ON THE MERITS OF MIXING METHODS:
A LANGUAGE PROGRAM EVALUATION

JACOB A. KLETZIEN

University of Hawai'i at Mānoa

ABSTRACT

In the spring of 2009, an evaluation was conducted of a university-level language program. The focus was to determine the viability of using a specific Virtual Learning Environment in all classes at the program. The evaluation that ensued followed a mixed methods design, mixing at least one quantitative and one qualitative method in the same study (Bergman, 2008b). This paper highlights the benefits of using mixed-methods in language program evaluation as seen in the professional literature and then through a practical example of an evaluation that benefited from the use of mixed methods. Despite the great amount that has been written in favor of mixing methods in all social science research, (e.g., Bergman, 2008a; Cronbach, et al., 1980) reports of actual examples are currently in small number in the professional literature especially in the context of language program evaluation (Caracelli & Greene, 1997; Cronbach et al.,1980; Weiss, 1998). The report of this evaluation, which contains the extent to which methods were mixed and the benefits of that mixing of methods for the evaluation, is presented in response to calls for such writing.

INTRODUCTION

It is the start of the second decade of the new millennium and the paradigm wars that embroiled the social sciences in the last two decades of the past century are supposedly behind us...but are they really? Qualitative research methods have gained more widespread acceptability in research, but a segregationist-like attitude towards them is still to be found. Separate but equal: they are fine, but not with my methods. Those in favor of mixing of quantitative (QN) and qualitative (QL) methods in social science research are still fighting for acceptance in some circles. Despite the great amount that has been written in favor of mixing QN and QL methods (e.g. Bergman, 2008a; Cronbach, et al., 1980; Datta, 1997; Howe, 1988; Patton, 2008; Perrin,

1998), debates on the validity of mixing methods are ongoing (for a recent example, see the August/September issue of *Educational Researcher* (2009) dedicated to a Howe article critiquing the positivist dogma and the debate surrounding his article). Many have called for more writing on mixing methods in research in general (Bryman, 2008; Creswell & Plano Clark, 2007; Creswell, Plano Clark & Garret, 2008) and in evaluation specifically (Caracelli & Greene, 1997; Cronbach et al., 1980; Weiss, 1998). This paper is in response to those calls for more writing on the usefulness of mixing methods, especially in language program evaluation.

This paper is about the evaluation of a language program and the use of mixed methods in that evaluation. Program evaluation findings are meant to be used (Cronbach, et al., 1980; Kiely & Rea-Dickens, 2005; Patton 2008; Rea-Dickens & Germaine, 1998; Weiss, 1998) and using mixed methods is a good way of obtaining findings (data) that are useful in decision making (Creswell & Plano Clark, 2007). This evaluation had to address different kinds of questions asked by the intended users of evaluation, and thus it called for different kinds of data. Because this evaluation, like many if not most other evaluations, required flexibility and adaptability on the evaluator's behalf, it was of utmost importance that a wide variety of methods, both QN and QL be available for use.

As will be seen, in each step of the evaluation, different types of data were required to answer the questions the evaluation's primary intended users (PIUs) had. In the first stage of the evaluation, the PIUs' questions demanded data that was fairly straightforward and objective, and most easily obtained with a largely QN method: a survey. After this stage in the evaluation, the PIUs' questions evolved somewhat and a different kind of data was required: teacher and student opinions. Thus, different, more QL methods were used in order to obtain those types of data.

Along the way, the decisions to mix methods at different stages also involved some PIU input, increasing ownership of and interest in the evaluation and its findings. While the actions taken were not on a grand scale, the decision made by the users in the end was based on the findings and the input from several stakeholder groups, something which is too rarely seen in the decisions to implement classroom technologies (Levy & Stockwell, 2006). It is partially due to the collection of the right type of data with the right type of method that the users were able to use the evaluation findings to come to such a decision.

