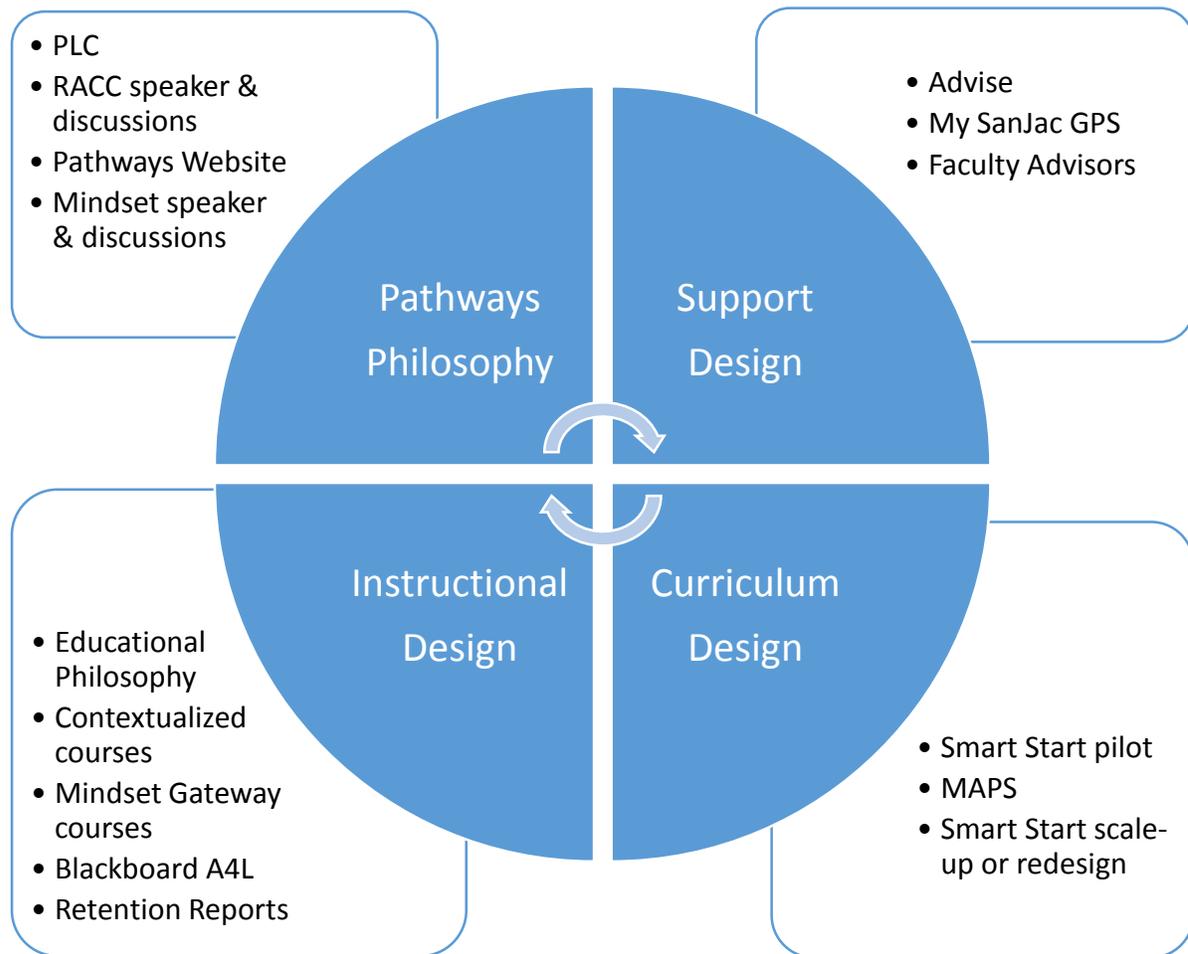


# Pathways for San Jacinto College

The design of Pathways for San Jacinto College requires the expertise and efforts of many individuals throughout the College. This is a description of the work accomplished in the four categories of Pathways Philosophy, Support Design, Curriculum Design, and Instructional Design (Figure 1) with a discussion of tasks that are completed, in progress, or are in the discussion and planning phases.



