

“An Evaluation of Experiential Learning in the CSUEB Personal Finance Classes”

David Murray and Joan Sieber

Acknowledgment: The authors thank Dr. Bruce E. Trumbo for useful conversations during the design of this study, and for his statistical analysis (using Minitab statistical software) to produce the tables, charts, and power computation of this section.

I. Summary

The purpose of the PEIL project was to assess the impact of experiential learning in the CSUEB personal finance classes.

We hypothesized that student participation in experiential learning activities would lead to higher levels of comprehension and better reasoning abilities for personal finance topics. We hypothesized that the mentoring activities of the experiential learning group students would lead them to learn the personal finance material better, improve their personal finance reasoning abilities, and become more skilled in the application of personal finance concepts in a variety of situations.

Our hypothesis followed on several studies that suggested experiential learning would be beneficial to the participating CSUEB students.

However, an analysis of the improvements in personal finance knowledge and skills over the quarter showed no statistically significant difference in achievement between the student experiential learning group and student control group. We could not conclude that experiential learning led to higher levels of personal finance subject comprehension and a better ability to apply and use personal finance skills.

However, in addition to a statistical analysis of quantitative assessment questions, the study group also undertook a series of qualitative interviews, in which students subjectively evaluated their experiences.

The students participating in the experiential learning mentoring rated that experience as important to their personal and professional development, - particularly for the communications skills, listening skills, and mentoring/coaching skills that they acquired during the experience.

Students in both the experiential learning group and the control group reported that they found the course relevant for their future success, and appreciated the real-life interactive teaching in class and the practical homework assignments.

The PEIL study team suggests three areas that might be production for further study:

- 1) A more thorough and quantitative assessment of the specific professionalism, communications, and management skills that were acquired by the experiential learning students.
- 2) A follow-up assessment of the subsequent hypothesis that students focus on the personal finance knowledge and skills that are of particular relevance to their own individual experience at the time, and to avoid disasters, and “file away” the other knowledge and skills that will be useful further down the road in their adult experience.
- 3) A study of ways to address the several students whose personal finance comprehension and skills did not improve as much as they should have.

II. Rationale for the CSUEB Personal Finance Class

The facts on the state of financial literacy in the US are been striking.

- The outstanding student loan debt of over \$1 trillion exceeds the amount of credit card debt. (Personal Finance: Turning Money into Wealth (6e). 2013. Keown, Arthur J. Pearson Education, Upper Saddle River, NJ. p. 221) The magnitude of student debt is considered a serious drag on the US economy (New York Federal Reserve Bank <http://libertystreeteconomics.newyorkfed.org/2013/04/young-student-loan-borrowers-retreat-from-housing-and-auto-markets.html#.VbAau3g9W24> , also <http://www.nytimes.com/2013/03/10/opinion/sunday/student-debt-and-the-economy.html? r=0>
- About one sixth of all student loans are current in default, and the amount of student loans in default is more than the combined annual tuition of all the campuses in the US. (The Missing Link: From College to Career and Beyond: Personal Financial Management (4e) Selinger, Fred. 2013. Pearson Education, Upper Saddle River, NJ. p.199) The average amount owed by a college graduate with student loans is \$28,400 (US News and World Report 11/13/14 <http://www.usnews.com/news/articles/2014/11/13/average-student-loan-debt-hits-30-000>).
- And yet, less than 50% of 22-to-29 year olds even work out a budget to help them manage their expenses. (Personal Finance: Turning Money into Wealth (6e). 2013. Keown, Arthur J. Pearson Education, Upper Saddle River, NJ. p. 33) About half of Americans have trouble meeting their monthly expenses (Financial

- Capability in the United States,” Financial Industry Regulatory Authority/U.S. Department of Treasury, 2009).
- Over 50% of divorces are estimated to be over financial problems (The Missing Link: From College to Career and Beyond: Personal Financial Management (4e) Selinger, Fred. 2013. Pearson Education, Upper Saddle River, NJ. , p. 126).
 - About 12% of Americans are unbanked, meaning that they have no checking account; and the unbanked population is disproportionately African-American and Hispanic (Financial Capability in the United States,” Financial Industry Regulatory Authority/U.S. Department of Treasury, 2009).
 - More Americans filed for bankruptcy than graduated from college (Bankruptcy: 2010 US Court system; Graduates 2010 Census, 2009 data as reported in the video <http://www.thelivingbalancesheet.com/financialbalance>)
 - Over 60% of college seniors have 4 or more credit cards (Personal Finance: Turning Money into Wealth (6e). 2013. Keown, Arthur J. Pearson Education, Upper Saddle River, NJ. P. 181.). Only 17% pay off all of their outstanding credit card balances themselves each month (11 Personal Finance: Turning Money into Wealth (6e). 2013. Keown, Arthur J. Pearson Education, Upper Saddle River, NJ. P. 184.). Few know the financial impact of having a low credit score (12 <https://www.savvymoney.com/debt-blog/article/millennials-lack-financial-literacy/>, retrieved 4-24-13; <http://usatoday30.usatoday.com/money/perfi/basics/story/2012-04-23/millennials-financial-knowledge/54494856/1> Less than 50% of college students budget (13 Personal Finance: Turning Money into Wealth (6e). 2013. Keown, Arthur J. Pearson Education, Upper Saddle River, NJ. P. 37.).
 - Studies have shown that students who have taken a financial literacy class in college are more likely to graduate (The report "Young Adults' Financial Capability: Arizona Pathways to Life Success for University Students," also contains the second wave of results from a longitudinal study that followed a group of about 2,000 students from their freshman year at the University of Arizona. See also: <http://chronicle.com/article/Financial-Literacy-Training/128848/>) Improving financial literacy is considered by some to be an imperative for the future of our nation (17 <http://usatoday30.usatoday.com/money/perfi/basics/story/2012-04-23/millennials-financial-knowledge/54494856/1>

The personal finance class (FIN 2300, Personal Financial Management) was started in the 2013 Fall Quarter. Those taking the course received CSUEB General Education credits in Quantitative Reasoning and Social Science.

The course description and student learning objectives for the course are included in Appendix A. In general, the course was designed to give college students a solid foundation in personal financial management skills as they enter the academic and professional world, to assist them in making good financial choices and decisions. In the

personal finance course, students are specifically expected to be able to: a) Construct and manage their personal household budget; b) Construct an appropriate credit card and debt management plan; c) Correct their credit report and improve their credit score; d) Design their savings plan, and practice using money wisely; e) Design an investment plan, using the appropriate investment instruments; e) Design an appropriate student loan management plan; f) Identify the conditions under which one would rent or buy a home, or rent an apartment; g) Describe the conditions under which one would buy a car, and describe an appropriate negotiating strategy; h) Design their insurance plan (auto, home, renter's, disability, life) in the context of your overall financial plan; i) Design a health insurance plan in accordance with the new federal health care law and the new Covered California guidelines; and j) Describe the key elements that make a business successful and develop a business plan.

A majority of the students taking the classes have been Freshmen and Sophomores, from a wide variety of majors, including Theatre Arts, Criminal Justice, Ethnic Studies, Psychology, Nursing, Environmental Studies, Political Science, Mathematics, Geography, Hospitality and Tourism, Speech Pathology, Human Development, Pre-Business, Ethnic Studies, Art, Economics, History, Kinesiology, International Studies, Computer Science, Biological Science, Sociology, Engineering, Music, and Health Sciences.

While one cannot predict the composition of future classes, a fact reinforcing the importance of the personal finance course is that CSUEB students may be more financially vulnerable than the average American university population.

In 2012-13, 79% of CSUEB college freshmen reported a family income of less than 80% of the median income of the Oakland-Fremont-Hayward statistical area; 84% of freshmen qualified for financial aid and 51% qualified for Pell Grants (CSUEB report data, via Susan Wageman, February 2013)

III. Rationale for, and Circumstances of, the CSUEB Experiential Learning Assessment

Students who enrolled in FIN 2300 courses since 2013 have been deeply involved and enthusiastic about the course (as reflected in instructor observations and in the quarterly course reviews administered by the University). However, as observed by instructors, surprisingly the students also seemed to score lower than expected on basic personal finance knowledge and personal problem solving skills.

The authors considered factors that may underlie this poor performance. These may include: a) a very basic lack of financial literacy upon entering the class; b) lack of mathematical skills needed to understand concepts such as compound interest; c) a lack of practice at concepts such as budgeting and financial planning, and d) lack of opportunity to explore financial literacy concepts out of class.

