INITIAL PROJECT PROPOSAL

(CATEMA Data Export/Import Process)

# **Executive Summary – SEction 1**

**Provide high-level, summary information about the project and why it is needed. This is submitted by the requestor and approved locally before technical research is started. This is a tool for the local college, department, etc. to make a project request and then prioritize.**

Bakersfield College, Cerro Coso Community College, and Porterville College and their respective feeder high schools within the Kern Community College District service area are using CATEMA as the tool to track articulated (credit by exam) course enrollments, student achievement, and teachers’ credit recommendations. The California Community College Chancellor’s Office has endorsed and supported the adoption and use of CATEMA for this function.

Currently, the transcription of articulated (credit by exam) credit recommendations is a two-step manual process wherein the student id (@number) is validated by education advisors and then A&R staff manually enter the credit by exam on the students’ transcript. In the 2017-18 Academic Year, there were 2,533 students from 22 high schools completed articulated course enrollments and 2,095 credit recommendations for those that passed their courses (82.7%). A&R staff have experienced significant workload increases due to the increased number of manual packet enrollments related to dual enrollment, prison education, Westec, Fire Tech, and other ISAs. As a result, articulation is often at the end of the A&R task list. As of today, 2017-18 articulated courses have not been transcripted, 3 months after the August target date. Delays in the manual transcription process affects students who can’t register for subsequent courses, and has resulted in UC, CSUs, and some private college admission denials.

This project seeks more efficient processes to validate the student id and record / transcribe earned articulated credit (credit by exam). **Bakersfield College, Cero Coso Community College, and Porterville College all agree that this is a high priority project and will dedicate categorical funding to offset all costs of the CATEMA integration project, including internal and external (outsourced) private contractors to complete this project.**

# **Business Problem**

**Describe the business problem or opportunity.**

The CATEMA Banner Integration project will automate the manual, labor-intensive, and time-consuming work processes related to tracking, validating, and transcribing credit by exam, articulated credits, earned by high school students.

The work process as it is currently being done is as follows:

1. At the end of the academic year IR staff pull a printed hardcopy college campus report of credit recommendations. This may be done in approximately August and is sometimes pulled twice in order to both move forward as quickly as possible but also to ensure that all credit recommendations are received and processed.

2. Educational advisors validate student college identification numbers (@numbers) by confirming student account @numbers (manual Banner SIS lookup process) and also look up students who created a CATEMA account without using an @number to see if the student had been assigned an @number after creating their CATEMA account. Validating student @numbers is a manual process involving looking up each student in Banner and matching first, middle, last names, and birth dates and takes an inordinate amount of time. Each year the education advisors estimate that they spend at least two weeks on this task. Validating student @numbers is a process that could and we are requesting that it be automated.

3. A&R staff manually input / transcribe the credit recommendations made by the teachers and recorded in CATEMA. This process takes between two and four weeks to complete, sometimes longer.

Consequent to this manual, labor-intensive, and time-consuming work process, students taking articulated credit classes as a senior may not have those courses posted to their transcript prior to enrolling for Fall term. This creates challenges for the student particularly when the course was a pre-requisite for program admission or for college level or advanced courses.

## Analysis

**Describe business processes that will be improved or are not operating properly because of the problem.**

Adopting more efficient processes resulting in the transcription of articulated credits (credit by exam) will reduce the time from class completion to transcription of credit; reduce the related workload on IE/IR staff, Ed Advisors, and A&R staff; reduce staff time spent in rote related job tasks, increase staff time available for related problem solving, and increase student / customer satisfaction.

**What is the impact of not implementing the proposed solution to the problem?**

The staffing impact will continue to burden both the educational advisor and the A&R staff. In fact, as both high school and college staff continue to examine the options and opportunities for utilizing both articulated credit (credit by exam) and dual enrollment, we are estimating and expecting increased utilization of articulated credit (credit by exam) used in conjunction with and as an alternative to dual enrollment for high school students. There are many advantages to adopting this strategy in terms of improving student self-efficacy in a low-risk environment and to support student learning how to be a successful college student.

**List all quantitative support in favor of eliminating the problem.**

CATEMA Banner Integration and work process automation will:   
Reduce the workload on Ed Advisors and A&R staff and systems  
Reduce the delay between end of term and transcription of articulated credit  
Staff time are freed up from rote manual processes  
Staff time is made available for student services and problem solving  
Increased student / customer satisfaction

**What timeframe are you hoping to get the solution\problem resolved within?**

Prior to the start of the Fall 2019 term.

**Is the solution to this problem an opportunity to collaborate with other colleges?**

Yes. All three colleges are experiencing these challenges and are interested in collaborating to implement automated solutions to these manual work processes to resolve this business practice problem and improve the efficiencies in transcription of articulated credits (credit by exam).

# **Solution**

**Describe the proposed solution in detail.**

Implement CATEMA Banner integration for the exchange of information: 1) to confirm and validate student identification numbers (@number); 2) admission application data; and 3) record articulated credit (credit by exam) for successful completion of the course (based on the articulated course instructor’s recommendation).