**Fig. 1**

## **PATHWAYS PHILOSOPHY**

The transition of San Jacinto College to Pathways began in summer 2016 with the formation of the Pathways Leadership Council (PLC) consisting of representatives from leadership, administration, faculty, support services, and technology. During the initial planning phase, the PLC met every two weeks to discuss the direction of Pathways and review planning documents. Now that most teams have started their work, the PLC meets when needed to review and approve the work on Pathways and discuss the progression of the initiative. The PLC continues to provide the leadership and expertise that ensures that Pathways at San Jacinto College meets the needs of our diverse student population and reflects all of the College's values, particularly those of Excellence, Innovation and Student Success.

One of the first goals of the PLC was to introduce College employees to the Pathways philosophy and explain why our students need Pathways. This effort began in fall 2016 when Dr. Rob Johnstone, author of “Guided Pathways Demystified,” spoke to faculty at the College Assembly of College Community Week followed by smaller Q&A sessions on each campus. The Pathways team followed this event with book discussions around *Redesigning America’s Community Colleges* facilitated by faculty and staff. Facilitators divided the book into three parts and offered multiple discussions sessions for each part. Faculty and staff facilitators led over 1,100 total attendees (duplicated count) with over 540 different employees attending at least one session and 277 employees completing all three sessions. Facilitators scheduled additional sessions for the spring 2017 to meet continued interest.

The Pathways team created a webpage to the SJC Internal Exchange website to provide a robust and readily available source of information about Pathways work nation-wide and at SanJac. The Pathways team posted a variety of information on the site that includes an overview of Pathways at San Jacinto College, the charters of the PLC and the Student Continuum Task Force with guiding principles and scope of work, informational literature from AACCC and Texas Pathways Institutes, the “Pathways Demystified” article and videos of Rob Johnstone’s San Jacinto College presentation, Pathways FAQs, names of the individuals serving Pathways in various capacities, and the “State of Higher Education” address (2016) by Texas Higher Education Commissioner Raymond A. Paredes.

In the second year, the focus of Pathways will shift from curriculum planning to instructional planning with a new round of discussions in 2017-18 around the book *Mindset: The New Psychology of Success* by Carol Dweck. Several studies indicate significant improvement in success among students, particularly minority and low-income students, who have participated in class activities that cultivate a sense of belonging and academic tenacity. The Pathways team has invited Dr. Jacquie Beaubien, Senior Program Manager-PERTS, Stanford University, who used *Mindset* to overcome personal and academic challenges, to work with department chairs and instructional deans at the Chair/Dean Academy in the summer and to work with faculty groups in Discipline Enrichment meetings during College Community Week (August 2017).



## **PATHWAYS SUPPORT DESIGN**

A catalog redesign team is working to move the catalog from a printed publication to a document that resides on the website and to make academic planning information easier for students to access and understand. The catalog redesign team will separate the front part of the current catalog that deals with processes and move this information to a different part of the website where it will be accessible to students when needed, but will not obscure the instructional planning portion of the catalog. The team will organize instructional information by degrees and certificates to accommodate the upcoming SACSCOC reaffirmation reporting requirements. The redesign team will arrange information by Pathways academies, and each academy page will have a description of potential careers, a short introduction video, and a list of pathways to these careers. When students or parents click on a Pathway name, the site will direct the viewers to a page that will have specific job availability, salary information, and a semester-by-semester MAP for completing a specific Pathway at San Jacinto College. The MAP acronym stands for My Academic Plan. The site will also include a list of any unique milestones that might be on the Pathway, such as upper level math requirements, criminal background checks, or additional academic degrees needed for employment. Students can print the Pathway page for future reference. Users will be able to download the entire online catalog as a PDF for departments that need to retain a copy of the catalog for documentation support.

San Jacinto College has implemented CRM Advise to help improve student retention and outcomes and to connect students with relevant resources needed for student success. Advise enables Educational Planners and Counselors to identify at-risk students with a scoring plan, to raise individual alerts on specific students, to coordinate and execute engagement plans, and to track outreach, communication, and follow-up with students. Advise currently pulls in data from Banner and Blackboard. We are beginning to work on mapping data pulls from GPS and Tutor Track. Once we have implemented the new Blackboard analytics piece, data from this system will need to be pulled into Advise for potential engagements and alerts. In addition, through Banner's SPACMNT function, advisors and faculty can share notes on individual students.

Early adopters from the offices of Educational Planning, Counseling, and Completion (EPCC) provided extensive face-to-face training on the use of Advise for all Educational Planners and Counselors during the last two weeks of January 2017. They are also in the process of creating a web-based training that will be accessible via Cornerstone that can be used for future CRM Advise training. As additional uses are identified, additional training will be held.