The authors became interested in testing experiential learning activities in the personal finance class. One of the authors (Murray) personally observed the benefits of experiential learning in a different finance class. Also, published studies pointed in this direction. For example, the studies state: “Students who are more civically engaged perform better in reading, mathematics, history and science, and are more apt to complete high school..” (Davila and Mora (2007) “Civic Engagement and High School Academic Progress: An Analysis Using NELS Data” quoted from National Youth Leadership Council research summary

<http://www.nylc.org/sites/nylc.org/files/SLResearchSummary.pdf>)

“Low socio-economic status students who participated in (high school) service scored higher in achievement, motivation, grades, bonding in school, and attendance...” (Scales et al (2006) “The effects of service learning on middle school students’ social responsibility and academic success” as quoted from National Youth Leadership Council research summary <http://www.nylc.org/sites/nylc.org/files/SLResearchSummary.pdf>)

“On a statewide survey of federally funded Learn and Serve (high) schools in Florida (Follman & Muldoon, 1997), 74% of reporting schools indicated that student grades had improved, 68% reported a decline in disciplinary referrals, and 62% noted decreased absences. Impacts on academic outcomes were even more positive in schools with a high percentage of at-risk students” (Quoted from research summary: <http://www.nylc.org/sites/nylc.org/files/SLResearchSummary.pdf>)

At CSUEB, through a contact with one of the authors (Sieber), an opportunity arose to collaborate on an experiential learning project with Mt. Eden High School, a nearby local high school also in Hayward. A workshop program at the high school was arranged where a CSUEB instructor would organize 4 weekly personal finance lesson workshops in 2 high school civics classes at Mt. Eden High School. In the workshops, the CSUEB instructor would send materials in advance to the high school. The instructor would be a brief introduction and overview, and then the high school students in teams of 3 students would figure out the answers to a number of topic questions, and then work through real life situations. In solving these problems, each team of three high school students would be joined by a CSUEB college student mentor, concurrently in the CSUEB personal finance class. The CSUEB students would coach the high school students in working through the assigned personal finance questions in their small groups.

The topics covered in the workshops were: developing, tracking, and managing your budget; selecting a bank; saving money; selecting a credit card; managing your credit and debt, and correcting your credit report and improving your credit score; financing college, and student loans; and buying a car and successful negotiation strategies. By the time the workshops began, the CSUEB students had learned and completed a midterm on most of the topics; the other mentoring topics were covered at CSUEB before being discussed at Mt. Eden HS.

This chance for CSUEB students to mentor high school students in personal finance seem to address the needs of CSUEB students and community members to manage their personal finances more effectively.

It also gave the authors an opportunity the need to better understand the dynamics of experiential learning. At the heart of this project are two related questions: 1) When students teach others the material they are learning, is their own learning and motivation are reinforced? and 2) Does an inherent reward of giving back to society further reinforces their valuing of what they are learning?

IV. Research Hypothesis and Research Methodology

Assessment of the CSUEB student mentoring of high school students and Mt. Eden HS would assess the impact of experiential learning participation on students enrolled in a course on personal finance.

The authors hypothesized that student participation in experiential learning programs mentoring basic financial literacy concepts to high school students will lead to CSUEB students achieving higher levels of comprehension and better reasoning ability about the management of their personal finances, relative to a control group of CSUEB students enrolled in the course.

Two Fall 2014 personal finance classes were identified. Both classes at CSUEB were taught in an almost identical manner, by the same instructor, both emphasizing real life cases and assignments, and class interaction. The only difference was that one section class was identified as a *control* group, and the other class section participated in the mentoring at Mt. Eden High Schools.

For the research design, the authors determined to measure personal finance knowledge and reasoning at *week 4* of the quarter (prior to the mentoring activities and after most of the topics had already been covered) and at *week 11* (after completion of the mentoring and the CSUEB personal finance course) and compare the improvement in assessment scores between the experiential learning student group and the control group. The approach for analyzing the data used standard protocol for statistical data analysis of experimental data

In addition to this knowledge and reasoning assessment, the authors planned to select 15 or more students from the experiential learning and control groups for in-depth interviews to get anecdotal evidence on attitudes concerning life objectives, short and long term financial planning, etc. If the authors that some specific students may have particularly interesting stories to tell, a few of them might be purposely selected for interview, if they are not among those chosen at random. There was to be no statistical analysis of the qualitative interview results.

In the signed agreements, students were to be compensated for their participation in the study, for mentoring, and for participating in a follow-up survey in the Spring 2015 quarter.

The combination of results from the quantitative assessment data analyses and the open-ended in-depth interviews was intended to provide a detailed sense of the dynamics of the experiential learning and the extent to which it benefitted the students.

Quite apart from the degree to which experiential learning may have enhanced students' knowledge of personal finance, is the way it influences their attitudes and behavior, both in regard to the management of their personal finances, in their relationship to others, and the extent to which it helps them in their future professional careers.

"Hard data" of course are the gold standard in applied research such as this. However, what is learned from the interviews of many of the experiential learning students and the control group students is important. The authors expected that the wise integration of "soft" and "hard" data could be vital to the successful dissemination of what is learned and to the development of subsequent research agendas on the topic of experiential learning.

V. Statistical results and analysis of comparisons of student improvements in knowledge and skills/reasoning abilities between the experiential learning group students and the control group students

Our hypothesis was that for the CSUEB personal finance classes, student participation in experiential learning mentoring activities would naturally lead to higher levels of comprehension and better reasoning abilities.

To measure comprehension and reasoning abilities we used a set of 35 assessment questions. These 35 questions were culled from quizzes and exams over the past two years, as questions where past student correct answers seemed to be positively correlated with student mastery of personal finance topics knowledge and reasoning skills.

The 35 questions were imbedded within the larger set of questions contained within the first midterm administered in week 4 of the quarter, to both the experiential learning and control group students.

By week 4, the majority of the topics covered in the experiential learning mentoring activities had been covered (for example budgeting, banking, and the use and

management of credit). The mentoring experiential learning activities began shortly after this first midterm.

The same 35 questions were also then later imbedded within the larger set of questions in the final exam of the quarter administered in week 11.

In our hypothesis, we expected the experiential learning students to show a greater improvement – from the first midterm to the final – on their scores on the 35 assessment questions as compared to the students in the control group. With the experiential learning students’ mentoring preparation and practice, we expected that these students would have higher levels of comprehension and better reasoning abilities.

However, as the following tables and charts show, in comparing the improvement in comprehension and reasoning abilities as measured by the 35 assessment questions, there was no statistically significant difference in improvement between the students in the experiential learning group (designated “1” in the tables) and the students in the control group (designated “0” in the tables).

Table 1: Total Improvement in 35 Question Assessment Scores from Week 4 to Week 11: Two-sample t-test comparing Group 0 (Control) and Group 1 (Experimental), with confidence intervals

Two-sample T for TotImp

TotGrp	N	Mean	StDev	SE Mean
0	23	4.17	3.65	0.76
1	42	4.45	4.32	0.67

Difference = mu (0) - mu (1)

Estimate for difference: -0.28

95% CI for difference: (-2.31, 1.75)

T-Test of difference = 0 (vs not =):

T-Value = -0.28 P-Value = 0.784 DF = 52

For the data in Table 1, the P-value is 0.78, and the confidence interval for the difference in improvement scores includes 0. (Each of the rows in the table for "TotGrp 0" and "TotGrp 1" shows the population size, mean, standard deviation and error mean for the student control group. A One-way ANOVA assessment confirms these results with an equivalent p-value of 0.79.

Chart 1: Total 35 Question Assessment Score Improvement for Each Subject Student in the Experiential Learning Group (designated “1”) and the Control Group (designated “0”), Between the Early (Week 4) Assessment and the Late (Week 11) Assessment

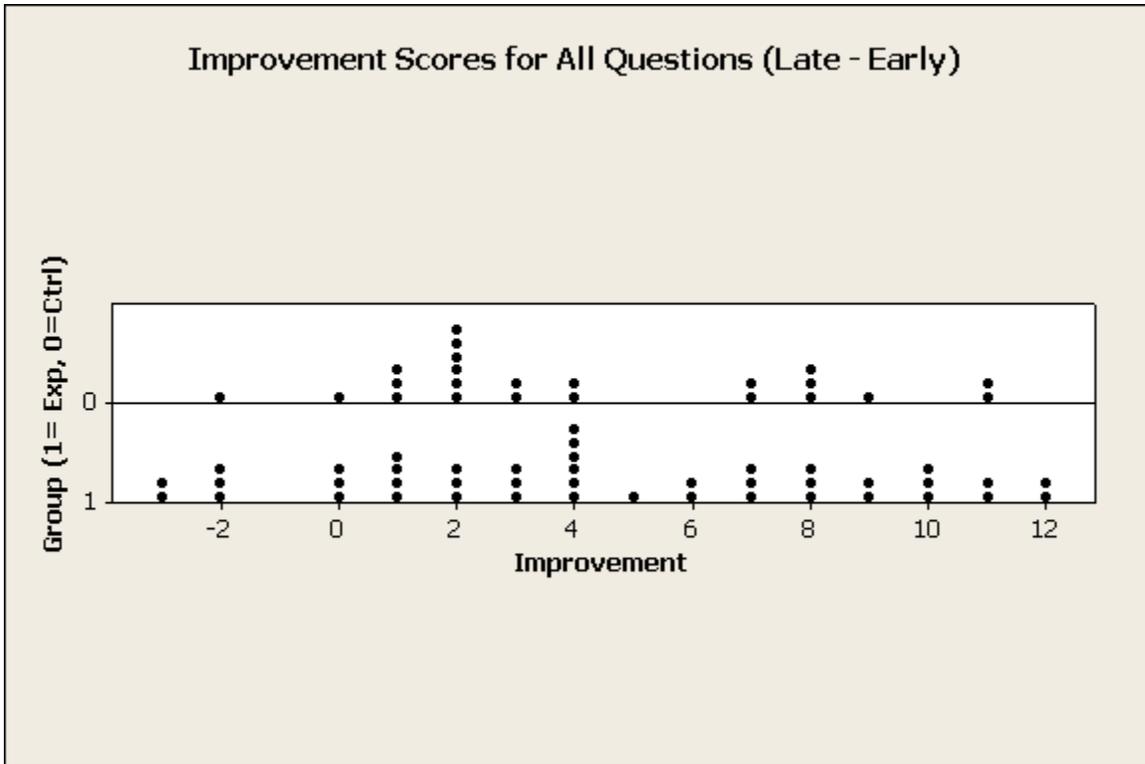


Chart 1 shows the wide range of total assessment score improvements by individual students, with a number of students showing no improvement, or receiving a lower score, between the early assessment (in week 4) and the late assessment (in week 11).