Terminology

Bryman (2008) takes issue with the cavalier way in which some researchers use the term mixed methods (MM) inaccurately. It is to address concerns like his that it seems essential to clarify exactly what will be discussed in the exploration of the evaluation done in this study. In choosing to design and conduct research, the abbreviation 'MM' can mean so many similar, yet crucially different things. In writing about the methodological choices made in this evaluation, the terms *mixed methods research* (MMR), or more simply, mixed methods (MM) will be used. Creswell and Plano Clark (2007) argue that MMR:

> ...focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone.

More succinctly, Bergman (2008b) defines it as "the combination of at least one qualitative and at least one quantitative component in a single research project or program" (p. 1). There are, however, the similarly named mixed-method design (Bergman, 2008c; Caracelli & Greene, 1997) and mixed method inquiry (Greene & Caracelli, 1997), which are essentially the same as MMR. All of these terms focus on the mixing of QN and QL methods in a single project. Whether we choose to call it research, design, or inquiry, they are all mixed methods.

Also similarly named, yet substantially different are multi-method research (Creswell & Plano Clark, 2007) and multiple measures (Lynch, 1983), wherein several methods or measures are employed in one study, but not necessarily from different paradigms. A study using two QN methods, for example could be multi-method research, but not MMR, whereas a study using the same QN method twice would be an instance of using multiple measures. More similar in spirit to the mixed methods examples previously mentioned, yet somewhat different are mixed mode research (deLeeuw & Hox, 2008), which is meant for survey research, and mixed design, which "attempts to combine the perspectives represented by the positivist and interpretivist paradigms" (Lynch, 2003, p. 27),) or mixed strategy (Lynch, 1996; 2003). The last two involve the seemingly paradoxical task of mixing epistemologies rather than QN and QL methods and data: a small yet important distinction. While there is no doubt much to be gained from the multiple designs, measures, and modes just mentioned, it is particularly the use of a MM design that will be found useful in the evaluation studied here.

Purpose

Evaluation might seem like a field especially accepting of MM, with the need to tailor methods to each unique site. Currently, evaluation is largely accepting of MM, but this has not always been the case. In the early days of contemporary evaluation (mid 20th century), evaluations were predominantly summative in nature, done for the purpose of assessing the extent to which certain educational methods or materials were effective (for more detailed accounts of evaluation's history, see Kiely & Rea-Dickens, 2005; Lynch, 1996; Patton, 2008). Such evaluations often used strict (QN) positivist designs involving experiments. Only more recently, with the rise more pragmatic approaches to evaluation, like Utilization-Focused Evaluation (UFE, Patton, 1997), has the acceptance of QL methods, and a resulting acceptance of mixing them with QN methods taken hold in the evaluation field, much like the rest of social sciences. One example of positive views on MM is seen in Perrin (1998), who theorizes that every evaluation method has limitations that can only be overcome through the use of a combination of methods. A stronger example of recent widespread acceptance is the 2003 statement by the American Evaluation Association (AEA) which argues that "This issue was settled long ago. Actual practice and many published examples demonstrate that alternative and mixed methods are rigorous and scientific. To discourage a repertoire of methods would force evaluators backwards" (para. 6). Michael Patton, champion of UFE, has declared "*methodological pluralism and appropriateness the new gold standard"* (italics in original, Patton, 2008, p. 460). Thus, some 30 years after Cronbach and associates came out in favor of mixing methodologies, stating that "The evaluator will be wise not to declare allegiance to either a quantitative-scientific-summative methodology or a qualitative-naturalistic-descriptive methodology" (Cronbach, et al., 1980, p. 7), one would think the issue settled, but such an opinion is not unanimous in evaluation, much less the social sciences in general. Guba and Lincoln (1989) famously argued it impossible to responsibly combine QN and QL approaches within a single evaluation, and as recently as 2007, there were still a substantial number of AEA members leaving the organization over the growing acceptance of mixing methodologies in evaluation (Patton, 2008). What seems like common sense to many (especially to pragmatists) and the accepted norm in evaluation (e.g., AEA, 2003), is not accepted by all evaluators and may have even less widespread acceptance in related fields of the social sciences.