Scoring Plans are a set of weighted conditions established by an institution against which a selected group of students is measured. Once evaluated, students are given a success score which can be used to identify potential risks to students' educational success. Targeted activities can then be built within Advise to support students who have been determined as at-risk. We have consulted with and will continue to work with the Office of Research and Institutional Effectiveness to ensure that our scoring plans reflect factors that are of specific concern to the student population of SJC.

Currently we have scoring plans that include:

Scoring Plan	Demographic Rules	Financial Rules	Current Semester Progress Rules
First Time in College with more than one college prep Course	*Gender and Ethnicity (Male and Hispanic) *Gender and Race (Male and African American) *Age > 21	*Financial Aid Estimated Family Contribution = 0 *Pell Eligibility *Financial Hold on Student Record	*Faculty Feedback Concerns *Enrolled in Less Than 12 Semester Credit Hours *Enrolled in Less Than 4 Semester Credit Hours *Enrolled in a Distance Learning Course
First Time in College not enrolled in college prep Course	*Gender and Ethnicity (Male and Hispanic) *Gender and Race (Male and African American) *Age > 21	*Financial Aid Estimated Family Contribution = 0 *Pell Eligibility *Financial Hold on Student Record	*Enrolled in Less Than 12 Semester Credit Hours *Enrolled in Less Than 4 Semester Credit Hours *Enrolled in a Distance Learning Course *Student is Differentially Placed
Continuing Students	*Gender and Ethnicity (Male and Hispanic) *Gender and Race (Male and African American) *Age > 21	*Financial Aid Estimated Family Contribution = 0 *Pell Eligibility *Financial Hold on Student Record	*Student is on Academic Warning or Probation *Cumulative GPA < 2.5 *Program = 1G-Study *Enrolled in Less Than 12 Semester Credit Hours *Enrolled in Less Than 4 Semester Credit Hours *Enrolled in a Distance Learning Course *Student was considered a "No Show" at Census or stopped attending by mid-point in the semester

Alerts are individual, and concerns are sent to an advisor about a specific student that allow EPCC staff to quickly identify conditions that may create challenges for students and respond appropriately and consistently. Alerts can be triggered by concerns such as missing classes or failing to turn in assignments or, alternatively, by positive things such as improving academic standing. Activities may be attached to alerts so that once the student meets the condition(s) and the alert is triggered within Advise, an email is automatically sent to the student or a phone call task is automatically applied to the advisor dashboard for follow up.

Currently, the system is in place for all students in college preparatory classes. Alerts are raised based on Faculty Feedback reported by our College Preparatory faculty. College Preparatory faculty access the faculty feedback reporting page (SPACOMM) through the Faculty Services tab in SOS.

Once an alert is generated on a specific student in Advise, advisors can view the alerts on their advisor dashboard, respond to the alert as needed, and document their efforts in CRM Advise. Faculty can raise alerts based on poor class participation, excessive absences, frequent tardiness, missing assignments, no textbook/course materials, or personal issues. In their follow-up, the Ed Planner or counselor may recommend academic advising, personal counseling, study skills, or tutoring.

Engagement Plans are made up of a group of activities that are scheduled and distributed to a select population of students over a set period of time. Activities can include emails, phone calls, text messages, mobile notifications, and more; and they can be scheduled to launch on specific dates or a certain period of time after another activity has launched. Students in the selected group will

continue to receive the predefined activities until they no longer meet the requirements for inclusion in the engagement. Next steps include scale up so that Advise and the alert system is in place for all students. A plan for engaging faculty in this work and a communication plan for roll-out are being developed.

Currently, the following engagement plans are active:

Engagement Plan	Student Population	Timeline for Communication	Communication Method
Distance Learning	Students enrolled in an online or hybrid section who have not completed an online or hybrid course	*One email sent prior to the start of class	*Email, sent to student preferred email address in CRM Advise, communicating instructions for how to be successful in distance learning and hybrid courses
Academic Warning	*Classified as Freshmen (<30 earned semester credit hours) *Current Academic Standing is Academic Warning *Accepted a Financial Aid award greater than \$0.00 for the current Aid Year(s) *Enrolled in an academic program (AA, AS, or AAT) *Not included in the Mandatory Advising engagement plan	*One email sent several days after census date for the full term *A second email sent several weeks prior to the drop deadline for the full term	*Emails automatically generated through CRM Advise and sent to the preferred email address of the student *Emails communicate resources available throughout the district that can support their efforts to return to Good Standing
Mandatory Advising	*Enrolled in an academic program (AA, AS, AAT) *Not enrolled as a Dual Credit or Early Admission student *Have a Mandatory Advising hold recently applied in Banner and by extension a recently applied Mandatory Advising restriction on their record in CRM Advise	*One email sent several days after the census date for the full term *A second "reminder" email sent prior to early registration for the next term	*Emails automatically generated through CRM Advise and sent to the preferred email address of the student *Emails communicate the fact that a hold has been placed on the student's record, and they must meet with an advisor to have the hold released to allow registration for the next term

Outreach and Tracking efforts for each student are recorded within the system and can be viewed by the Ed Planners and Counselors during the current term and for all future terms. This allows Ed Planners to see if there are patterns of behavior that need to be addressed.

San Jacinto College has adopted Ellucian Degree Works, rebranded as "My San Jac GPS," as our degree audit system. GPS is a web-based planning tool that helps students and staff monitor student progress toward degree completion. It shows students and advisors the courses needed to earn a degree or certificate in an easy-to-read format. The College is currently using Degree Works version 4.1.4 in Production. We are testing version 4.1.6 and plan to move this version to production during our next Banner Maintenance weekend on April 28<sup>th</sup>.

Staff and Faculty access GPS through our SOS system. Faculty access this through the Student Advising Menu under My Faculty Services, just as they would access the Faculty Feedback for Advise. This assists with improved advising and degree planning services for students.

The 24/7 online system allows students to be better informed through:

- Showing requirements needed to fulfill in order to complete an award
- Showing courses that have been taken, transferred in, or granted exceptions
- Showing coursework that could be applied toward another major using the "What If" option
- Planning future academic coursework and estimating how many semesters it will take to graduate

- Providing the course descriptions and sections available by clicking on the course numbers
- Using GPA calculators to determine what would be necessary to achieve a specific GPA at the end of the term or at graduation

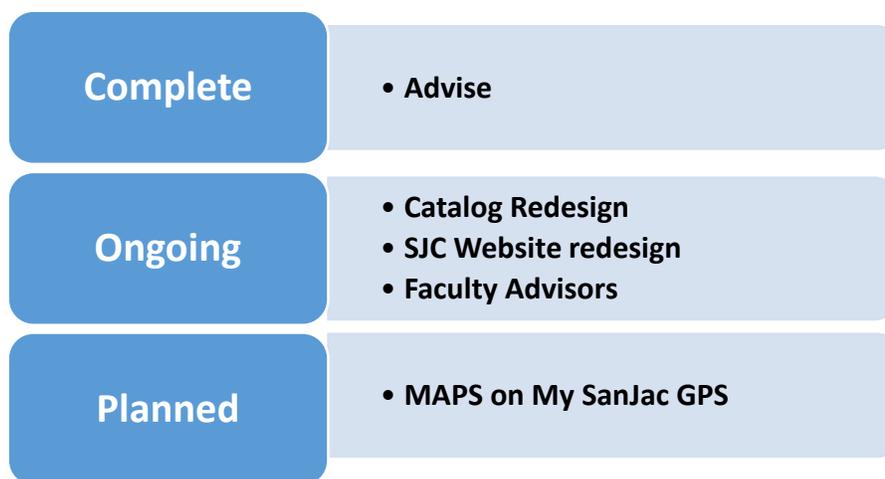
Student Services staff have attended extensive face-to-face trainings regarding Degree Works and its functionality. A web-based training is under development and will be made available through Cornerstone for on-demand access.

Multiple features of GPS allow additional functionality for our students and staff. These other features include:

- Planning: the planning feature allows for Financial Aid Appeals students to have their courses planned out and locked through graduation. It also allows the student and advisor to agree on a road map for degree completion, a semester-by-semester view of how to reach his or her educational goals.
- Audit: the audit allows students and advisors to gauge progress toward completion of an award.
- “What-if”: the “What-if” function allows a student to view other possible award options and see what would happen to current credits if changes were made to the degree plan or to the career goal.
- Exceptions: the Exception feature allows SJC staff, faculty, and administrators to give flexibility to sometimes rigid degree requirements by allowing a course a student has completed to fit in a spot where it might not fit otherwise or by allowing degree requirements to be modified if curriculum requirements have significantly changed.