Also, for the tests based only on the specific topics covered in the mentoring at Mt. Eden High School, in comparing the improvement in those specific topics covered there was similarly no significant statistical difference in the assessment score improvements between the students participating in the experiential learning activities and the students in the control group, as shown in Table 2, and Chart 2.

These tests shown Table 2 and Chart 2 covered only the 16 assessment questions that were related to the topics covered in the mentoring at Mt. Eden HS.

Table 2: Mentoring Topic Improvement in Assessment Scores from Week 4 to Week 11: Two-sample t-test and confidence intervals

Two-sample T for MentImp

MentGrp	N	Mean	StDev	SE Mean
0	23	0.35	2.12	0.44
1	42	0.69	2.49	0.38

Difference = mu (0) - mu (1)

Estimate for difference: -0.343

95% CI for difference: (-1.520, 0.835)

T-Test of difference = 0 (vs not =):

T-Value = -0.58 P-Value = 0.562 DF = 51

For the data in Table 3 The P-value is 0.56, and the Confidence Interval for the difference in mentoring topic improvement scores, between the experiential learning group and the control group, includes 0. (The row in the table for “MentGrp 0” shows the population size, mean, standard deviation and error mean for the student control group; the row in the table for “MentGrp 1” shows population size, mean, standard deviation and error mean the student control group.) A One-way ANOVA assessment confirms these results with an equivalent P-value of 0.58.

Chart 2: Mentoring Topic Assessment Score Improvement for Each Subject Student in the Experiential Learning Group (1) and the Control Group (0) Between the Early (Week 4) Assessment and the Late (Week 11) Assessment

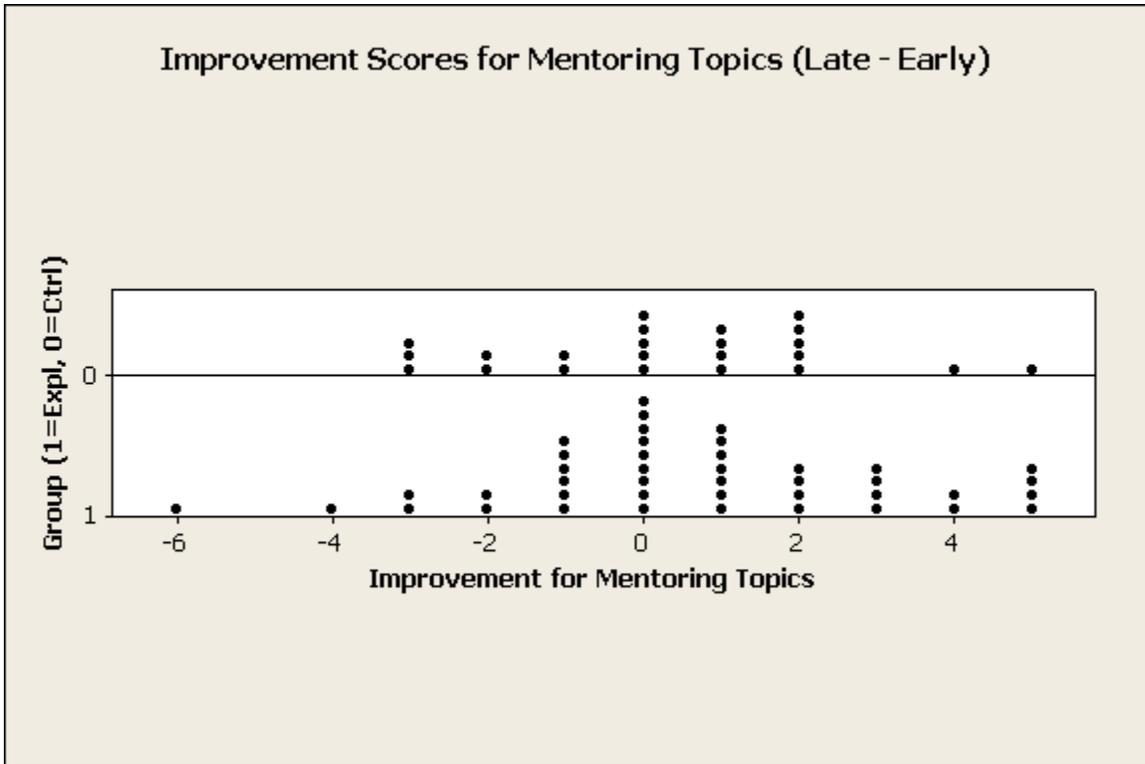
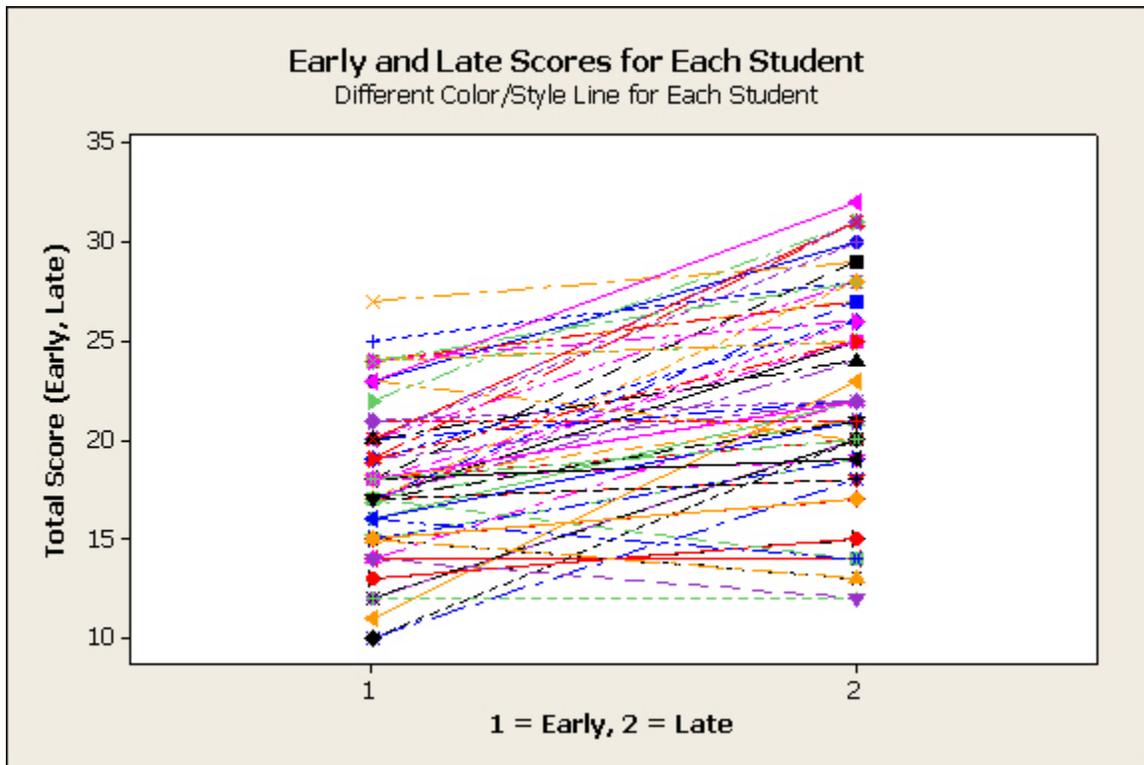


Chart 2 also shows the wide range total assessment score improvements by individual students, with a number of students showing no improvement, or receiving a lower score, between the Early assessment (in week 4) and the Late assessment (in week 11).

Technically, there were 2 experiential learning student populations. Most experiential learning students mentored at Mt. Eden HS. For those students whose work or family schedules did not permit mentoring at Mt. Eden HS, or for another personal reason, an alternative experiential learning option was developed that involved research and topic presentation at the CSUEB library, and answering questions from the attendees at their panel presentation. In the statistical analysis, there was similarly no significant difference (P-value 0.862) in improvements on the mentoring question between the specific students who participated in the mentoring at Mt. Eden HS only and the control group.