## objectives

**List the high-level objectives of the proposed solution.**

Project objectives include: The adoption of more efficient batch validation of student id numbers, the batch import and recordation of earned articulated credit (credit by exam) for successful students based on the teachers’ recommendation and the CATEMA Post Credit Export File, and a Banner import file into CATEMA to indicate that credit has been transcripted. These objectives provide bilateral communication at a course and student level and therefore provides the opportunity at the system level, and at the teacher, counselor, and administrator level to quality assure articulation related practices and processes.

**Provide the scope of the proposed solution**

1. Banner script process to batch validate student id numbers.

Student application data  
Student identification (@number) validation

1. Banner script to import and post students’ grades based on the data extraction process file - CATEMA Post Credit Export file

A - in the current/selected school year that have been recommended for credit,

B - have a validated college ID, and

C\_ have not already be awarded or denied credit for the course enrollment record

The example file we set up is in a csv format, but can also be tab delimited or a fixed length file.

Each record extracted has the following fields:

Course\_Num     [10 char] like BSAD B252A

Course\_Name   [up to 50 char]

KCCD\_ID              [9 char]

Last\_Name         [20 char]

First\_Name        [20 char]

Grade                   [1 char]

Credit                    [Num] up to 3 digits and 1 decimaal

Term                     [7 char] like 2018-19

StartDate             [10 char date] like mm/mm/yyyy

EndDate               [10 char date] like mm/mm/yyyy

Catema\_SID       [int 12] internal unique student identifier

Catema\_EID       [int 11] internal unique enrollment record

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Note that this is just an example. The output can be customized to meet your needs.

1. Banner import into CATEMA

Credits transcribed by class and student.

(Recommend further discussion with STATCO regarding the structure of this import process)

Statco CATEMA application technical information is attached which details the full automation solution.

*Note: Please be as thorough as possible in what you want implemented (for example, if there are multiple modules in a software/hardware solution, which of those are you hoping to implement?) The scope that is defined in this section will help determine the resource needed for the project and shouldn’t be changed once the project is in the queue.*

## Deliverables

**List the project deliverables. A deliverable is a unique and verifiable product, result, or capability to perform a service that must be produced to complete a process, phase, or project.**

Requirements

The adoption of more efficient batch validation of student id numbers,

The batch import and recordation of earned articulated credit (credit by exam) for successful students based on the teachers’ recommendation and the CATEMA Post Credit Export File.

A Banner import file into CATEMA to indicate credit transcribed by college, course, and student.

Ongoing Banner SIS system and data updates

## Estimated Cost

**Provide high-level cost information or funding(s) for implementing the proposed solution. Items include Software, hardware, training, ongoing license\maint, purchase price.**

|  |  |
| --- | --- |
| Description | Estimated Cost |
| Unknown. | Unknown. |
|  |  |
|  |  |
|  |  |
| Ongoing cost of solution (sponsor will commit to funding) |  |
| **TOTAL ESTIMATED COST OF PROPOSED SOLUTION** | **Unknown.** |

# **Authorization – Section 1**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Project sponsor approval

# **College review and approval – Section 2**

*Note: This section to be completed by the campus IT Director, or in the case of the district office, a district office IT Director.*

Provide high-level, summary information about the project and why it is needed. This section is submitted to the college’s technology committee and approved locally before submission to the district wide committee.

If it is determined it can be done locally no further submission into the district wide process is required and the college will proceed as needed.

The following are areas that need to be reviewed and verified prior to further submission into the process. Several of these sections will help indicate if District Office resources are needed.

SSO (Single Sign-on) – Will staff need to have access to the system (internal\external to the district).

Data integration- What other systems will this solutions’ data need to access - both internal\external to the district.

New application – Is this a new application in the district

Security – Data\access security analysis

Legal – Contracting language, FERPA, HIPPA, etc.

Accessibility – ADA, 508 compliance

## Estimated Total Cost of ownership

This section will share how this product will be supported for the duration of the life cycle until it is discontinued. Key parts will include:

Ongoing funding source – This is GUI, RP, grant, etc.

Staff support – how will this be supported for ongoing maintenance of the solution

If this is a grant funded project the college will provide the resources to support this system once the grant funding has ended.

# **Authorization – Section 2**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ IT Committee Faculty Co-chair

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ College IT Director approval

# **Committee Review – Section 3**

## Estimated Schedule

Provide high-level schedule key milestones.

|  |  |
| --- | --- |
| Project Milestones and/or Phases | Estimated Completion Date |
| Start of Project |  |
|  |  |
|  |  |
|  |  |
|  |  |
| End of Project |  |

Modifications to any requirements, timeline, scope, etc. of this project can only be authorized with a formal change control request and with approval of the below signatories

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ College IT Director approval

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Chief Information Officer

*This section still in development.*