In addition to these processes, Student Services is currently implementing additional functionality including the following:

- Utilizing the new Template feature to list the specific courses needed for a student’s chosen Pathways (or MAP) using the transfer maps received from the faculty mapping project.
- Utilizing the ability to identify critical courses along the MAP or pathway and setting alerts through Advise to intervene when a student does not complete these courses.
- Automating the Course Substitution process.
- Improving the reporting functionality.
- Identifying students who are enrolled in courses outside of their current program and importing that data into CRM Advise so that it can be used to intervene and get students back on track.



### **PATHWAYS CURRICULUM DESIGN**

The Student Continuum Task force has redesigned the student intake and first semester pathway for first-time-in-college (FTIC) students called SmartStart. In this design, students begin by taking required career interests and aptitude testing during the admissions process. They discuss their test results with an Advising Staff member who encourages students to select an academy prior to the beginning of their first semester. Students will register for their first semester during their initial visit to Admissions.

The first semester schedule for SmartStart students will begin with EDUC 1200, which is a two (2) week, intensive two-credit hour student success course that is contextualized for a chosen Academy (Business, STEM, Communication, Fine Arts, etc.). As part of this course, students investigate careers, salaries, and jobs available in the Pathways they are interested in pursuing. They are exposed to some of the skills required to be successful in these careers, so they can make an informed decision on a Pathway in their Academy. Additionally, students have their first exposure to Mindset-inspired (Dweck research) activities and study skills. At the end of EDUC 1200, students verify their Pathway selections or move to a new cohort, if necessary.

SmartStart will be piloted fall 2017 with a group of approximately 450 full-time FTIC students. In this course, students will learn skills that will increase their success in college. Faculty selected to teach the two-week classes will receive 20 hours of training during the week prior to and during College Community week. Additionally, they will be trained on the curriculum for the course. All students will have a Pathway selected by the end of the course and will be assigned to a faculty advisor who will explain the MAP and provide additional information about the potential career at the end of the Pathway. Students will register for classes and purchase books as part of class activities in the last week of EDUC 1200. They will then transition into a combination of seven- and fourteen-week classes to complete the semester. Faculty will contextualize these classes with assignments that pertain to the Pathway academy. At the end of the semester, faculty advisors will help students register for the next courses on their MAP.

After the pilot of SmartStart, a team will need to make needed modifications and design a SmartStart for developmental and part-time students. This team will then need to plan for the transition of all students to Pathways by fall 2018.

Faculty and advising staff are developing Pathway MAPs (My Academic Plan) course selections and semester sequences for all certificates and degrees that aim to reduce the average number of credit hours students take to the minimum required by the degree and results in students transferring to a particular university with junior standing in their chosen Pathway or transitioning successfully into their chosen careers. To assemble a MAP, faculty select and sequence courses that teach and reinforce the knowledge and skills that best prepare the students for success in that field. A resource team, consisting of faculty within each component area of a degree and representatives from Developmental Education, Dual Credit, Educational Technology, and Continuing Professional Development advise mapping groups in their course selections.

The design of Pathways MAPs began with Science, Technology, Engineering, and Math (STEM) faculty fall 2016. Each mapping team member attended a three-hour training session to learn how to build a map that ensures courses transfer as credit toward the major and not only as electives. The remaining transfer Academic teams began mapping January 2017. Both groups have submitted MAPs to related degrees at UH and UHCL (see example below).

**Approved **Biology** Pathway**  
**For College-Ready Students seeking an Associate of Science in Biology at San Jacinto College**  
**Transferring to UH seeking a B.S. or B.A. in Biology**

**Full-time Student Pathway**

**1<sup>st</sup> Semester**

3 SCH PSYC 1300 or EDUC 1300  
 3 SCH ENGL 1301  
 4 SCH BIOL 1306 + BIOL 1106  
 3 SCH BCIS 1305  
 3 SCH MATH 1314

**2<sup>nd</sup> Semester**

3 SCH ENGL 1302  
 3 SCH MATH 2412  
 4 SCH CHEM 1311 + CHEM 1111  
 3 SCH ARTS 1301 or MUSI 1306 or ARTS 1303

**3<sup>rd</sup> Semester**

3 SCH HIST 1301  
 3 SCH GOVT 2305  
 4 SCH CHEM 1312 + CHEM 1112  
 4 SCH BIOL 1307 + BIOL 1107

**4<sup>th</sup> Semester**

3 SCH GOVT 2306  
 3 SCH HIST 1302  
 4 SCH PHYS 1301 + PHYS 1101  
 3 SCH SOCI 1301 or PSYC 2301 or ANTH 2302  
 3 SCH PHIL 1301 or PHIL 2306 or HIST 2321