Chart 3 shows that student scores generally improved noticeably between the early and late evaluations, in both the experiential learning and the control student groups. Though, statistically we were not able to disprove our null hypothesis – that there is no significant difference in improvements in personal finance knowledge and skills between the experiential learning and control group – there was general improvement by most students between the Early and Late assessments.



Power Analysis. One potential issue is that the 35 questions may not have been as powerful as assessment tool as possible. However, given the same sample size and standard deviation, the difference in mean improvement differences between groups may have to be about 10 times as large as observed in our study for a statistically significant result. Moreover, given the observed improvement differences and standard deviations, the sample size would have needed to be about 3,000 students in each group (compared with the sample sizes in the study: 42 students in the experiential learning section, and 23 students in the control section agreeing to participate in the study).

Perhaps a conclusion from the power analysis for any future study is that unless the measured effect is larger (or perhaps a different more effective assessment tool is developed), researchers may be unlikely to find a statistical difference.

Several Related Observations

As a sidebar: (a) There does not appear to be any evidence of a selection bias. A permutation test was done (with about the same P-value as the study t-tests), showing that there were no significant differences between male and female students. (b) Also, and there were no significant statistical differences in scores between the various exam versions (with the same questions listed in different orders).

Variance Analysis. (c) The data for both the experiential learning and the control group show a number of students for which assessment scores were the same, or lower, between the Early assessment and the Late assessment. This was not expected.

VI. Qualitative Value of Experiential Learning as Self-Assessed by Students

Students were interviewed by Dr. Joan Sieber at the completion of the fall 2014 quarter. Transcripts are included as Attachment B. Though not as many students were interviewed as were originally intended, the students indicated a positive experience in the classes, and valued the experiential learning activities.

Experiential learning students also participated in weekly debrief, problem solving, and sharing of successful mentoring techniques with Mr. Murray.

Some of the recommendations from students during the interviews regarding experiential learning are:

- Be sure that the CSUEB students understand why they are doing experiential learning and what the objectives of the experiential learning activities are.
- Make sure the CSUEB students are “bought in” to the experiential learning, and are not “just doing it for a grade”. CSUEB students must be prepared, for mentoring and for the specific topics covered that day – the high school students rely on their CSUEB mentors – though it is not necessary to be perfectly able to answer all questions in advance.
- Work with other CSUEB experiential learning students to pool expertise when a second opinion is necessary – the high school students also like to see you interact with your peers.
- Stress the importance of CSUEB student professionalism; for mentoring they must be punctual, behave and speak appropriately, and be good role models.
- For the high school mentoring, spend additional time in advance for the high school students and their CSUEB mentor to get to know each other better professionally.
- For the mentoring, it is also important to reserve free time for the high school students to get answers to their questions about college from their CSUEB mentors.
- Make sure the host institution coordinates well in advance, and is a good partner.
- Consideration of, and coordination with, CSUEB student commutes and school and work schedules is important. For example, some students have long commutes and are only on campus a few days a week.

Experiential Learning students also reported a value for their future careers. Comments (some paraphrased slightly) included:

- Experiential learning enabled the acquisition of communications skills: listening skills, helping others to articulate their issues and questions, and being able to manage group dynamics and individual behaviors
- Experience enabled discovery that work is best when you are able to teach and help. In my future career I can do this with others, - teach, manage, mentor.
- I may be a teacher, and this helped me know what it's like to be a teacher, and to be more understanding. I learned what it means to work with students to help them learn.
- It enabled me to be more transparent in my leadership – I was able to tell them how I messed up and how they can avoid making the same mistakes. I learned others appreciate this.
- It gave me self-confidence in working with others, which is useful for a career.
- It helped me get out of my shell and learn to speak with people.
- It made me more interested in helping people, and working with the community. I would like to volunteer more.
- I liked being able to help people. I learned how to coach people to discover the answers for themselves.
- I liked being able to help people correct their prior misconceived notions, to help them apply the concepts to benefit themselves.
- It firmed up my specific career plans.
- It helped me focus on learning how to teach. It was really a career development activity for me.
- It made me want to volunteer more in my community

CSUEB training elements that may have contributed to the acquisition of the professional skills reported by the experiential learning students:

A. Mentoring Code of Conduct

The PEIL team was not able to find a comprehensive code of conduct for college students mentoring at a high school. By patching together several recommended high school Volunteer Requirement documents and several agreement requirements for Student Teachers, a specific Code of Conduct was developed for the CSUEB student mentors, which may have contributed to the learning of professional behavior and standards. The Code of Conduct is included in Appendix C.

B. Specific Mentoring Training

The PEIL team trained the CSUEB student mentors in class. The training had three main components:

- Dr. Lettier Ramirez (Professor, Teacher Education Department) gave a presentation on the Hayward Unified School district, student demographics, school community, role of teachers, role of mentors, criteria for CSUEB participation, CSUEB student responsibilities, what mentors do and what they can accomplish. (Powerpoint slides attached as Appendix D)
- Dr. Joan Sieber (Professor Emeritus, Psychology Department) gave a presentation on communication approaches, and explained techniques and approaches for success in achieving classroom goals. She covered being a professional authority figure (not a friend), improvised mentoring/coaching concepts, coaching without giving away answer, coping with teenager attitudes and viewpoints in communicating personal finance ideas, and coping with unexpected changes in the classroom.
- Mr. David Murray (Adjunct Lecturer, Finance and Economics Departments) then led the class in dividing up into groups, and practicing verbal and non-verbal interventions for dealing with a variety of high school student off-task behaviors, that the mentors may face at Mt. Eden HS. In this part of the training, CSUEB students also practiced revising mentoring statements to make them positive, specific, concrete, observable, and as appropriate, sequential. The CSUEB students also practiced rewriting negatively framed comments to make them positively framed. CSUEB students also listed one situation where they are vulnerable to losing their cool, and scripted a calm and poised comment that they might use in response instead.

C. Mentoring Feedback

At the request of the PEIL Oversight Committee, time was set aside after each mentoring session to review together what worked, what didn't work well, and develop recommendations for improvement for the next session. The feedback sessions were candid, constructive, and resulted in continual improvement in the mentoring sessions at Mt. Eden High School, in terms of problem solving, organization, coordination, and mentoring tips.

D. Contractual Responsibilities Associated with the Experiential Learning Activities

Students participating in the mentoring at Mt. Eden HS had to be at the classroom on time, be professionally dressed, be alert and without a cellphone, be an authority figure, be knowledgeable, and use professional teaching and mentoring skills.

In addition, there were certain processes to accomplish and a number of documents to understand and to sign. For volunteering at Mt. Eden HS, students needed to complete and turn in a District application form, arrange for fingerprinting and a TB test (paid for by the University). Forms included an agreement to participate in experiential learning, an agreement to participate (or not) in the PEIL study, an agreement to abide by the Code of Conduct, filling out an online experiential learning form, and completing an off-campus activity waiver form. A majority of the students in the personal finance class were freshmen, and these contractual obligations necessitated a developed professional maturity.

CSUEB students were compensated for participating in the experiential learning activities and the PEIL study. The compensation for the study was in line with study participation compensation for other CSUEB studies. The compensation for participation in the experiential learning activities at Mt. Eden HS seemed appropriate for students who had to make special commutes or rearrange work schedules to participate.

A number of students were not able to mentor at Mt. Eden HS, and participated in an alternative experiential learning activity. Reasons included work conflicts, child care conflicts, and choices to not have a TB test and fingerprinting. These students researched a personal finance topic, developed a presentation of their topic, and participated in a panel presentation and Q&A/discussion at the CSUEB Library that was open to all interested CSUEB students.

Recommendations for Future Research

- 1. Develop a quantitative assessment for the self-described benefits in professional skill development** described in the student interviews - such as improvements in communication skills, writing skills, collaboration skills, management skills, organizational skills, presentation skills, coaching skills, and general behavioral professionalism. The assessment should include a broad range of students involved.
- 2. Develop an assessment to evaluate the extent to which personal finance knowledge and skill acquisition is “personal”.** Specifically, do students specifically value – and focus on mastering – mainly the finance skills and facts that they can apply right now to their own unique circumstances and experiences? Is it the case that with the other personal finance topics, students are content to avoid disasters for now and file away for later detained knowledge and skills for when they will be used, such as home insurance?
- 3. Develop options and studies to determine if there a better way to reach the several students who did not improve their personal finance comprehension and reasoning abilities during the quarter** CSUEB does not have a comparatively high graduation rate, and a number of classes have several students who stop attending and stop turning in homework during the quarter. Some request a late withdrawal due to work schedule or family obligation conflicts. These students, though, may also benefit from improved personal finance knowledge and skills. Traditional engagement and outreach efforts and online courses have not always been successful.

