

Student Success Program Pilot Workshops Final Report

ABSTRACT

This program was a series of three, game-based, pilot workshops for the Student Success Program. Each workshop consisted of game-based learning activities that covered specific learning objectives. The results indicated that the pilot workshops were very successful in engaging and motivating students to fully participate throughout the entire 90-minute workshops. In addition, students enjoyed their experience in the workshops and preferred the game-based workshop format over a traditional, lecture-based workshop.

INTRODUCTION

Game-Based Learning

The use of game-based learning activities has proven to be one of the best ways to achieve student engagement in the classroom. Today, 97% of teens play games,¹ and the average American youth will have played an estimated 10,000 hours of video games by the age of 21.² We are now in the midst of the "gamer generation," in which kids not only think like gamers but also expect to learn like they do in games, with continual feedback, flow-promoting challenges, and a safe environment in which to experiment and learn from failure. Games are also helping kids develop valuable 21st century learning skills, such as creativity and collaboration, along with social emotional and character skills.

Pilot Workshops

This program was a series of three, game-based, pilot workshops for the Student Success Program. Instead of a traditional, lecture-based workshop, the pilot workshops were fully-participatory experiences in which students were actively engaged throughout the 90-minute period in a series of game activities. A total of 20 students participated in the pilot workshops, which were held in May-June, 2016.

WORKSHOP DETAILS

The pilot workshops consisted of three different game-based learning activities, each of which covered specific learning objectives. The main learning objectives that were covered in the workshop were the same as in a traditional Student Success Program workshops:

- Analyze transcripts
- Understand academic probation, progress probation, and dismissal status
- Understand the levels of academic and progress probation
- Determine ways in which students can be removed from academic probation, progress probation, and dismissal status
- Learn about various student resources available on campus

In each workshop, students were divided into two-to-four person teams, which encouraged collaboration and social learning between team members and also provided an opportunity for students to get to know each other.

Teams received fictitious probation dollars for succeeding in each game. The team with the most probation dollars at the end of the workshop was deemed the winner, and the winning team members received first priority to meet with their counselors.

Transcript Games

The transcript games were a series of three, short, fast-paced games that helped students learn how to analyze transcripts and determine the academic status (probation and/or dismissal) described by the transcripts. In the games, team members raced against the clock to quickly analyze packets of 12 transcripts and sort the transcripts into groups.

In the first transcript game, teams had four minutes to sort the transcripts into two groups, academic probation and in good standing. The second transcript game was similar to the first except for the transcripts were either of students on progress probation or in good standing. In the last transcript game, teams had six minutes to sort the transcripts into three groups, level one academic or progress probation, level two academic or progress probation, or dismissal status.

Card Grab Game

The Card Grab game built upon the learning in the Transcript Games to help students learn about ways in which they can be removed from academic probation, progress probation, and dismissal status.

In the game, teams competed against each other to analyze one transcript at a time. Each transcript represented a student on academic probation, progress probation, or dismissal status along with three multiple choice responses (A, B, and C) that described a possible way for that student to get back to good standing. Three sets of cards marked "A," "B," and "C" (three of each letter) were laid out on each game table.

In each round, two players from each team (four players total) had to quickly analyze the transcript and grab the card with the letter of the correct response. Because there were only three cards of each letter, one player would not be able to grab the correct card, thus promoting quick analysis of each transcript and responses.

Exit Game

The Exit Game was a scenario-based, transmedia game that helped students learn about various student resources available on campus. Each workshop had a slightly different Exit Game design because we sought to improve the game based on player feedback. Although the games were slightly different, the general gameplay and learning goals remained the same.

To start the game, each team was given a packet of papers that contained a storyline about students along with one or more clues to puzzles related to getting off of probation status. Puzzles were designed to direct students to various student resources pages, such as the Learning Resource Center page, on the El Camino College website. At the end of the game, solving a final puzzle allowed teams to conclude the game and "exit" the workshop.

At the conclusion of the workshop, all students were asked to complete both the El Camino College survey and the GameTrain Learning survey (see Appendices).

RESULTS

Survey Results

The following results are primarily from the GameTrain Learning survey responses except for additional comments responses that were aggregated from the El Camino College survey responses.

