Company Description

Stucess brings together the best of learning management systems (LMS) and assessment solutions into one complete resource for teachers, students, principals, and administrators. With seamless connections between assessments and curriculum, Stucess tailors instructional content to student comprehension, delivering a truly personalized learning experience. The company's name is Stucess. There is only one location. There are 500 employees. The company sells software called Stucess. The transactions are according to the needs of the company.

Scope Definition (FAST Phase 1)

Stucess unifies the data, curriculum and tools teachers, school leaders and administrators use every day by integrating all of a district's software and systems, including third-party applications and open education resources, into one fully secure and easy-to-use, cloud-based platform. The powerful single sign-on solution is deployed by districts across the nation to enhance communication, transition to common core, plan and evaluate curriculum, manage assessment and monitor student progress in real time.

Educators will love Stucess because it simplifies their workflow, increases efficiency in the classroom and empowers them to use the resources and strategies that work best to improve instruction and outcomes for each student. With Stucess, educators are able to connect the right content to the right student at the right time all in an effort to accelerate achievement, while also providing parents and students greater visibility into performance and progress.

Stucess solves for critical issues in education like data accessibility, common core implementation and compliance reporting, as well as streamlines systems by consolidating critical information and resources at all levels – classroom, school and district. Through shared dashboards, all stakeholders can immediately access the information they need to act in one central platform.

Additionally, Stucess is compatible across operating systems and not only is the platform accessible from any device, it can communicate with technology used in the classroom, eliminating the need for teachers to manually input the data generated by students each day as they complete exercises, assessments and assignments either designed in Stucess or from a third-party application. It will take about 6 months to design. The cost will be $500,000. There will be 500 employees.

Problem Analysis (FAST Phase 2)

1. The current system doesn't challenge students to learn, grow, and innovate.
   A. Students will be able to view their assignments.
   B. Students will be able to make necessary adjustments.
2. It's difficult to analyze student data holistically.
   A. Administration will be able to view student data easier.
   B. Teachers will be able to make lesson adjustments easier according to the data.
3. It's complicated to transfer student performance insights easily to the classroom.

      A.   Teachers can offer assistance to each other easier.

      B.   Student information from the previous teacher is readily available.

4.   Parents can't see their child's progress.

      A.   Parents can get more involved with child's education.

      B.   More information is readily available to help parents with their child's education.

5.   It is difficult for Administration to view and assist their staff with instruction issues.

      A.   Administration will be able to view and assist their staff with instruction issues.

      B.   Administration can schedule professional development more efficiently.

Requirement Analysis (FAST Phase 3)

Parent Functionality

Log into account

Stay in Touch with Teachers

Teachers are the best educational resources for both parents and children. An instructional management platform enhances your accessibility to your child's teacher. Send questions or messages quickly and effectively; get clarification on an assignment your child is working on; or receive feedback on how your child is performing in class. Parent-teacher communication strengthens the connection between home and school.

Monitor Your Child's Grades

Your added layer of support goes a long way for your child's grades. Check your child's current progress by quickly logging in to the gradebook. If your child is excelling, falling behind, or struggling with a specific subject, you won't lose time identifying the assistance he or she needs.

Help Your Child with Class Material

Homework help becomes easier when you're in tune with what your child is studying. View class assignments and lessons digitally, or head over to your child's class website for additional insight and resources posted by their teacher.

Attendance

A significant factor of student success is attendance. Your teachers know that missed class time often means lower test scores for students. With a system like Stucess, backtracking and communicating with absent students is a snap. Parent involvement is crucial here, and parent alerts regarding excessive absences can help students get back on track.

Gradebook

Posting timely grades gives students ongoing feedback and a benchmark to improve. With their own accounts, students who already know how they're doing feel more comfortable approaching their

teachers about grades. Parents can stay in tune with their children's progress throughout the year by monitoring whenever it's convenient, which adds another layer of support and accountability.

For Parents

Parents who are involved in their children's education drastically boost student outcomes. Before the school year kicks off, meet with new and returning parents to refresh them on the benefits and opportunities of Stucess.

Assignments

To increase parental involvement, teachers can give parents access to class assignments. Parents then see what their children's assignments are and what they're expected to learn. This promotes interaction and education at home, enhancing the mastery of student work.

Class Websites

Class websites are a central hub of online activity. Students and parents gain extended access to the most valuable resource in the classroom: their teacher. Stucess makes every parent aware of the relevant websites so they can connect with digital content, tools, and class activities to further aid their children in school.