Conclusion

Our hypothesis was that participating in the experiential learning activities would lead to increased student comprehension and reasoning abilities. However, our quantitative assessment data showed no statistically significant differences in learning improvement between the experiential learning group and the control group.

In interviews, students valued the personal finance class extremely highly, and were very strong supporters of the experiential learning program as being valuable for future professional success.

Appendix A

Course Syllabus:

Syllabus

Personal Financial Management (FIN 2300)

Spring 2015

Mondays and Wednesdays, 10 am - 11:50 am

VBT 137

Course Description: Finance 2300 is designed to give students a solid foundation in personal financial management skills as they enter the academic and professional world, to assist in making good financial choices and decisions. This section also includes an experiential learning component. 4 units. Prerequisites: Entry Level Math.

Student Learning Objectives: By completion of the course, students are expected to be able to:

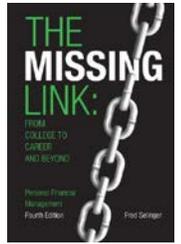
- A) Explain the basic financial literacy concepts that are useful for students moving from high school, to college, and on to their careers
- B) Use these concepts to begin becoming more financially independent and "able to pursue your goals in life"

Within this general context, students are specifically expected to be able to:

- Construct and manage your personal household budget
- Construct an appropriate credit card and debt management plan
- Analyze and improve your credit report and score
- Design your savings plan
- Design an investment plan, using the appropriate investment instruments and vehicles
- Design an appropriate student loan management plan
- Identify the conditions under which one would rent or buy a home
- Describe the conditions in renting an apartment
- Describe the conditions under which one would buy a car
- Design your insurance plan (auto, home, renter's, disability, life) in the context of your overall financial plan
- Design a health insurance plan in accordance with the new federal health care law and the new Covered California guidelines
- Describe the key elements that make a business successful

Note that other learning objectives may be added in response to additions of course-related topics requested by students, or in response to current articles or events.

Textbooks: Required: **1) The Missing Link: from College to Career** (Personal Financial Management, 4e, 2013) by Fred Selinger, Pearson Learning Solutions, Boston, MA. ISBN 1-269-41828-9; and **2) FIN2300-01 Class Reader** (containing checklists and graphics from Personal Finance, Turning Money into Wealth (6e, 2013) by Arthur J. Keown, Pearson Learning Solutions, Boston MA.) To purchase on-line FIN 2300-01 FIN 2300 Reader access, please go to the weblink: http://www.pearsoncustom.com/ca/csueb_fin2300. A lending copy of each text is available at the CSUEB Library Reserve Desk.



Course Materials/Access: Students will need a calculator for projects and exams, and will need a calculator and/or a computer with Excel for assignments. Additional study material requirements will be posted on the Course Materials page of the class Blackboard site.

Topics: Chapter reading assignments from the Selinger textbook are shown with an “S” prefix, reading assignments from the reader have an “R” prefix. Web-based resource links are posted on the class Blackboard site, on the Course materials page. Specific weekly homework assignments and details will be announced in class and will be posted on the class Course Materials page.

Introduction	_____	S chapters 1-2, 6-7
		R p.26 – 35
Budgeting	_____	R p.1 - 15 +web-
		based resources
Using Credit	_____	S chapters 3-4
		R p.36 - 41 +web-
		based resources
Relationships and Money	_____	S chapter 13
Investing	_____	S chapters 8-12, 18-20
		R p.66 - 84 +web-
		based resources
Buying a Car or Home	_____	S chapters 14-15, 22
		R p.50 - 57 +web-
		based resources
Managing Risk with Insurance	_____	S Chapters 16, 23-26

	R p.58 – 65
Student Loans _____	S chapters
5, 7, 21	
	R p.42 – 49 + web-
based resources	
Starting a Business _____	S Chapter
27	
	+ web-
based resources	

Grades: are based on:

Exams: Midterm Exams (2) 20% each, Final Exam 30%. The Midterms are tentatively scheduled for Monday 4/20/15, and Monday 5/11/15. The Final Exam will be given at the date and time specified on the CSUEB website, *tentatively* scheduled for Wednesday 6/10/15 at 9 am. The exams will consist of multiple-choice, short-answer, and essay questions.

Assignments: 24%.

There will be nine weekly homework assignments during the quarter. Eight will count towards the regular class grade. If completed, the ninth homework assignment will count for extra credit. The written and verbal communications evaluation rubric that will be used to evaluate writing and verbal assignments is posted on the class Course Materials page.

Attendance and Participation: 6%

Course grades are assigned on the following overall student scores: $\geq 93\%$ =A, 92%-90%=A-, 89%-86%=B+, 85%-83%=B, 82%-80%=B-, 79%-76%=C+, 75%-73%=C, 72%-70%=C-, 69%-66%=D+, 65%-58%=D, and $\leq 57\%$ =F.

Class Rules:

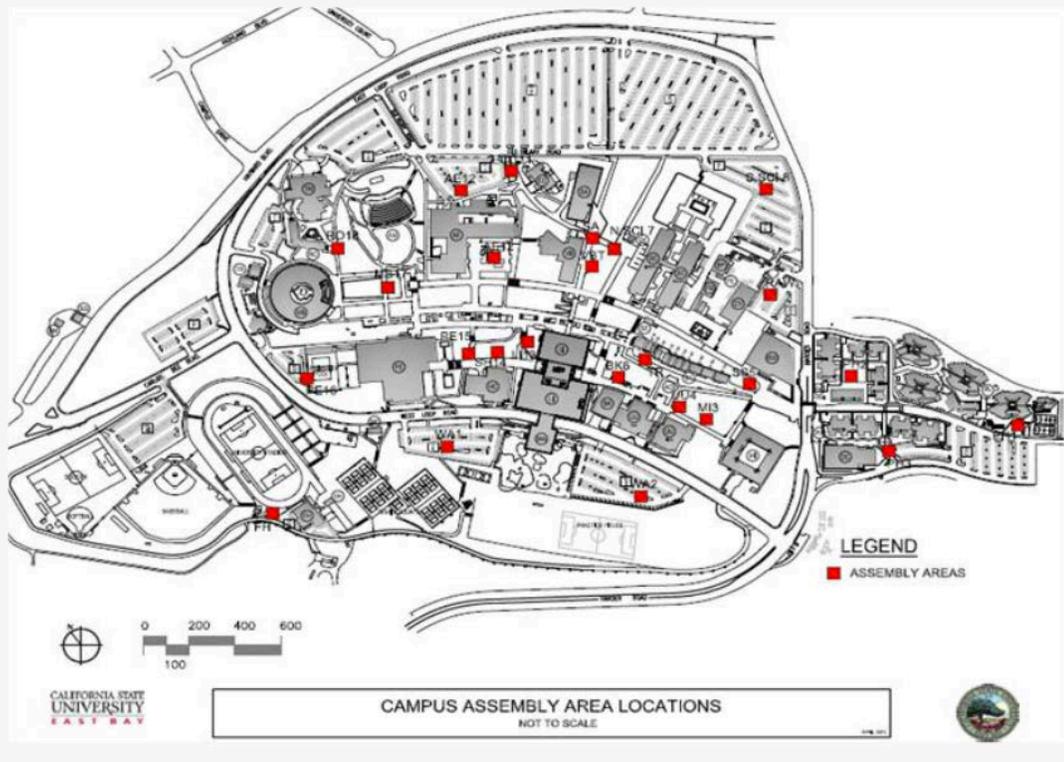
- Students are expected to be prepared for each class session.
- Students are expected to be attentive and to participate in class discussions and class activities. Attendance will be taken throughout the quarter and will count towards the class grade.

- Students are responsible for regularly checking the Blackboard course site and their CSUEB email accounts for assignment clarifications and details and for any class updates.
- There are no make-up exams. In extreme cases, accommodation may be approved by the CBE.
- Prompt make-up homework assignments can be arranged if appropriate accommodation documentation is provided at about the time the assignments are due.
- Grades of incomplete are given in cases of verified emergencies and if 60% of the course work has been completed with a grade of C+ or better.
- Academic honest is expected. Enrolled students agree to grant the DSDJA permission to pursue actions on academic dishonesty incidents. By enrolling in this class students agree to uphold the standards of Academic Integrity described on the CSUEB website at: <http://www20.csueastbay.edu/academic/academic-policies/academic-dishonesty.html>.

Cases of academic dishonesty will result in serious consequences, such as up to and including a grade of F in the class, a letter placed in the student's academic file, and referral for university administrative sanctions.