The main findings of the pilot workshops are as follows:

- Students enjoyed their experience in the workshop (average enjoyment rating = 8.25 out of 10)
- 19 out of 20 students believed that they learned better in the workshop as opposed to a traditional, lecture-based workshop
- 30 out of 32 comments submitted by students were positive

Observational Results

During all three workshops, we observed that all students were fully participating and engaged throughout the entire 90-minute period. We also observed a high amount of collaboration and social learning along with strong camaraderie and friendship among teammates.

In addition, we observed strong learning occurring during the progression of the games. For example, teams that made errors during the first two Transcript Games were able to correct those errors in the third Transcript Game and Card Grab Game. The statistical results of actual learning outcomes are included in the report compiled by El Camino College.

DISCUSSION

The results indicated that the pilot workshops were very successful in engaging and motivating students to fully participate throughout the entire 90-minute workshops. In addition, students enjoyed their experience in the workshops and preferred the game-based workshop format over a traditional, lecture-based workshop.

In addition to having an enjoyable learning experience, students were also provided with an opportunity to make friends and learn from each other. This type of social learning experience is one of the strongest features of good game-based learning activities.

For future consideration, expanding on this game-based workshop design might include having the Exit Game cover more student resources, student study habits, and helping students build their educational plan.

Overall, we were able to design and implement an engaging, educational experience that successfully covered all of the learning objectives. In addition, this learning game experience helped students develop their collaboration, communication, and other 21st century learning skills along with some social-emotional and character skills through participating in a team activity.

We hope that other student workshops, programs, and even courses can benefit from utilizing game-based learning activities such as the ones this program in order to make learning experiences more motivating, productive, and enjoyable.

REFERENCES

¹ Pew Research Center (2008). *Teens, Video Games and Civics*. Retrieved from http://www.pewinternet.org/2008/09/16/teens-video-games-and-civics/

² McGonigal, J. (2011). *Reality Is Broken*. New York, NY: The Penguin Press.

APPENDICES

The following supplemental materials to this report are provided on the following pages.

- Transcript Game transcript example
- Card Grab Game transcript example
- Exit Game puzzle example
- Survey instrument
- Results spreadsheet

EL CAMINO COLLEGE

TRANSCRIPT

DOB: 11/30/91

Name: Chip Potts

High School: Castle High School 2012

ECC GE	CSU GE	UC GE	CAN NO.	COURSE NUMBER	COURSE TITLE		GRADE	UNITS ATTEMPTED	UNITS COMPLETED	GRADE POINTS	GPA	FTNOTE
					Fa	all Semester	. 2013 -					
					Drawing Fundament							
SC	D2	4 A	111(10		Fundamentals of E				3.00	6.00		
~ ~					Intermediate Alge			(5.00)		0.00		
	E1		FCS2	N/FOOD 11	-		В	3.00		9.00		
			SEMES	TER TOTAL	WINC:	8.00		6.00	6.00	15.00	2.50	
			CUMUL	ATIVE TOTALS	WINC:	8.00		6.00	6.00	15.00	2.50	
					Spi	ring Semeste	r 2014					
					Writing the Colle			(3.00)				
	C2		SPAN2	SPAN 1	Elementary Spanis	h I			4.00	12.00		
LB	A1	1C		COMS 1	Public Speaking		I	(3.00)				
			SEMES	TER TOTAL	WINC:	6.00		4.00	4.00	12.00	3.00	
			CUMUL	ATIVE TOTALS	S WINC:	14.00		10.00	10.00	27.00	2.70	
					Fal	ll Semester	2014					
					Digital Art			(3.00)				
	E2				Weight Training							
С	E1			С Н 1	Persnl/Communty H	ealth Issue	В	3.00	3.00	9.00		
			SEMES	TER TOTAL	WINC:	4.00		3.00	3.00	9.00	3.00	
			CUMUL	ATIVE TOTALS	S WINC:	18.00		13.00	13.00	36.00	2.77	