Student Functionality

Log into account

Stay in Touch with Teachers

Teachers are the best educational resources for students. An instructional management platform enhances students accessibility to their teacher. Send questions or messages quickly and effectively; get clarification on an assignment the student is working on; or receive feedback on how the student is performing in class. Student-teacher communication strengthens the connection between home and school.

Monitor Grades

The added layer of support goes a long way for the student's grades. Students can check current progress by quickly logging in to the gradebook. If the student is excelling, falling behind, or struggling with a specific subject, the student won't lose time identifying the assistance he or she needs.

Student help with Class Material

Homework help becomes easier when the student is in tune with their studies. Students can view class assignments and lessons digitally, or head over to the class website for additional insight and resources posted by their teacher.

Attendance

A significant factor of student success is attendance. Your teachers know that missed class time often means lower test scores for students. With a system like Stucess, backtracking and communicating with absent students is a snap. Parent involvement is crucial here, and parent alerts regarding excessive absences can help students get back on track.

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Principal Functionality

Update user information

Create or delete user accounts

Add or Remove user privileges

Teacher Functionality

Create or delete user accounts

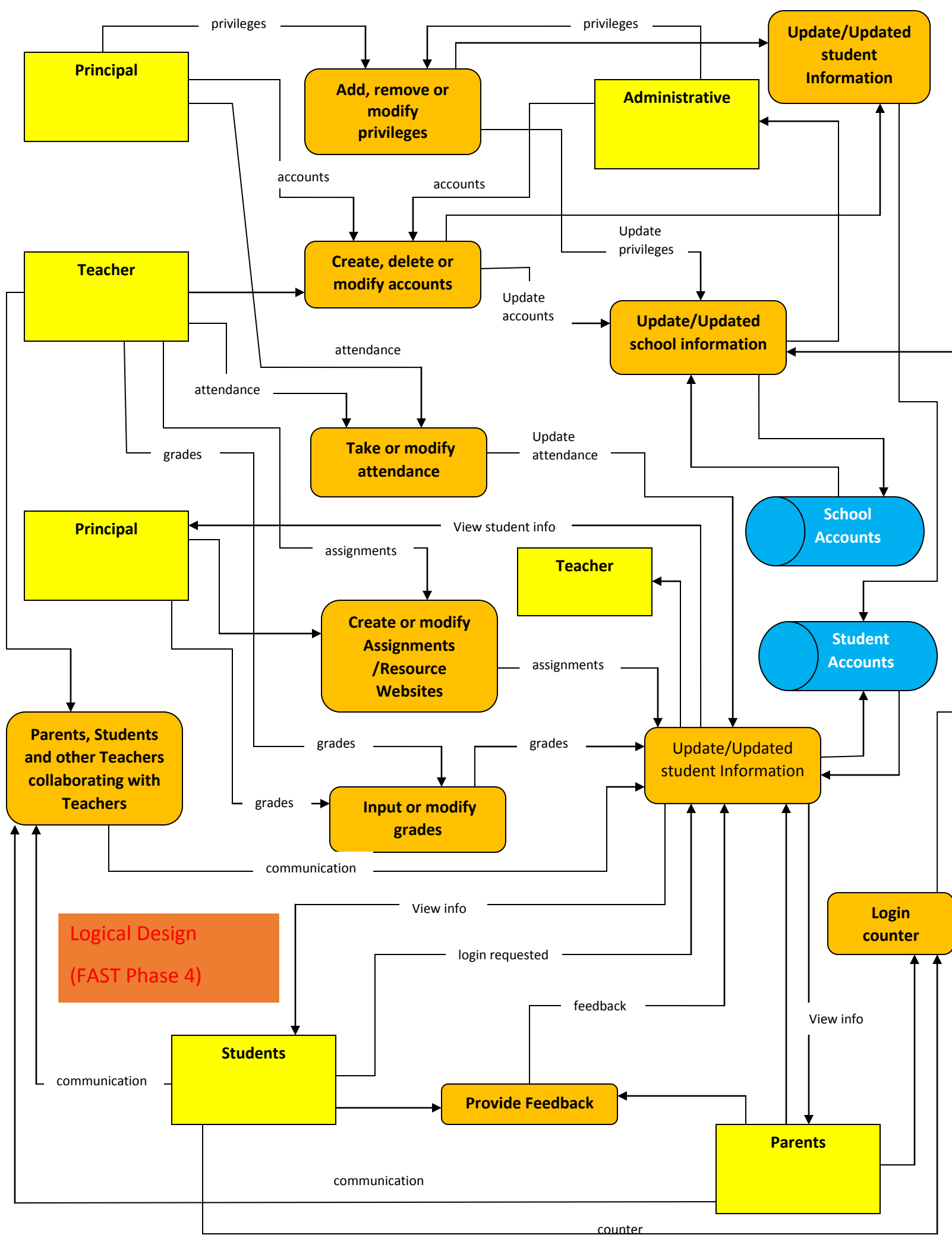**Add or Remove user privileges**

Update user information

Strategic/Analytic Functionality