- Photo IDs are required on the first day of class. Photo IDs are required throughout the quarter and may be periodically checked.
- Bring a green Scantron form, number-two pencils, a calculator, and a photo ID to exams. For exams, typically one page of notes handwritten by the students may be permitted. Electronic translators, programmable calculators (those with alphabetic keyboards), laptops, and cell phones, may not be used on exams. Students may not share calculators on exams.
- Laptops permitted for note-taking and class purposes.
- Cellphones: silent.
- Student writing will be graded according the CBE written communications rubric posted on the Course Materials page.
- CSUEB is committed to being a safe and caring community.
- California State University, East Bay does not discriminate on the basis of sex, gender, or sexual orientation in its education programs or activities. Title IX of the Education Amendments of 1972, and certain other federal and state laws, prohibit discrimination on the basis of sex, gender, or sexual orientation in employment, as well as all education programs and activities operated by the University (both on and off campus), and protect all people regardless of their gender or gender identity from sex discrimination, which includes sexual harassment and sexual violence. <http://www20.csueastbay.edu/af/departments/risk-management/risk/titleix/index.html>
- If a student has a documented disability, and wishes to discuss academic accommodations, or if a student would need assistance in the event of an emergency, the student should contact the instructor as soon as possible. Students with disabilities needing accommodation should also speak with the Accessibility Services department. The Accessibility Services department link is: <http://www20.csueastbay.edu/af/departments/as/>
- Students appropriate responses in the event of an emergency can help save lives. Information on what to do in an emergency situation (earthquake, electrical outage, fire, extreme heat, severe storm, hazardous materials, a terrorist attack) may be found at: http://www.aba.csueastbay.edu/EHS/emergency_mgnt.htm. Please be familiar with these procedures. Information on this webpage is updated as required. Please review the information on a regular basis. Here is a map of the emergency building assembly areas:

Building Assembly Areas



Homework Assignments (tentative)

<u>Assignment</u>		
1. due: 4-8-15	Develop your April budget Select a method to track your budget Complete a budget worksheet	
2. due: 4-15-15	Check your credit report Check your credit score Complete a credit worksheet	
3. due 4-22-15	Complete a worksheet on your budget experience for April, and the actions you've had to take/ adjustments you've made	
4. due 4-29-15	Turn in an essay describing your financial goals and your saving and investment plan for achieving your financial goals; complete time value of money calculation	
5. due: 5-6-15	Turn in a narrative describing your risk tolerance (after completing the worksheet) and corresponding investment choices, and turn in your medium term investment portfolio (google finance)	
6. due: 5-13-15	Complete a loan worksheet, Complete a student loan and repayment plan worksheet	
7. due: 5-20-15	Turn in narrative describing in detail the next vehicle you would like to buy (with the reasons why), and your strategy for getting the best deal on that vehicle	
8. due: 5-27-15	Complete an insurance worksheet (home insurance, car insurance, life insurance, health insurance in the current administrative setting)	
9. due 6-3-15	Turn in the business plan for your proposed enterprise; make a 30-second elevator pitch to a potential investor	

General Education Area B4 – Quantitative Reasoning

Goal Quantitative Reasoning Overview: *Students will demonstrate their ability, in homework and tests, to use college-level mathematical concepts and methods to understand, analyze, and explain issues in quantitative terms.*

Outcome 1 Quantitative Reasoning (Literacy): *Students will demonstrate knowledge of formal mathematical concepts and formulae in homework and on tests as appropriate to the course.*

Outcome 2 Numeracy Skills (Reasoning): *Students will demonstrate, in homework and tests, the ability to manipulate and use theories appropriate to course content, graphically display and interpret quantitative results, and demonstrate the ability to perform basic arithmetic skills.*

Outcome 3 Problem Solving (Thinking): *Students, in homework and on tests, will identify and analyze real or potential problems, apply appropriate quantitative theories, evaluate appropriate quantitative measures, and explain or discuss results in quantitative terms.*

General Education Area D – Social Science

Courses in this area acquaint you with basic principles, methodologies, theoretical problems, and applications in those sciences whose field of study is human behavior in its social environment.

D1-3 Basic Requirements (12 units)

Criteria: Courses fulfilling the Basic Social Science requirements present the fundamental principles and methods of inquiry that are grounded in social science disciplines. Students must take courses from three different departments.

- 1. *Demonstrate, orally and in writing, recognition of the application of disciplinary concepts derived from the social or behavioral sciences in the study of human behavior, individually and in society.***
 - a. State at least two standard or basic theories and models
 - b. Define key disciplinary terms
 - c. Identify professional applications of disciplinary concepts
- 2. *Demonstrate, orally and in writing, recognition of the inquiry methods used by at least one of the social or behavioral science disciplines.***
 - a. Identify key research issues
 - b. Describe how hypotheses or research questions are formed
 - c. List examples of data that are examined
 - d. Describe how data are analyzed
- 3. *Demonstrate, orally and in writing, the ability to describe how human diversity and the diversity of human societies influence our***

understanding of human behavior, individually and in societies, both local and global.

- 4. Demonstrate, orally and in writing, some knowledge of the political, social, and/or economic institutions of a country other than the United States.***

- 5. Demonstrate, orally and in writing, the ability to describe major positions and contrasting arguments made on one or more significant contemporary issue area confronting US society as applied to human behavior.*** (Possible areas include: biomedical and health issues, class, crime, discrimination, education, energy, environment, gender, global economy, immigration, military intervention abroad, poverty, race, technology.)

Appendix B

Interview Transcripts: Experiential Learning group

Student A ??

Student A ** Double Check research authorization !	
Question	Response
Please tell me what you liked or didn't like about your SL experience.	The first day, it was hard getting up that early. But getting to meet the kids was great. I loved working with the students. They were open minded about getting help. They had great questions. I felt I helped them.
What advice would you give to faculty considering adding SL.	I would tell them definitely they should do it. It helps their students learn what they are getting in class. I prepared for 2 days ahead of the class. When I had midterm exams, I didn't have to study as much. When you teach you learn.
Did you learn anything more from teaching than you learned in class?	Definitely. I learned the material much more in-depth because of the preparation , the experience of teaching, and the discussion with the high school students. You learn material differently when you teach it. Besides, I reviewed everything more than I would have done without the SL experience.
What did you think was the best part of working with high school students?	The best was being able to listen to their concerns and give advice. They were very curious about college and about my experience as a college student. I realized I am a role model for them. That felt good.
What advice would you give to students considering doing SL?	Be open-minded and prepared. Students expect you to be prepared; they rally rely on you. Don't worry about being perfectly able to answer all questions. Work with other SL students to network and pool expertise when students have questions where you think a second opinion would be useful. The mentor-to-mentor relationship can generate great teaching resources, and the high school students love seeing you interact with your peers.
How do you think this experience impacted your future employment?	I love business and have plans to open my own business; but also love working with the community. As a manager, I will need good listening skills to understand workers with problems. I also need to help them formulate their questions. I gained skills in the SL with teaching the key points of a new concept.
How could SL be improved?	It would be good to make sure all mentors can get there on time, and introduce them to the people they will mentor at the outset, so that they can connect and bond before they get into working with subject matter concepts.
In summary, how did you like this experience?	I loved it! I enjoy mentoring, helping others get where they want to go. I love helping people get the answers to questions that re important to them.
Student B	
Please tell me what you liked or didn't like about your SL experience.	It was OK. It was what I expected – helping kids. Not too out of the ordinary. I've worked with kids before at the Boys and Girls Club. What I really enjoyed was finding ways to help the kids figure out the answers for themselves. By the second week I was more comfortable with this. I improved my approach, rephrasing question to help them figure out answers on their own.
What advice would you	It's a great way to build on your experience of the class. It helps

give to faculty considering adding SL.	you develop real life experience of what the course is about. It helps you want to learn more. I would recommend SL very much.
Did you learn anything more from teaching than you learned in class?	Yes! I got a chance to teach. That helped me build on what I was learning. I got to practice with basic facts and also develop some depth. I refined what I knew. So it is easier to apply a wide range of concepts to my own situation.
What did you think was the best part of working with high school students?	The best part was having an opportunity to teach. This teaches us what a teacher does, and builds interaction skills. I learned how to build concepts for kids. As an adult, I approach this differently. This is stuff I will need to be able to do when I am a parent.
What advice would you give to students considering doing SL?	It is very beneficial. Even if you think you aren't interested, it is an unusual opportunity to go out and build interaction skills. It gives you another way to learn. It also builds discipline; you have to take time and teach others. It gives you a chance to explore this interaction option in life. Few college students get a chance to teach younger students.
How do you think this experience impacted your future employment?	It clarified the fact that regardless of the circumstances I prefer working with others to working in a way where I don't interact with others. Work is best when you are able to teach and help. In my future career I can do this with others, teach, manage, mentor.
How could SL be improved?	Four sessions is a little short. I think mentors should be assigned to students and have more opportunity to build up comfortable teamwork. The high school students had so many questions about our life on campus. They and I would have liked to have more time for them to ask about our college classes : how hard they are; and about campus life. It would be nice to have a 5 th week when we just meet with our group and talk about their questions about college life and other stuff. I wouldn't want to go out by myself and talk to a whole class. I'd like more one-to-one interaction with my group.
In summary, how did you like this experience?	Good! It was pretty much what I expected, and it was wonderful. I'd like more.
Student C	
Please tell me what you liked or didn't like about your SL experience.	It was tough getting up that early. I had never mentored high school students. I was worried that the kids wouldn't be cooperative and wouldn't care. Then I warmed up and they warmed up. I liked it. I was happy to give examples about stuff like debit cards and how you can screw up and get into trouble. I'm not sure whether this was the right thing to do but I told them about how I had screwed up. [Concluded each answer with a nervous "Was that a good answer?"]
What advice would you give to faculty considering adding SL.	It is a good idea. However, the professor has to work with people's time and schedules. I loved it but had only one free day which made it hard. I had to skip one mentoring session because

