, known as CAPP, there are several key indicators at the top of the degree audit results that can almost immediately indicate whether a student is ready for graduation (long before you examine individual degree results). [1] These include:

- Are All Requirements Met?
- Total Hours Earned
- Total Hours Applied toward Degree
- Cumulative GPA

For the purposes of reverse transfer, it may not matter on a detailed level how the student satisfied the degree requirements, i.e., did the student use MATH 1314 to satisfy general education math requirements? Or did the student use MATH 1324? It may only matter that all degree requirements are met, and the student has earned at least a 2.0 GPA. Try to identify as few high-level requirements as possible.

[1] Both institutions used the CAPP (Curriculum, Advising and Program Planning) degree audit module in the Banner student information system in the initial implementation of reverse transfer. EPCC has since transitioned to Degree Works.
Once you have identified the high-level degree requirements for reverse transfer, work with technical staff to identify where those results are located in the database (just as you did when identifying where other student details resided in Step 1). This will help technical staff write a query. Ask your technical staff to return only students who met the high-level requirements. Make sure to indicate the information that you want in your report: Last Name, First Name, Student Identification Number, Date of Birth, etc. If done properly, this report can be sent to the two-year school to determine whether associate degree requirements have indeed been met. With this in mind, ask your technical staff to return all fields that the two-year school will need – and no others – so you won’t have to clean up the report later.

Technical staff should be able to return a CSV or XLS file with the results. It should only list students who fulfilled the degree audit requirements you outlined. It is advisable to spot check the report before securing the document (with a password or other form of encryption) and sending it to the two-year school.

After several years of sharing the file via email, disk, file, etc., in 2016 we decided to share the file through SFTP (Secure File Transfer Protocol). The four-year institution created a custom automation process that notified the community college via email when the file was ready to be received and downloaded. This occurred a few days after census date for each term and the file contained student name, ID, phone, and UTEP email and address.
AUTOMATING REVERSE TRANSFER AT THE TWO-YEAR INSTITUTION

STEP 1
Review Data from Four-Year Institution

STEP 2
Request Transcripts from Four-Year Institution

STEP 3
Conduct Degree Audit

STEP 4
Interpret Results
STEP 1: REVIEW DATA FROM FOUR-YEAR INSTITUTION

To facilitate reverse transfer, the partners will share student data and files between institutions. Once the file is received by the two-year institution, an SQL statement is run for the population in the file to confirm it includes the appropriate student population. As previously described, once the file is received you will likely need to work with Information Technology staff to develop an SQL statement with the parameters that are needed. This process eliminates additional students whose records are not needed for review. The following information is written into the SQL statement to remove these records from the batch process. Applying these criteria leaves a remaining group of students who could potentially earn a degree or certificate.

- Earned a degree at El Paso Community College
- Attended EPCC within the last five years. You may ask why this is being added again since UTEP has already programmed this information. Sometimes students do not send transcripts to their final institution until they are ready to graduate, and they may not have the most up-to-date information, so this criterion eliminates future processing of the student.
- Minimum GPA and Academic Standing required to award a degree or certificate
- Not marked deceased
STEP 2: REQUEST TRANSCRIPTS FROM FOUR-YEAR INSTITUTION

Once the file is cleaned, students who meet the criteria are put on a list that is provided to the four-year college. UTEP sends transcripts to EPCC for the identified students so their files can be evaluated and updated.

The transcript request is prioritized, and within 48 hours all transcripts will be sent to EPCC. Depending upon institutional agreements and the transcript retrieval process at each institution, determine the timeline for turnaround processes and agree to the terms. If both institutions exchange data through SPEEDE server from the National Student Clearinghouse, sending transcripts and evaluating courses can be done quite rapidly.[1] Accepting PDF versions of transcripts can cause a lag in turnaround time and a slowdown in processes. Utilizing EDI can be more productive and more accurate.

The number of evaluations can be in the hundreds. At El Paso Community College, three identified and dedicated employees process these transcripts within a week. Once the evaluations have been completed, the evaluation team notifies the lead, and the degree audit team/graduation department begins their batch process audit.

[1] SPEEDE (Standardization of Postsecondary Education Electronic Data Exchange) is a server from the National Student Clearinghouse that provide free, open, and secure exchange of education documents and data between education institutions.
STEP 3: CONDUCT DEGREE AUDIT

When all courses have been evaluated and updated in the student information system the team designated to run batch compliances begins their process. Each individual degree type (AA, AS, AAS, AAT, Certificates) should be run separately so as not to hinder any other processes at the institutions. We set parameters to run program specific preliminary audits with the set of criteria defined below. If a student does not meet the minimum degree requirements based on their current student record in the student information system, a batch run is issued under the Associate of Arts in Multidisciplinary Studies and the Associate of Science in Multidisciplinary Studies. Parameters include the following:

- Specific program of study
- Minimum of 40 hours earned (The minimum is intentionally set low to capture students who may not meet the minimum with general criteria. We review these manually.)
- All degree criteria based on current term
- GPA not taken into consideration because those students have been already eliminated, as well as students who are on academic suspension

STEP 4: INTERPRET RESULTS

Once the final population has been identified, we have a list of students who are eligible for an associate degree but have not been awarded a degree. The next step is to update the student record to reflect that they have met the requirements. The batch audit is run again so that the student record reflects all areas met. Student records are reviewed manually to see if a substitution or exceptions can be made to graduate the student.