**Part-time Student Pathway**

**1<sup>st</sup> Semester**

3 SCH PSYC 1300 or EDUC 1300  
 3 SCH ENGL 1301  
 4 SCH BIOL 1306 + BIOL 1106

**2<sup>nd</sup> Semester**

3 SCH HIST 1301  
 3 SCH MATH 1314  
 3 SCH ENGL 1302

**3<sup>rd</sup> Semester**

3 SCH HIST 1302  
 4 SCH MATH 2412  
 4 SCH BIOL 1307 + BIOL 1107

**4<sup>th</sup> Semester**

3 SCH GOVT 2305  
 4 SCH CHEM 1311 + CHEM 1111  
 3 SCH BCIS 1305

**5<sup>th</sup> Semester**

4 SCH CHEM 1312 + 1112  
 3 SCH GOVT 2306  
 3 SCH ARTS 1301 or MUSI 1306 or ARTS 1303

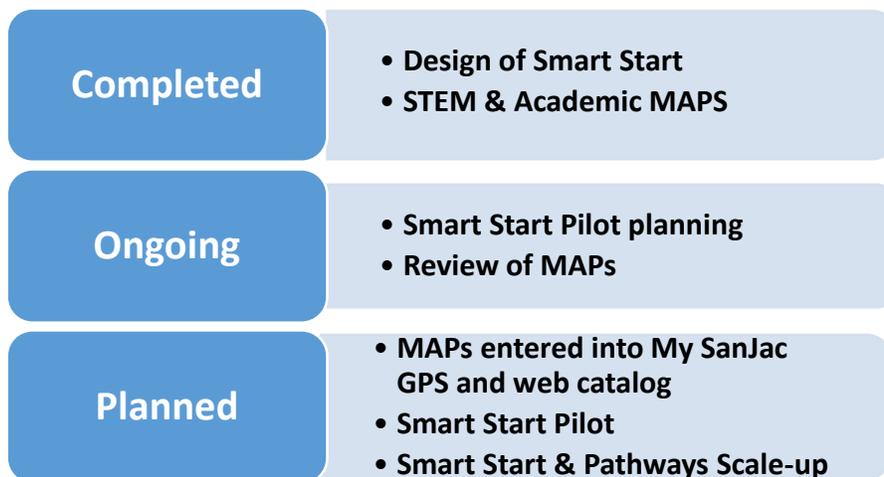
**6<sup>th</sup> Semester**

4 SCH PHYS 1301 + PHYS 1101  
 3 SCH SOCI 1301 or PSYC 2301 or ANTH 2302  
 3 SCH PHIL 1301 or PHIL 2306 or HIST 2321

These MAPS are under review by a team of advising and curriculum specialists (Catherine O'Brien, Joanna Zimmerman, Shelley Rinehart, Jessica Tello, Joan Rondot, Martha Robertson, and Kelly Mizell). Once they have been reviewed and approved by the PLC, the MAPs will be entered into the online catalog and in My SanJac GPS. This work will begin in May and conclude August 2017.

In March, the Health Sciences and Technical teams were trained, then began reviewing awards and job availability for each certificate to determine that each certificate leads to jobs at a living wage in the Houston area. If there were evidence to support continuation of the certificate, the teams began to develop MAPs for each. The MAPs are due in May to be

reviewed by the Review team and then entered in to catalog and GPS. Certificates that do not meet a minimum level of awards or job availability will be submitted to a team consisting of the Deputy Chancellor/President, the Provosts, and Instructional Deans to determine if the certificate should continue to be offered or retired.



#### **PATHWAYS INSTRUCTIONAL DESIGN**

An Educational Philosophy will be developed to guide faculty in the development of course instruction, course assessment, and student activities that follow educational best practices. The development of this document will begin during Dean and Department Chair Academy (2017), and faculty will refine the philosophy during Discipline Enrichment of College Community Week. This philosophy will guide the development, redesign, and evaluation of courses.