	I had too much work. It was a great experiences. It opened me up to something new.
Did you learn anything more from teaching than you learned in class?	The FL concepts were hard for me to understand. I had to read and figure out the questions students were likely to have and how I would answer them. It was a very positive experience. Teaching is different from learning.
What did you think was the best part of working with high school students?	The best part was seeing how motivated those high school students were. I was really impressed. It really mattered that they were there to learn. That surprised me.
What advice would you give to students considering doing SL?	I would advise them to think carefully about how to work it into their schedule. Timing is important. Also, they need to be understanding. I would encourage them to be understanding of kids and learn to work with them.
How do you think this experience impacted your future employment?	It had a very positive impact. I am studying geography and may teach geography or history in high school or college. This helps me prepare to be a better teacher.
How could SL be improved?	Nothing needs to be improved.
In summary, how did you like this experience?	I loved it. It was a great experience. I loved the interaction.
Student D	
Please tell me what you liked or didn't like about your SL experience.	I felt shy at first. I was hesitant and unsure how to engage them. But the students were very willing to speak with me and I became comfortable engaging them on a professional level. I got into conversation about their interests and we discussed their interests and I helped them formulate questions about budgeting and helped them figure out the answers to their questions
What advice would you give to faculty considering adding SL.	It is a good idea to include SL in the curriculum. It is good for all of us to have a chance to teach, and though that to learn how to reach out to people we want to serve professionally.
Did you learn anything more from teaching than you learned in class?	Yes. I learned how students react and how I can give them hints so they can figure things out for themselves. It did not seem useful to give them answers, but rather to help them think.
What did you think was the best part of working with high school students?	The first day I had two students who are really sure they want to be in music or theatre. They told me quite a lot about what they want for a career. I told them about East Bay's theatre and music program. They plan to check it out. They were also very interested in learning about my experience of college. They were very concerned about how hard the classes are. We talked about how to prepare for classes. They really liked that. So did I.
What advice would you give to students considering doing SL?	I'd say it would be a very good idea for them to participate in SL because it gives you self-confidence. You get over your stage fright and learn that you can open up to people and they will do

	the same.
How do you think this experience impacted your future employment?	I will definitely do volunteer work. I plan to be a dentist. It will be important to me to work with the community I serve and help kids with whatever they need help with. This experience also helps me get out of my shell and learn to speak to people. A dentist needs to put patients at ease.
How could SL be improved?	We would have benefitted from longer sessions. That would have been nice. The time was too short for the students to get a full understanding of the material. I would also like just to have more time to chat with the students.
In summary, how did you like this experience?	It was really fun. I learned new ways to figure out what it is kinds don't understand and give them effective hints so that they could learn to think about these problems on their own.
Student E	
Please tell me what you liked or didn't like about your SL experience.	This was a great experience. I have been thinking about becoming a probation officer. So working with high school kids was perfect for me. I find I sometimes have a hard time reaching out to others. I tend to be shy. So this was a great experience. I learned I can reach out with kids and it was a great experience.
What advice would you give to faculty considering adding SL.	It is a good idea. It is really a great way for people to figure out what they want to do as a career. Many students are shy. The LS experience teaches them to reach out. To ask questions. It gets them to open up.
Did you learn anything more from teaching than you learned in class?	This experience really confirmed my idea of becoming a probation officer. In addition, I learned that I would like to do volunteer work with teen agers in their communities. I learned how to open up with people.
What did you think was the best part of working with high school students?	I realized that I really do have a passion for working with kids. I wasn't sure about that before this experience. Now I am more certain about my career plans.
What advice would you give to students considering doing SL?	I'd advise them to do it. It helps you get out of your shell. I think people don't want to do it because they are shy. They need to be encouraged. This is really a special opportunity that no everyone has.
How do you think this experience impacted your future employment?	This really firmed up my ideas about becoming a probation officer and also working some community volunteer work into my future plans.
How could SL be improved?	I'd like to have more time with the students. We wee just getting into discussion about college when it was time to stop.
In summary, how did you like this experience?	I liked it a lot. I was nervous at first but got over that. The high school students were very respectful. I had a great experience.
Student F	
Please tell me what you liked or didn't like	I liked it pretty well. In the beginning it was hard to adjust. At first, we Cal State students are struggling to learn the material

<p>about your SL experience.</p>	<p>and then we have to teach it to the high school students. At first, I would bring my textbook with me to the class to make sure I was saying the right thing. I was surprised to learn that this was the first time the kids had learned anything about FL. So I realized I needed to teach the key elements correctly. As time went on, I felt more and more comfortable. I could help them with experience with credit cards because I have credit cards. I shared my experience with them and told them to do research and ask around before making a decision about which kind of credit card is best for them.</p>
<p>What advice would you give to faculty considering adding SL.</p>	<p>That depends on which course it is. For example, FL has some key concepts. For example, budgeting is very interactive learning. It is important to coordinate with the high school students. I would be a good idea for high school students to have some general concepts ahead of being mentored. SL is generally a good thing. It helps students practice what they learn. It is one thing to know and another to do. Knowledge with no opportunity to do something with it is not very helpful. Actually doing a budget with the high school students really helped me think about my own budgeting.</p>
<p>Did you learn anything more from teaching than you learned in class?</p>	<p>I realized that you have to engage the students. At the end, I worked with other students and it was easier if the student is energized. Then you can easily get your point across. It is good to have time to talk to kids about other things in college life. I was able to use my life experience as a CSUEB student. I encouraged them to enroll close to home at CSUEB; also it is less expensive. I was able to give some of my personal knowledge to students who are about to enter a new chapter in their lives.</p>
<p>What did you think was the best part of working with high school students?</p>	<p>Seeing them eager to learn. I liked seeing different styles of learning. It was interesting to see the students; learning methods and problem solving styles.</p>
<p>What advice would you give to students considering doing SL?</p>	<p>I would advise them to carefully follow the guidelines they are given. They should be sure they are interested in mentoring, not just going because they will be graded on it. They need to be focused and 100% into it.</p>
<p>How do you think this experience impacted your future employment?</p>	<p>Yes. I like helping people. While mentoring, I felt I could help them think about their own college plans and application. I would like to volunteer some more, to help students with their future. I would like to donate to give schools resources for more one-on-one relationships with mentors. I think schools should offer experimental learning courses so students can explore other ways of learning.</p>
<p>How could SL be improved?</p>	<p>Students would benefit from more prior information about what is to be one. Students need worksheets ahead of time. They should complete the worksheets themselves so they are sure they understand it. There should be more planning with the collaborating (high school) teacher so some material can be taught before hand.</p>

In summary, how did you like this experience?	I liked it overall very much.
Student G	
Please tell me what you liked or didn't like about your SL experience.	I loved it. This is a special opportunity. You can learn so much more thoroughly when you know you will be teaching the material. The opportunity to teach the material and enjoy interacting with students was super. I didn't like the scheduling. Friday is the only day I don't have classes. I live in Brentwood and it is a 2+ hour commute both ways. But I never missed a session.
What advice would you give to faculty considering adding SL.	Consider students' schedules so that it isn't terribly costly and inconvenient.
What did you think was the best part of working with high school students?	The best part was experiencing the way the high school students engaged with us and wanted to know about our experience of college. Teaching the FL concepts and coaching the students was great and I enjoyed being an effective teacher coaching them as they figured things out. But the best part was being able to satisfy their curiosity and responding to their concerns about going to college.
What advice would you give to students considering doing SL?	I would urge them to take advantage of this special opportunity to apply what they are learning in an important context where they can both help others and consolidate their own learning. This is so much more effective a way to learn than sitting in class.
How do you think this experience impacted your future employment?	I learned a lot about how to explain concepts and how to help learners formulate good questions and seek the answers for themselves. I think this is a skill I will be able to use in any career as well as in my personal life.
How could SL be improved?	We need to be able to spend more time with the students. I felt that we had just begun when it was time to leave. The sessions were too short for all that the students and mentors wanted to discuss. We could have used an extra day as well.
In summary, how did you like this experience?	I loved it. It was one of the most outstanding learning experiences I've had. It really made me think about the importance of focusing on my skills of explaining things. One of the students asked me if I was going to be a teacher and said that I was a really good teacher. I am in communication and do not plan to be a school teacher, but I realize that I have a skill I can use everywhere where I interact with people, and I need to hone that skill.
Student H	
Please tell me what you liked or didn't like about your SL experience.	I liked it. The only problem for me was that 8:15 is a bit early, commuting from Oakland. Overall, this was a very good experience. I definitely would like to do it again. I am a math major and want to be a math teacher. I thought about how to engage students, how to motivate them, especially in math. I did