Students who meet all criteria are added manually to the candidate list and mailed a letter that provides information on the degree earned and invites them to the graduation ceremony. When end-of-term processing is completed diplomas are mailed to students.
Retention, persistence, and graduation rates are measures through which colleges and universities continuously work to improve student outcomes. Student success is specifically measured by persistence and degree attainment. Auto-graduation can be used as a tool to support students on the path to college completion. Auto-graduation (also known as automatic degree awarding) is the process by which a certificate or degree is automatically awarded when all program and college requirements have been met and no application is necessary.

By automatically awarding a degree, institutions can streamline and facilitate degree conferral. Meanwhile, a student can quickly improve marketability, more easily reenter the workforce, or obtain promotions. The barrier of having to apply for graduation is eliminated. As noted previously, studies indicate that completing a postsecondary credential can support further educational achievement – if a student completes an associate degree, they will may be more likely to earn a bachelor’s degree. El Paso Community College has implemented an auto-graduation process that facilitates completion of a certificate and/or degree.

At El Paso Community College students do not have to apply for graduation and no fees are charged to the student. There are several institutional SQL statements that have been written to support this process so that there is limited human intervention. This required the help of the Information Technology staff to assist in writing and implementing the SQL requirements directly into the student information system.

We must emphasize that it is crucial to have a degree audit system that is updated and well-maintained. Without accurate information this process will not work. The offices that are involved in this operation at EPCC are The Office of Curriculum and Instructional Development, which houses the formation and maintenance of the degree audit system as well as the school academic catalog, and the Graduation Department, which is located within the Admissions and Registration Office. Each office reports to a different division, so communication is crucial for constant information sharing. In order to be successful, rules and processes must be developed and implemented. In addition, deadlines must be maintained to prevent mistakes in degree requirements, changes within an academic year, substitutions, and exceptions.
STEP 1: IDENTIFY STUDENT POPULATION AND DEFINE DEGREE REQUIREMENTS

Within a week after census, a population selection is run with the following criteria:

- Identify students with at least 40 hours of academic credit under the following individual degree types. (Be mindful that each degree type is run individually and not combined to limit strain on institutional technology resources.)

- Degree Type: AA, AS, AAS, AAT, Certificates (This information is based on the most recent declared major in the student information system.)

- Current Term

STEP 2: CONDUCT INITIAL DEGREE AUDIT

Once this population is selected and gathered, run a batch degree audit for each specific degree type. Those that meet the criteria of all areas met for degree attainment will be identified and then depending on your student information system may require you to run an additional job to insert a unique identifier/code to flag the students that are candidates for graduation.

Students identified as candidates for graduation are collected with another script (SQL statement) that gathers directory and degree information; this is submitted to the graduation software, which allows students to participate in the graduation ceremony. This list identifies degrees that include certificates and allows us to double check to determine if the student record includes an embedded certificate.

To make sure that eligible students are not excluded, an additional script identifies students with over 59 hours of credit, but no degree awarded. For these students, we conduct a manual degree audit to determine if a degree can be awarded with other qualifying criteria. Qualifying students are manually added to the graduation software so that they may participate in the graduation ceremony.
STEP 3: INTERPRET RESULTS AND CONDUCT END-OF-TERM AUDIT AFTER GRADES POST

After grades post for the term, we conduct end of term processing steps (including GPA recalculation and academic standing) and repeat the process for the population selection for each degree type (Steps 2 and 3). Then, a final batch audit process will load and automatically identify whether students have met the criteria (‘Y’ or ‘N’). When the population is identified, run a final script to insert degree awarded. This produces a list of graduates that is used to create mailing labels to mail out diplomas.

Those students coded as an ‘N’ are verified manually to confirm their reason for exclusion. There are various reasons for students to be excluded from the final run due to dropping a course after census, failing a course, or not meeting academic standing or GPA.

Having an automated process in graduating students limits the number of FTEs that need to be dedicated to the area. Prior to the creation of this process, there was a team of six, and now there is a team of three dedicated to this effort.
TIPS AND BEST PRACTICES

We highly recommend using the following tips and best practices to ensure that your reverse transfer and auto-graduation processes run as intended.