Login counter

Reports will be generated for daily, weekly and monthly for use of the software.

Feedback

Users will be able to communicate any concerns, questions, and/or recommendations on the feedback page.

Logical Design
(FAST Phase 4)

Decision Analysis (FAST Phase 5)

Technical Feasibility

The proposed technology for the defined system is PHP, MySQL, Javascript,HTML and CSS. All of these products have been on the market for a number of years. The maturity level of these products are not considered a risk due to the current technical staff being familiar with the use of these products. Stucess institutes a transition process that is guided in a series of logical steps by an account manager that is dedicated to each particular school. All hardware and software currently being used will have no compatibility issues with the proposed technologies. A simple algorithm will be used to integrate the single-sign-on, other curriculum providers, other student information systems and active directories.

Operational Feasibility

The performance of Stucess will cut the amount of time Educators spend on data and allow them to concentrate on other needed areas of education. Also, information won't be difficult to produce, data can be captured in time to be useful and data will be well organized. Economically costs of materials are lowered and new markets can be explored. Controlling the data using Stucess will bring more data security and will lessen crimes such as fraud that are committed against student data. Efficiency will improve with less materials and effort being required to complete tasks. The service of Stucess will be easy to learn, flexible to change and compatible with other upcoming systems.
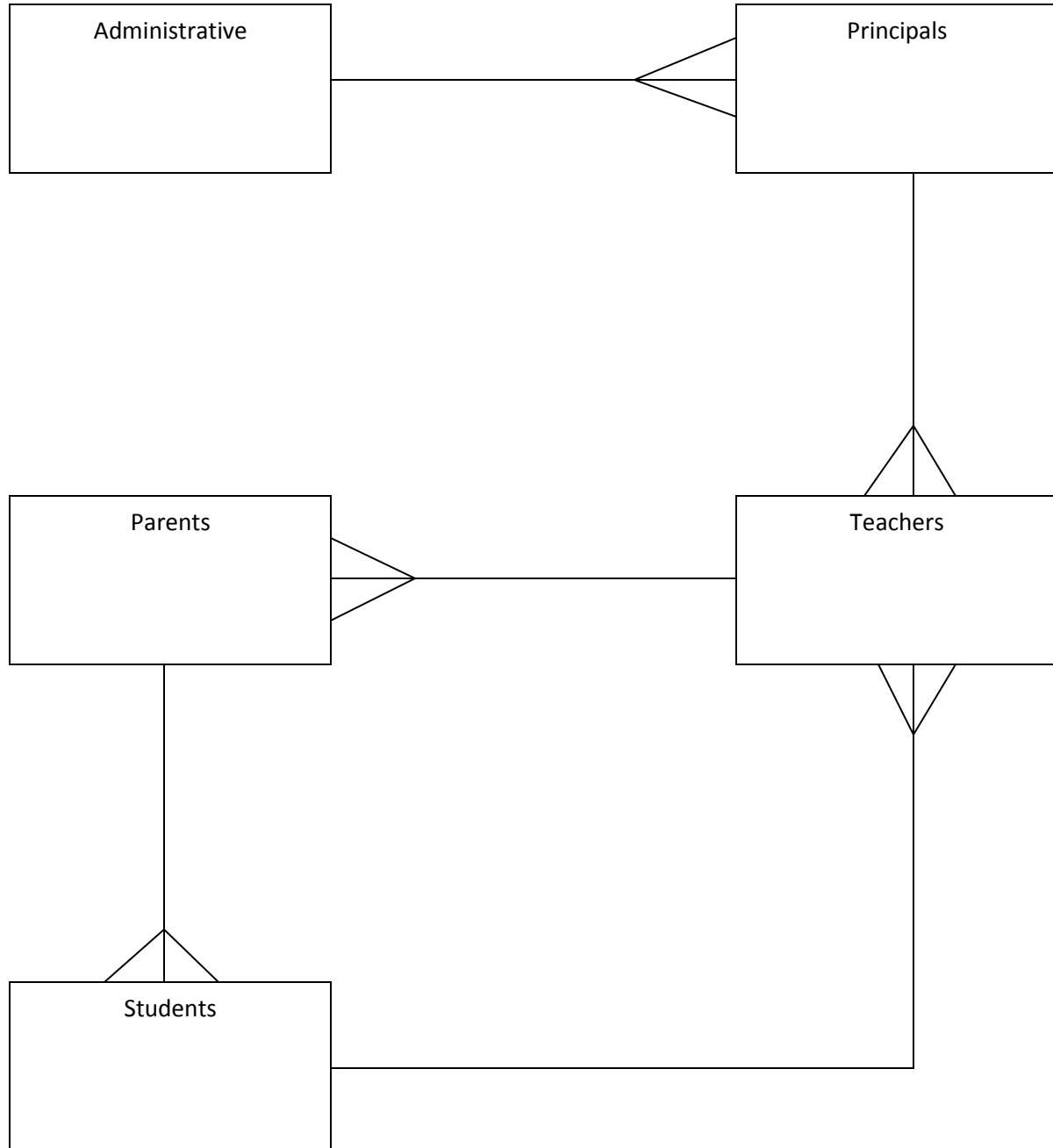
Economic Feasibility

