PEIL Project _ 2014-2015

"An Evaluation of Experiential Learning in the CSUEB Personal Finance Classes"

David Murray and Joan Sieber

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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
r reasoning abilities

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 Finana5l2.w1.1(o)3(((6e)5(s)(d)l2j2-1(ng)1(Mo)-3

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-

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 wicha1i19ipslenad to

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

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 0" 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 Eteenspr -1.es3.9(i)-4(s)-n(bteen(a)i)e21(h)en1aove8(1/)4.8(15)]TJ4..002 Tw 4 BDC T( )Tj

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 leaning activities are.

- Make sure the CSUEB students are u1-1(t)5(e)d5(g)1ottert ac(do)2 Td( )TjEMC /P TD[e)-1(x)(e)d5(g)1

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

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

Recommendations for Future Research

DGM

Note that other learning objectives may be added in response to additions of course-related topics requested by students

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) FIN 2300-01 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 14T x 20/8(e1.7(9%9)-3.7d3.1(rt(,3..3)0.02 --( )4lj6) 0Tj3.5455)-2815%=B7593

- Students are responsible for regularly checking the Blackbo ard 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 arrang ed if appropriate accommodation documentation is provided at about the time the assignments are due.
- x

Homework Assignments (tentative)

Assignment		
1. due: 4-8-15	Develop your April budget Select a method to track your budget Complete a budgeto4 58.91ar( )2(s)bs(9)80.4	8EMC /P <MCID 8 >BDC Q17144.24 609.96 11.21 48.84reW nnBT0.002

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 w riting, 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 mns ans amae9 02 i s( )0.6rUnerUcener trUnt

Appendix B

Interview Transcripts: Experiential Learning group

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

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.

	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 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. [illegible]

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

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 w ill 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 p ermission from the student's parents.

6. I agree not to exchange telephone numbers, email addresses, home addresses, or any other home directory information anJ 0 /iithaora/MCI-0.7/LBod1.9(s)-2(i)-3.4(o.8(is)1.1(io)3.

b. Conduct that contributes to an orderly classroom and school

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