EL CAMINO COLLEGE

TRANSCRIPT

DOB: 09/19/92

High School: Brave High School 2013

ECC GE	CSU GE	UC GE	CAN NO.	COURSE NUMBER	COURSE TITLE	GRADE	UNITS ATTEMPTED	UNITS COMPLETED	GRADE POINTS	GPA	FTNOTE
					Spring Seme	ster 2014					
				ENGL A	Writing the College Essay		3.00	3.00	6.00		
	C2		SPAN2	SPAN 1	Elementary Spanish I	C	4.00	4.00	8.00		
LB	A1	1C		COMS 1	Public Speaking	W	(3.00)				
			SEMES	TER TOTAL	WINC: 3.00		7.00	7.00	14.00	2.00	
			CUMUL	ATIVE TOTALS	S WINC: 3.00		7.00	7.00	14.00	2.00	
					Fall Semest	er 2014					
				ART 141	Digital Art	D	3.00	3.00	3.00		
				MATH 73	Intermediate Algebra Gen	Ed W	(5.00)				
С	E1			С Н 1	Persnl/Communty Health Is	sue C	3.00	3.00	6.00		
			SEMES	TER TOTAL	WINC: 5.00		6.00	6.00	9.00	1.50	
			CUMUL	ATIVE TOTALS	WINC: 8.00		13.00	13.00	23.00	1.77	

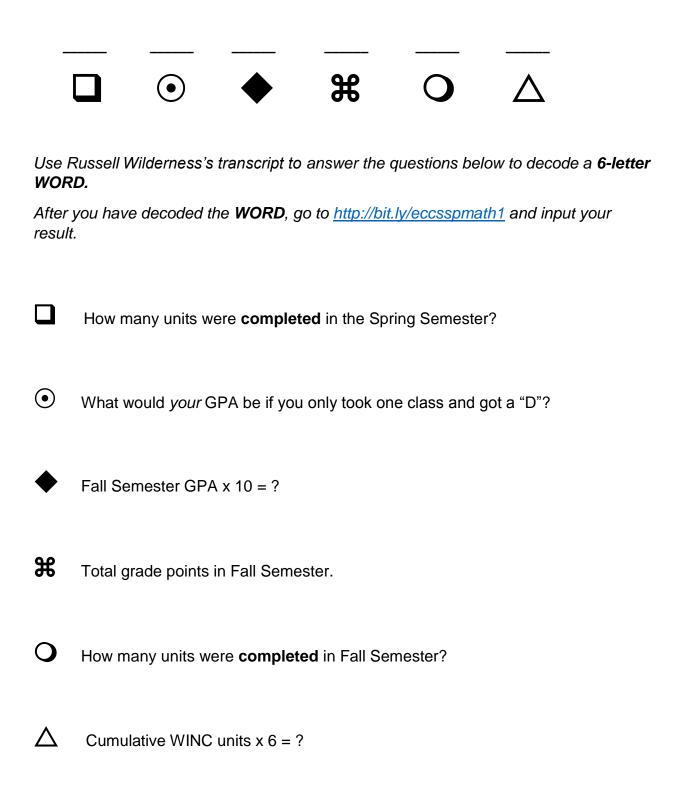
You had no W, I, NP, or NC courses in the next semester

Name: Merida Archer

You got Bs in all three classes in the next semester, raising your cumulative GPA to 2.32

Next Semester's Grades: ECON 5 (3 units): C ENGL 1A (4 units): C MATH 12 (3 units): D

С





Student Success Program Workshop Post-Game Survey

1.	How many hours do you play games each week?
2.	How much did you enjoy participating in this workshop? (1 = low, 10 = high)
3.	Do you think you learned better or worse from the games than you would have from a traditional (lecture-based) workshop?
4.	Which game did you like the most (Transcript Game, Card Grab Game, or Exit Game)? Why?
5.	Which game did you like the least? Why?
6.	How can any of the games be improved?
7.	Additional comments