	a lot of listening and learned a lot from these students.
What advice would you give to faculty considering adding SL.	I would tell them that SL is a very beneficial experience for them to give to their students. My advice would be to make sure participants understand why they are doing SL, and what they will be doing. I would stress the importance of setting professional standards, and of emphasizing the importance of being punctual. This is especially important because the CSUEB students must be role models of professionalism, and not act like peers of the high school students.
Did you learn anything more from teaching than you learned in class?	Yes! I got a much better handle on concepts about credit and credit cards. Some things got processed more. I finally feel I got these concepts and could give them to others. My students were un comfortable about credit. They had a lot of personal bias or misinformation. They realized how little they knew.
What did you think was the best part of working with high school students?	Being able to talk with students on a real and professional level was the best part. They were interested. I learned from them. The interaction was the most valuable part for me. Their openness was impressive. I would ask then why they think s they do. Also, they were very interested to learn about college. They had some revealing questions: For example, Do you have time for dating? I don't have money to spend on a girl friend. Does that mean I won't be able to date? The students I mentored were Black males (Hadiya Anderson is a Black female.) They told me that banks do not give Black people good credit scores so they can't get credit cards. I explained that race has nothing to do with it. Taking care of one's credit, and not spending more than you can pay is what gets you a good credit score. I explained that if they or their family have bad credit, there are ways to repair their credit and improve their credit scores. I discussed the basics of doing that with them. They were amazed.
What advice would you give to students considering doing SL?	I would definitely urge them to do it. No matter what their career plans or interests, they are sure to find SL a mind-opening experience. The interaction with high school kids will teach them so much more about whatever they are helping the kids to learn. It is a special privilege and opportunity to do SL.
How do you think this experience impacted your future employment?	I really saw this as a teaching experience that had a powerful influence on how I am thinking about my future career as a math teacher in high school. It helped me focus on learning how to teach. The experience of working with high school kids was very enriching. I guided their thinking, gave them pointers. I did not tell them answers. It was a career thing for me.
How could SL be improved?	Make sure the partners are on board with the program. Mt. Eden was not organized for us.
In summary, how did you like this experience?	It was fun. Everyone involved benefitted from it. It was a great opportunity for me. The Mt. Eden students wanted the CS"UEB students to come back.

Interview Transcripts Control group

Student I Control Group	
Please tell me what you liked or didn't like about your class experience.	I really enjoyed it. I noticed that when I apply material to myself I can learn it more easily. It is more interesting and I can learn it faster. It is not like studying the material. It is a new level of learning.
What advice would you give to faculty considering this interactive element.	I think something like this could be added to other courses. I did something like this in high school and it helped me a lot. I think it is beneficial
Did you learn anything more from this than you learned in lectures?	Yes. Applying the knowledge is a great way to learn more fully.
What did you think was the best part	I liked the specific assignment best
What advice would you give to students considering this?	I'd encourage them.
How do you think this experience impacted your future employment?	I am not a finance student. I don't like finance. But I decided to take this class and it was easier than I thought it would be. I can understand it.
How could SL be improved?	It was great as is.
In summary, how did you like this experience?	I really enjoyed it. It made the materials more approachable for me. I can't see how some material would apply, but this assignment made the information understandable. I can use this for myself for the rest of my life. It is more interesting to learn this way.
Student J Control	
Please tell me what you liked or didn't like about your class experience.	Financial aid project – really enjoyed the class over all, teacher was great. He was always helpful. Overall a great class. I worked alone but sometimes I worked in a group. I liked it all. Working in groups was great. Even though I am not a group person, I enjoyed the groups.
What advice would you give to faculty considering this interactive element.	Make sure you have your activity planned ahead of time, and well prepared at all stages. Make sure you set up groups properly. Make sure you have a goal and the students achieve it. Of course, they should also have a very pleasant, approachable personality like Mr. Murray.
Did you learn anything more from this than you learned in lectures?	Yes, I learned a lot more doing the activity on my own. I am more engaged in it, and therefore learned much more. I really encourage group activity because it causes engagement. Working in groups actually helps people learn more than doing it on their own. Explaining and learning from one another – we

	help and explain to one another. You learn so much when you teach someone else.
What did you think was the best part	The best part was meeting new people. That means you all help one another, e.g., prepare for midterms.
What advice would you give to students considering this?	I would advise them to think of it as meeting a new person who will make it all very interesting and rewarding. That friend will be there for you. The relationship is vital to your learning.
How do you think this experience impacted your future employment?	Yes. It improved my skills. I am more positive in groups now. I am better at asking good questions. I understand that I can ask for help. I feel more self confident.
How could SL be improved?	A little bigger group, rather than just twos. Maybe a larger group would be more interactive.
In summary, how did you like this experience?	It was really enjoyable. Everything, the class, the groups, the people I met. Mr. Murray was always so well prepared and always there for us when we needed help.

Appendix C

Code of Conduct for CSUEB Students mentoring at Mt. Eden High School

As a volunteer at Mt. Eden HS, I agree to abide by the following code of conduct:

- 1. I agree to be on time, and to call the Mt. Eden HS Office (510-723-3180) if I may be late or unavoidably absent.*
- 2. Immediately on arrival, I will sign in at the main office or designated sign-in station. I will wear or show volunteer identification whenever required by the school to do so.*
- 3. I will use only the adult bathroom facilities.*
- 4. I agree to never be alone with individual students apart from the supervision of teachers, school authorities, or Hayward public library librarians.*
- 5. I will not contact students outside of school hours without permission from the student's parents.*
- 6. I agree not to exchange telephone numbers, email addresses, home addresses, or any other home directory information with students for any purpose, - unless it is specifically required and specifically authorized by the Mt. Eden HS class teacher as part of my role as a volunteer. I will exchange directory information only with prior written parental and administrative approval.*
- 7. I will maintain strict confidentiality outside of Mt. Eden HS, and I will share with Mt. Eden HS teachers and/or school administrators any concerns or questions that I may have related to student welfare and/or safety.*
- 8. I agree to not transport students without the prior written permission of parents or guardians or without the prior written permission of the school or district and will abide by District Administrative Procedures when transporting students.*
- 9. I will not disclose, use, or disseminate student photographs or images or any personal information about students, self, or others.*
- 10. I agree to follow the district procedure for the screening of volunteers (including completing the volunteer forms, having fingerprints taken at the HUSD office, and taking a TB test at the CSUEB student health center).*
- 11. I agree to notify the school principal immediately if I am arrested for a felony or misdemeanor drug, weapons, or sex related offense.*
- 12. I agree to only to do what is in the best personal and educational interest of every child. Doing what is in the best personal and educational interest of every child includes, but is not limited to:*
 - a. Conduct that keeps students, staff, and others safe*

- b. *Conduct that contributes to an orderly classroom and school environment, respecting to the school and teacher you are assisting*
- c. *Consideration of, and respect to, students and staff (including avoiding any bullying or harassment or discrimination or put-downs; the use of formal names unless instructed otherwise; professional, not personal relationships; making only those professional promises and assurances that can be keep)*
- d. *Consideration of private property of students, staff, and the district*
- e. *Consideration of student and staff personal and professional space (including avoiding overly personal/familiar conversations, and avoidance of physical contact (apart from greetings such as handshakes or high-fives IF permissible by student's culture and religion and personal preferences); avoidance of the possibility of any behavior that is of a sexual relationship in nature)*
- f. *Use of professional and respectful language (including no profanity, vulgar, or abusive language)*
- g. *Appropriate attire (dress comfortably, neatly, and appropriately)*
- h. *Act with honesty and integrity, trustworthiness and reliability*
- i. *Punctuality, and commitment to assigned tasks*
- j. *Professional conduct (including no alcohol, tobacco, weapons, or prohibited drugs on school grounds; and not being under the influence of alcohol or prohibited drugs; and not lending money or property; and not entering into any business relationships with students)*
- k. *Respect the learning environment (including avoiding any use of cellphones, pagers, media players, and non-educational use of tablets or computers, on school grounds)*
- l. *Respect for privacy of students and staff (including following strict confidentiality and avoiding the use of recording devices or cameras on school grounds; including using pseudonyms in course assignments if you are referring to students or staff)*
- m. *Being flexible (the level or intensity of an activity is not always predicable; being composed, caring, and flexible can assist in working smoothly and producing positive results)*
- n. *Notifying immediately the school, teacher, and/or CSUEB instructor if you will be absent or late, or if you have any concerns, - and asking questions if you are uncertain about a task or situation*

Abiding by the existing CSUEB standards for student conduct (<http://www20.csueastbay.edu/students/campus-life/student-life/sdja/student-conduct.html>), the HUSD volunteer commitments and policies (HUSD application

form), and the CSUEB off-Campus Learning Waiver (<http://live-csueastbay.gotpantheon.com/form/3>)

Appendix D

Mentoring Training: Dr. Lettie Ramirez, Teacher Education Department CSUEB

(to be added separately)