In the SmartStart pilot, advisors will assign students contextualized classes. Faculty and advising staff will expand this practice to courses along the Pathway. Contextualized classes keep students engaged with activities that are relevant to their chosen pathways. These contextualized activities increase student success by teaching students how skills, such as math and writing, are relevant to their careers of interest. Additionally, faculty teaching gateway courses will be trained on the design and inclusion of Mindset activities. The goal of Pathways going forward is to design a curriculum that assigns most students to classes that are contextualized to their academy and to help them develop a growth mindset.

Educational Technology (Ed Tech) is currently working with College stakeholders to implement a building block for the Blackboard Learning Management System named Analytics for Learn (A4L). This product is designed to integrate into the Blackboard system to provide detailed insights into how students are performing and engaging in Blackboard-supported courses and to provide opportunities for schools to view online learning measures vs. course design to improve student performance. The types of reports generated can be grouped into ten categories:

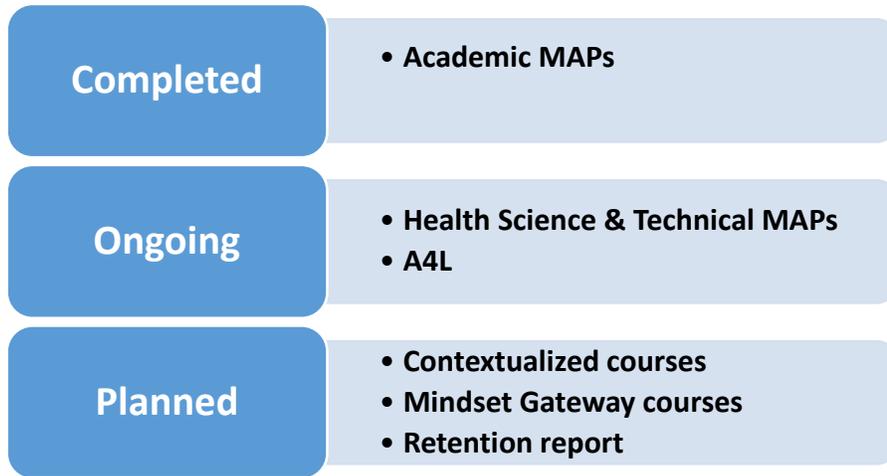
1. Provides data on student activity in individual courses.
2. Provides insight on individual student grade.
3. Provides student information on course (section) standing and activity against all other students (grouped) in course.
4. Provides usage patterns on LMS courses, content, and tools for instructional administrators.
5. Provides LMS course activity comparison at department level.
6. Provides executive level course activity comparison activity.
7. Provides LMS content access and effectiveness data.
8. Provides comparison of LMS activity level by year, department, content, etc.
9. Provides insight reports on LMS course design data by tools, item types, trends, etc.
10. Provides reports on student performance data in LMS to correlate student grade to success and content engagement.

A4L provides reports with data based on institutional hierarchies and that are useful to departments, divisions, campuses, and delivery modality. Ed Tech has begun initial work on this implementation to define implementation goals, identify data dashboard configurations, and prepare integrations with the Blackboard system and Banner Student Information System. Next steps will finalize configurations for data reports and provide training for College stakeholders.

Ed Tech will conduct a beta test in the 2017 second summer semester (201730) with a demonstration and training provided during the Deans and Department Chair Academy in July 2017. Based on results of the beta test, Ed Tech will conduct an expanded test fall 2017 (201810) with a goal of availability to all courses no later than spring 2018 (201820). Ed Tech will begin training for users in August and provide training in the future as needed.