The approximate cost to develop will be $500,000. The payback is approximately in 2.2 years. The Net Present Value is approximately $425,000. After researching the cost in depth, $500,000 will still be sufficient enough to design the Stucess information system. There are no known additional charges that will be incurred due to building this system.

Schedule Feasibility

The timetable for Stucess to be developed has not changed. The desirable timetable for completion is still 6 months to deliver a properly functioning system. In the allotted time, Stucess still will solve for critical issues in education like data accessibility, common core implementation and compliance reporting, as well as streamline systems by consolidating critical information and resources at all levels – classroom, school and district.

Physical Design and Integration (FAST Phase 6)

ERD

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┌─────────────────────┐                              ┌─────────────────────┐
│   Administrative    │─────────────────────<        │     Principals      │
│                     │                              │                     │
└─────────────────────┘                              └─────────────────────┘
                                                               │
                                                               │
┌─────────────────────┐                              ┌─────────────────────┐
│      Parents        │────<                          │      Teachers       │
│                     │                              │                     │
└─────────────────────┘                              └─────────────────────┘
         │                                                     │
         │                                                     │
┌─────────────────────┐                                       │
│     Students        │───────────────────────────────────────┘
│                     │
└─────────────────────┘
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Relational Database Table Definitions

Login	Account	Privilege	Assignment
Username_id	Create_acc_id	Add_priv_id	Homework_id
Password	Delete_acc	Remove_priv	Project
Log_counter	Modify_acc	Modify_priv	Resource_site
CHAR description	CHAR description	CHAR description	CHAR description
Student_info	Attendance	Communication	Grade
Social_security_id	Present_atten_id	Email_id	GPA_id
Last_name	Absent_atten	Live_chat	marking_period1
First_name	CHAR description	Feedback	marking_period2
Middle_initial		CHAR description	marking_period3
Street_address			marking_period4
City			CHAR description
State			
Country			
Zip_code			
Phone_number			
Date_of_birth			
Gender			
CHAR description			

Method Signatures

Login

 String getUsername_id(Username)

String getPassword(Password)

Int getLog_counter(counter)

Account

Boolean isCreate_acc_id(Create)

Boolean isDelete_acc(Delete)

Boolean isModify_acc(Modify)

Privilege

Boolean isAdd_priv_id(Add)

Boolean isRemove_priv(Remove)

Boolean isModify_priv(Modify)

Assignment

string getHomework_id(Homework)

string getProject(Project)

string getResource_site(Resourcesite)

Attendance

Boolean isPresent_atten_id(Present)

Boolean isAbsent_atten(Absent)

Communication

String getEmail_id(Email)

String getLive_chat(Live)

String getFeedback(Feedback)

Grade

String getGPA_id(GPA)

String getmarking_period1(markingperiod1)

String getmarking_period2(markingperiod2)

String getmarking_period3(markingperiod3)

String getmarking_period4(markingperiod4)