In practice, at least, mixing methods may have more acceptance in evaluation than in the professional literature. This is especially so in language program evaluation, where the most important thing is to end up with useful, reliable results, no matter which method or combination of methods produced such results (Kiely & Rea-Dickens, 2005; Patton, 2008). The purpose of evaluation in language education, after all, is "to have some practical effects on a given program" (Kiely & Rea-Dickens, p. 15) and "to assist program management so that quality processes are assured and high standards of learning are achieved" (Kiely & Rea-Dickens, p. 19). In the description of the evaluation that follows, it will be seen that it was exactly for these reasons the evaluation was conducted and also why an MM approach was utilized.

THE EVALUATION

Context

In the spring of 2009, an evaluation was conducted for the Preparatory English Program (PEP), an academic English program for international students at the main campus of a large public university located on the Pacific Rim. PEP teaches academic English skills to international students through content-based classes. Classes meet four hours a week for eight weeks. PEP terms roughly correspond to the semesters at the university, with two terms nearly perfectly aligning with the university's semester. While all students are adults, most are younger and look to enroll in an American university after completing their studies at PEP. Graduates of PEP often matriculate into the university at which PEP is located, or into an affiliated community college. PEP's goal is to prepare these students for studies at the university. As opposed to classes that place their focus on skills (e.g., a reading & writing class), PEP integrates development of different language skills into each of its classes. While there are some classes devoted to test preparation too, most of the classes develop general proficiency in all language skills.

The evaluation was predominantly a formative evaluation examining the usefulness of the university's on-line virtual learning environment (VLE), which will be known in this paper as Site for Collaborative Online Learning (SCOL), for PEP classes. Within the study, both QN (survey) and QL (interviews, case-study) data-collection methods were used. It is this mixing of

methods that led this evaluation to successfully include the users in the evaluation process and ultimately to produce useful findings for those same intended users.

Background Information

In order to effectively evaluate the usefulness of the SCOL VLE, it is important to understand what a VLE is, and how its use in a language classroom can be beneficial. A virtual learning environment is an online information system that facilitates computer assisted language learning (CALL) or e-learning. VLEs process, store and disseminate educational material and support communication associated with teaching and learning (McGill & Hobbs, 2007). For the case in point, SCOL use has the potential to help teachers save class time, by providing a way for them disseminate and collect all sorts of papers and assignments they would traditionally hand out and explain in class. In addition to its potential to save time, SCOL can facilitate language learning through functions that promote Computer Mediated Communication (CMC) and Computer Mediated Peer Review (CMPR). However, there are also drawbacks to the usage of VLEs. These drawbacks primarily stem from the fact that VLEs require to use of technology by students and teachers, the resources for which may be lacking and the learning curve of which may be too steep for some people.

The purpose of this study was to determine the extent to which the potential benefits of SCOL use (such as its time-saving potential, as well as promotion of CMC and CMPR among learners) could be realized at PEP in spite of the potential drawbacks entailed in the implementation of a VLE in a class.

CMC and CMPR, it should be noted, are two phenomena with many positive effects attested in previous studies. CMC has been shown to be beneficial in: (a) increasing student production by facilitating greater student participation (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995; Warschauer, 1996); (b) fostering a greater distribution of participation among students (Beauvois, 1992; Kern, 1995; Warschauer, 1996); (c) promoting greater participation by "shy" students (Beauvois, 1992; Chun, 1994; Kelm, 1992); (d) promoting transfer of communicative authority to students (Beauvois, 1992; Chun, 1994; Kern, 1995); (e) reducing learner anxiety (Chun, 1994; Kern, 1995); (f) promoting the development of extended discussion more attuned to student motivation and ability (Weasenforth, Biesenbach-Lucas, & Meloni, 2002); (g) increasing attention to classmates (Chun, 1994); and, among other benefits, (h) increasing