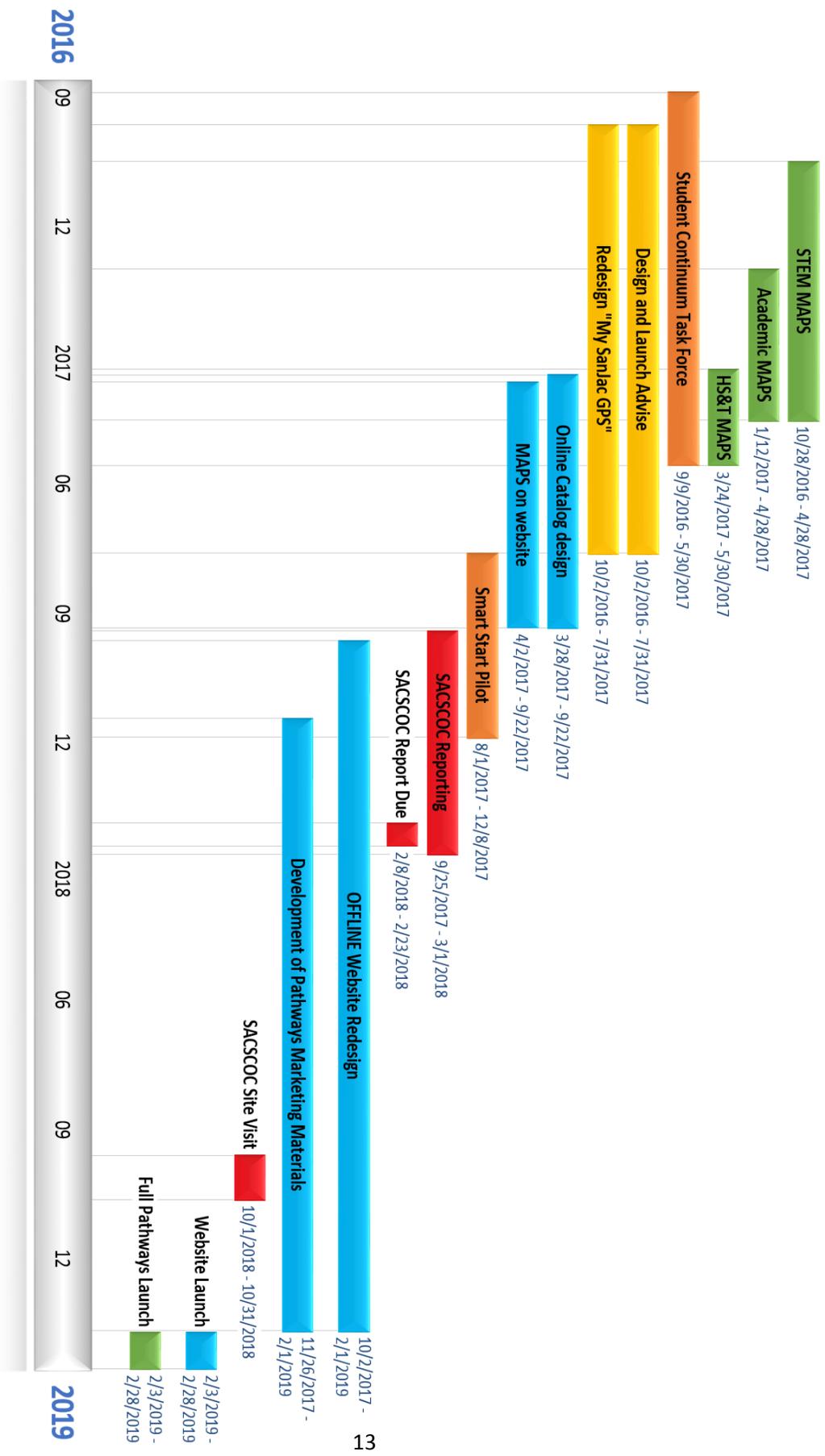
The Blackboard A4L system is a proprietary system designed to gather and provide insight on system usage in the Blackboard Learning Management System. The College can extract data from this system in a format to be made available to the Ellucian CRM Advise system. The CRM Advise team will then be able to determine if and how the data can be integrated into that system for advising purposes.

Data on course enrollment are sent out on a daily basis, but student success reports are typically generated after the end of the semester. To collect actionable data, a Retention Report will ask faculty to enter a mid-term grade and describe actions to help the student. This report will be discussed with the Department Chair to address student success while action can be taken. Plans are to discuss this with Deans and Department Chairs at the summer Academy for possible implementation in fall 2017.



#### **SUMMARY OF PATHWAYS PROGRESS**

The Pathways Initiative has generated much interest and enthusiasm at San Jacinto College. The project is currently on the following timeline (Figure 2 below). Plans are to accomplish as much work as possible before suspending work at approximately November 2017 for final preparations and reviews of the SACSCOC self-study report due March 2018. Work will continue offline so that after the SACSCOC site team visit October 2018, revisions can resume February 2019. Although Pathways has and will continue to demand many hours of work, the Pathways team believes this work will provide students a clear path to completion and provide the support to keep them on their Pathways through their educational experience to their goals.



## Pathways Timeline