Student_info

string getSocial_security_id(Socialsecurity)

string getLast_name(Lastname)

string getFirst_name(Firstname)

string getMiddle_initial(Middleinitial)

string getStreet_address(Streetaddress)

string getCity(City)

string getState(State)

string getCountry(Country)

string getZip_code(Zipcode)

string getPhone_number(Phonenumber)

date getDate_of_birth(Dateofbirth)

string getGender(Gender)

User Interface Specification

Stucess

Stucess Login

Username

Password

☐ Keep me logged in on this computer

Submit

Lost Password   - HTTPS Secure

Stucess

Assignments

Attendance

Communicate

Feedback

Gradebook

Settings

Students

Stucess

Gradebook

Welcome, Harry Car

Marking Period 1	Marking Period 2	Marking Period 3	Marking Period 4	GPA	
80	84	77	89	83	

Stucess

Attendance

10/01/2016	10/02/2016	10/03/2016	10/04/2016	10/05/2016
Present	Present	Present	Absent	Absent

Stucess

Assignments

1. Do pages 16,17,18 in Math Steps

2.Read Chapters 10-11 in Moby Dick

3. Book Report due on December 12, 2016

Stucess

Mark Clark	Fred Kelly
Terry Free	Brandon Real
Bill See	
James Smith	
Sam Bass	
Bobby Smith	
Gary Tell	
Harry Bob	

Add Student	Delete Student	Modify Student

Stucess

Is Stucess easy to use? ☐ Yes ☐ No

Do you like viewing your child's grades? ☐ Yes ☐ No

Do you like communicating with your Child's teacher? ☐ Yes ☐ No

Is your child doing better now with Stucess? ☐ Yes ☐ No

Would you recommend Stucess to other schools? ☐ Yes ☐ No

Would you say Stucess is the wave of the future? ☐ Yes ☐ No

Thank you for using Stucess.

Stucess

Communicate

Thank you Ms Harris for all your help with my child.

Stucess

Settings

Add privilege	Remove Privilege	Modify Privilege

Add Account	Delete Account	Modify Account

Construction and Testing (FAST Phase 7)

Parents

Log into account

1. Try to log into account without a username and password.
2. Log into account using only numbers
3. Log into account using a combination of letters and numbers.
4. Log in from different devices to see if information is cut off.

Stay in Touch with Teachers

1. Send a blank email.
2. Use live chat without another user on the other end.
3. See if email can be spammed.

Monitor Your Child's Grades

1. Check if grades can be altered by parents from their end.
2. Verify modified grades update in a timely matter.

Help Your Child with Class Material

1. Check to see if PDF books can be viewed.
2. Verify PDF books cannot be altered.

Attendance

1. Check to see dates and years increment properly.
2. Verify absent, present and lateness can be changed according to the student's status.

Gradebook

1. Verify modified grades update in a timely matter.
2. Check if grades can be altered by parents from their end.

Assignments

1. Verify assignments can be viewed and not cut off.
2. Check to see if assignments can be posted.

Class Websites

1. Check resource links can be clicked
2. Verify web addresses show hyperlinks when (www) is entered

Principal

Update user information

1. Check to see user information can be accessed.
2. Verify when user info is changed, changes take effect immediately.

Create or delete user accounts

1. Confirm user account is created when button is clicked.
2. Verify user account is deleted when deletion button is clicked.

Add or Remove user privileges

1. Add privileges and check to see if they went into effect.
2. Remove privileges to see if they went into effect.
3. Verify Principals have access to Teacher, Parent and Student views.

Student

Log into account

1. Try to log into account without a username and password.
2. Log into account using only numbers
3. Log into account using a combination of letters and numbers.
4. Log in from different devices to see if information is cut off.

Stay in Touch with Teachers

1. Send a blank email.
2. See if email can be spammed.
3. Use live chat without another user on the other end.

Monitor Grades

1. Check if grades can be altered by students from their end.
2. Verify modified grades update in a timely matter.

Student help with Class Material

1. Check to see if PDF books can be viewed.
2. Verify PDF books cannot be altered.

Attendance

1. Check to see dates and years increment properly.
2. Verify absent, present and lateness can be changed according to the student's status.

Gradebook

1. Verify modified grades update in a timely matter.
2. Check if grades can be altered by parents from their end.

Class Websites

1. Verify web addresses show hyperlinks when (www) is entered.
2. Check resource links can be clicked.

Strategic/Analytic

Login counter

1. Check to see reports are generated for daily, weekly and monthly use of the software.
2. Verify reports coincide with the login counter.