HOURS SPENT PLAYING GAMES PER WEEK	ENJOYMENT OF WORKSHOP	LEARNED BETTER OR WORSE IN GAME VERSION THAN TRADITIONAL WORKSHOP	FAVORITE GAME	LEAST FAVORITE GAME	HOW CAN GAMES BE IMPROVED		COMMENT (calculation) 1 = positive 0 = neutral -1 = negative	DATE	NOTES
10 4-5	10 8	Better Better	Exit game - loved the puzzles Exit game	Slap game (second part)	Transcript game Add timer to slap game	Enjoyed welcoming environment, better than expected.	1	5/19/2016 5/19/2016	
56 0	10 7	Better Better	Academic probation pong Exit game - loves puzzles	Slap game (should lose points for not choosing) Transcript game		All the games were solid	1	5/19/2016 5/19/2016	
0	8	Better	Academic probation pong - felt very engaged	Transcript game	They were good			5/19/2016	
1	8	Better	Exit game - enjoyed the teamwork	Transcript game - shouldn't be first game	Explaining games better	I actually paid attention	1	5/19/2016	
6	10	Better	Card grab game	None, all were enjoyable and challenging	More people			5/31/2016	
50	8	Better	Card grab game - it's competitive	Exit game - too much work		Game style forced me to pay attention	1	5/31/2016	
1	10	Better	Transcript game - helps me understand my transcript	Exit game		I learn better with games	1	5/31/2016	
9-10	9	Better	Exit game	Transcript	More exit game types	It's a great way to get it to stick without making us feel ashamed	1	5/31/2016	
1-2	10	Better	Exit game was the best	Team vs team- didn't understand all the rules until the middle of the game	Clearer picture prints on puzzle	The games challenged me to actually think of an answer	1	5/31/2016	
0	8	Better	Card grab game	Exit game - long process	Everything was interesting	Hands on, engages the students, it was fun	1	5/31/2016	
0	5	Worse	Transcript game - it related to what we needed to learn	Exit game - too many steps, relied on material not easily available	Fewer steps	Games should clearly relate to what we are supposed to gain	-1	5/31/2016	
1 0	8 9	Better Better	Card grab game Exit game	Transcript game got hard Liked them all	They were great They're great			5/31/2016 5/31/2016	
0	9	Way Better	Transcript games	Card grab- not enough time, need our own sheets		This forced me to understand what all the numbers meant on my transcript	1	6/20/2016	
5	5	Better	Transcript game - because it taught me the most	Exit game - too long	More extensive description			6/20/2016	
0	10	Better	Card grab game because i'm a physical competitor	I liked all of them	No improvements	I learn better with games; This was more interesting than a lecture	1	6/20/2016	
0	5	Better	Card game	Filling blanks in paragraph	More time to study material			6/20/2016	
10	8	Better	Exit game - participants can put their own spin on the lecture	Card grab - too much info, switch multiple choice to transcript game		Hands-on learning allowed me to help me remember quickly; Workshop enjoyment 10 if not mandatory	1		From ECC Survey
	8.25					I learned how to read a transcript How to read a transcript I learned the difference between academic and progress probation and	1 1		From ECC Survey From ECC Survey
						dismissal How to read a transcript Learned how to read a transcript The workshop was up to on what I	1 1 1	5/19/2016 5/19/2016	From ECC Survey From ECC Survey From ECC Survey
						needed to learn Learned the difference between	1		From ECC Survey
						academic and progress probation Knowing the difference between	1		From ECC Survey
						academic and progress probation The proper definition of academic and progress probation; It was a great	1	5/30/2016	From ECC Survey
						workshop Learned about the different		5/30/2016	From ECC Survey
						probations I learned the locations and times I can	1	5/30/2016	From ECC Survey
						go to tutoring How to recognize progress and	1	5/30/2016	From ECC Survey
						academic probation; It helps us get involved I learned the different levels and how	1	5/30/2016	From ECC Survey
						to get off them More visual instruction before	1	5/30/2016	From ECC Survey
						gameplay	-1	5/30/2016	From ECC Survey

Learned now to determine different levels of probation How to read a transcript properly and what academic/progress probation is; You guys are on track!	1		From ECC Survey
what academic/progress probation is;	32 30 0	6/20/2016	From ECC Survey
·	1	6/20/2016	From ECC Survey From ECC Survey
How to properly read a transcript and determine what type of probation I'm on and why How to read the transcript; I like the	1		From ECC Survey
The different tutoring options; Everything was great - very hands on	1	5/30/2016	From ECC Survey