SET-UP A SCHEDULE IN A JOB SCHEDULER

Most campuses have an automatic job scheduler, such as UC4 or Oracle Job Scheduler. We highly recommend using scheduling tools so jobs run (for the most part) on their own, without requiring additional intervention. For example, the four-year school can schedule jobs in this order, right after new grades post:

- Your population selection

- Use the population selection results to run batch degree audit

- Run the results script (an SQL statement), which produces a results file

UTEP schedules these jobs to run once per semester, immediately after grades post. It is very uncommon for a student to complete degree requirements for graduation in the middle of a semester. For the sake of using resources efficiently, we schedule the jobs to run after we would have new grades and new credit earned.

MAKE TIME TO VET RESULTS

The first time you write and run all scripts, take time to have a meeting with your partner school and review all results. If the four-year school identified many students who did not actually qualify for an associate degree, find out what went wrong. Did the four-year school misunderstand degree requirements? Or perhaps there was an error programming in the degree audit? Maybe a key requirement related to residency was missed. Did the population selection have all the correct parameters? Take time to be sure that the scripts, degree requirements, and reports are as accurate as possible. Doing this right after the first run will reduce the amount of manual work required each semester, which in turn increases the likelihood of continuing to nurture a successful partnership.
CONTINUE NURTURING YOUR PARTNERSHIPS

As mentioned several times throughout this case study, the key to making the processes work is much more about the relationship than about the steps in these processes. If you have a strong partnership, you are much more likely to make reverse transfer, auto-graduation, or any other articulation process work more smoothly. Make sure you have a person at your partner school with whom you have a connection. Call each other often. Have lunch. Talk about the transfer problems that your students are facing and, without finger pointing, work together to identify solutions.

SCHEDULE A REVIEW DATE

Make a plan to revisit and re-examine the process two years from the date of your implementation. A lot can (and does) change in two years – degree requirements change, course articulation changes, and these changes will impact not only the manner in which courses reverse transfer, but also the way in which degrees are awarded. It is a good idea to schedule a date to reconnect, share all changes, and update logic for reports and jobs. Failing to do this can be devastating for your reverse transfer partnership; when results become inaccurate, it is far less likely that either school will continue to use the results.

ALLOW OPEN COMMUNICATION

Allow open communication between team members. Do not limit and set structural communication roadblocks. It helps that the processor can speak to the IT staff and not have to go through chains of bureaucracy. Let the experts talk to each other and it will make the process go much faster and easier. Ultimately, set boundaries and make sure that any major decisions or changes run through the leads.
SHARE AS MUCH DATA AS YOU CAN

Develop a plan to share as much data as possible between institutions. One item that has been essential for EPCC and UTEP is sharing transcripts. Transcripts are sent between both institutions at time of application, as well as at the end of term. Prior to the semester, each institution queries their student information system and provides a list of incoming new students who have stated that they have attended EPCC or UTEP. Each institution sends the list of students to the appropriate office so they can be evaluated (students who have business holds do not have their transcripts released). Additionally, at the end of term a survey is sent out to UTEP students asking if they attended EPCC during that semester or prior and if they would like for UTEP to request their transcript. UTEP provides a list to EPCC, and EPCC sends the most updated transcript after grades post. Sharing academic history through transcripts increases the chances of having all pertinent data for better outcomes with advising, core completion, and ultimately graduation.

WORK WITH IT TEAM TO CREATE A “STUDENTS NEAR COMPLETION” REPORT

To help proactively identify students who are near completion of their degree or certificate, produce a report that includes all students who are within 12 hours (or some other reasonable number) of completing their degree or certificate. Then share this report with Academic Counselors/Advisors and other staff to: 1) contact the students and ensure they are aware of how close they are to completing their credential, and 2) offer completion guidance and other support services for the student.
CONSIDER USING NATIONAL OR STATE DATA SHARING PLATFORMS

Institutions with manual reverse transfer processes may consider using national or state platforms to support automation if funding and opportunities for collaboration are available. For example, state agencies may have, or be willing to develop, platforms that support automation of reverse transfer and auto graduation. Alternatively, institutions may contract with a third party provider such as the National Student Clearinghouse Reverse Transfer Service.

CELEBRATE AND PROMOTE YOUR SUCCESS

Create reports that capture your success and distribute these internally to your team and institutional leadership. Team members want to know they are making a difference, and institutional leadership appreciate learning about these successes and sharing it with others. Promoting your success numbers helps to demonstrate accountability for all involved.
DEFINITIONS

BANNER
A comprehensive student information system created by Ellucian that contains information on students, faculty, alumni, and staff. The system is divided into modules including: Admissions, Registration, Billing/Accounts Receivable, Financial Aid, and Graduate Student Data.

CAPP
Curriculum, Advising and Program Planning is a degree audit module in the Banner student information system. Partners used this tool to identify students who may be eligible for auto-graduation by examining their progress toward an Associate degree.

SPEEDE
Standardization of Postsecondary Education Electronic Data Exchange) is a server from the National Student Clearinghouse that provide free, open, and secure exchange of education documents and data between education institutions. Partners used this server to share data.

SQL
Standard Query Language is a standard programming language used to manage data in relational databases. Partners in El Paso used SQL to help identify the student populations of interest for reverse transfer and auto-graduation.