Feedback

1. Check to see survey answers are being captured.
2. Verify any updates to the survey reflects immediately.

Teacher

Create or delete user accounts

1. Confirm user account is created when button is clicked.
2. Verify user account is deleted when deletion button is clicked.

Add or Remove user privileges

1. Add privileges and check to see if they went into effect.
2. Remove privileges to see if they went into effect.
3. Verify Teachers cannot view what the Principal views

Update user information

1. Check to see user information can be accessed.
2. Verify when user info is changed, changes take effect immediately.

Installation and Delivery (FAST Phase 8)

Stucess' instructional management program provides kindergarten through grade 12 (K-12) school districts with a comprehensive system that combines the features of both a learning management program and an assessment system. With single sign-on (SSO) capabilities, users can access all their needs from just one location, instead of having to access multiple programs and resources.

Stucess can pull content from third-party providers and fully integrates with student information systems (SIS), offering all-inclusive functionality. Stucess is customizable to your school's specific needs, allowing you to choose to implement only one, or both, of the modules. A variety of professional development resources are available to assist with system training, and you'll also have access to Stucess' online help center where you can reach the support team for assistance.

The Stucess Instruct module includes all of the advantages of a learning management system, which gives teachers the resources to create and store lesson plans, input student grades and progress, and collaborate with other teachers. Students can access additional resources to enhance their learning, connect with other students and communicate with their teachers, and stay on top of their assignments and upcoming events. Parents are able to stay more involved in their child's education and can access all the assignments, grades, and upcoming events, as well as tools to communicate directly with teachers. The Stucess Inform module is designed to keep testing and assessment aligned with school and state standards. It provides a variety of data and analytics that administrators can utilize to evaluate learning performance for individual schools, or the district as a whole. Administrators can also create larger district-wide curriculum directives and share those with all the teachers. Stucess integrates with a wide variety of curriculum content providers and also student information systems.

Stucess Instruct includes all the features of a learning management system. It enhances engagement and personalized learning, helping connect teachers with parents, and students with teachers. With this module, teachers can contribute content to a comprehensive library of learning materials, create interactive lesson plans, and share assignments and course materials with students. It can even be used to specialize content for more advanced students, or offer additional help for those who may be struggling. Teachers can also utilize this module to collaborate with other teachers, as well as entering students' grades and progress, which can then be shared directly with students and their parents.

An account with Stucess empowers parents to become more involved in their child's education, and they can even opt-in to receive email alerts regarding their student. The option to receive text a text message will be available in the near future. Parents can view their child's grades and schedule, see what assignments are coming up or are overdue, and help to make sure their child stays on course. Parents are also able to communicate directly with teachers to discuss concerns or arrange conferences. Students utilizing Stucess will have greater access to everything they need to succeed, from accessing assignments and additional course materials, to communicating and collaborating with their teachers and other students.

Stucess Inform includes assessment and reporting tools to view analytics and trends between individual schools, or for the district as a whole. It provides a comprehensive real-time

dashboard utility, which allows administrators to review testing results, evaluate the effectiveness of the district or school's programs, and ensure that the education being provided is keeping up with necessary standards.

Teachers and administrators can create custom built tests and benchmark assessments to establish and monitor student ability and progress. They can also use the custom test tools to ensure content and programs are aligning with the state standards and the standards of the Partnership for Assessment of Readiness for College and Careers (PARCC). District-wide curriculum directives and objectives can also be established and distributed easily to all teachers and staff through the Stucess Inform module.

Integrating technology into the learning environment so that students and teachers experience the seamless ideal of instant connectedness—where information in every type of media is available and able to be instantly interacted with, with fully automated grades and progress reporting. That is why Stucess offers implementation that is intentionally user friendly.

In the past, schools and districts may have kept less than optimum systems to avoid the pains of new system implementation—the systems that didn't provide easy data analysis, or data insights to teachers, or challenge students to learn and innovate. But these can now be easily moved away from. Stucess institutes a transition process that is guided in a series of logical steps by an account manager that is dedicated to each particular school.

Beginning with an executive planning session, duties, schedules, and deadlines are set in advance. Then sensitive data is secured and single-sign-ons are established. Following this, is configuration of sites and integration of data. And once all those foundational pieces are in place, professional development takes place in sessions that are hands-on so that the "front line" educators and administrators can be trained in the new system that they will then export school-wide to the rest of the faculty. This creates an easy, sharable way to stay on top of current status and progress and with customizable management tools that provide data returns.