collaboration among students in the development of learner-learner support networks (Darhower, 2002; Kern, 1995). CMPR, too, has been shown to have some benefits over its traditional, offline predecessor, Face-to-Face Mediated Peer Review (FMPR), which has been shown by Grabe and Kaplan (1996), Reid (1993) and Spear (1987) to be a beneficial activity for language learners. CMPR can be more flexible than FMPR, allowing learners to review others' works at times and places of their choosing. In addition, many learners find the process more comfortable and feel less pressure when they give feedback through a computer (Ho & Savignon, 2007). While SCOL certainly allows for increased CMC and for the use of CMPR through its blogging and discussion tools, it was the aim of the study to ascertain whether or not the benefits of these activities would be capitalized upon in the ESL classes at PEP.

Research Questions

The impetus for the evaluation was a call for research put out by the administrators of the PEP program. The administrators, who were the PIUs of the evaluation, were seeking to leverage the perceived benefits of web-based resources such as SCOL more effectively and to gain a better sense of how SCOL could be used at PEP. In the first meeting with the administrators, this focus of the evaluation was discussed. It was theorized that the use of this online tool tied to the university would better prepare students for their future studies as it is used in many standard university classes for matriculated students. The administrators were looking to make a decision on whether or not it was feasible to make SCOL a feature of all PEP classes. They had suspected using SCOL in particular would be a good idea as it is used at the university PEP is tied to and into which many graduates matriculate.

An initial research question was formulated after this meeting as follows:

RQ1: To what extent is it feasible to implement SCOL in PEP classes?
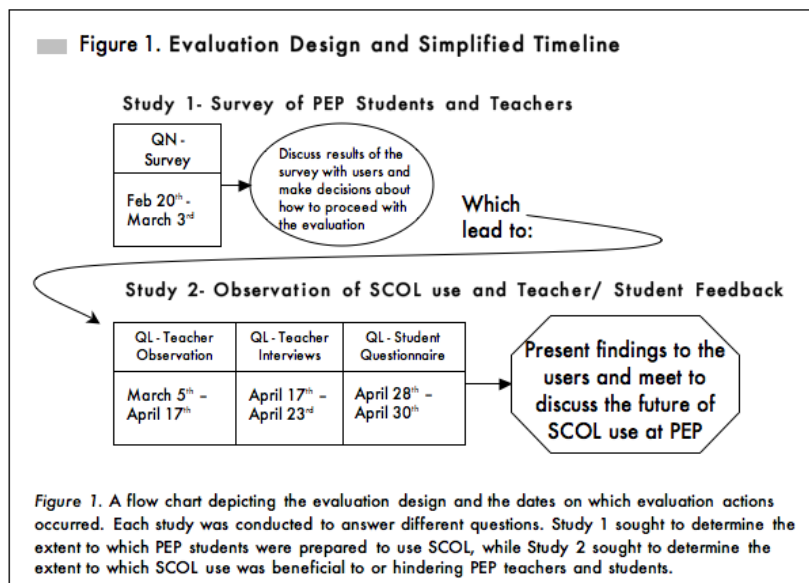
This question was in part answered through a needs analysis, a description of which follows, and the outcomes of which led to a second research question:

RQ2: To what extent would it be beneficial to use SCOL in all PEP classes (as opposed to only certain classes)?

Research Design

The evaluation unfolded in several phases, all of which used methods tailored to the specific questions at hand. While it could not be foreseen exactly what would happen, a rough outline for the evaluation was presented to the PEP teachers and administrators before further evaluative actions were taken. This outline, seen in Appendix A and in a summarized version in Figure 1, highlights the use of surveys, followed by close work with teachers (observations/case study), and then by another survey.

As the study went through several phases, starting with QN and followed by QL, with data collected, analyzed, and reported after each phase, it should be clear the design best resembles an *explanatory design* (Creswell & Clark, 2007; Creswell, Clark, & Garrett, 2008) in this MM approach to evaluation. Explanatory designs consist of an initial QN phase, after which the data is analyzed and used to inform a decision on how to proceed. In the second phase, QL methods are used, usually to obtain a more nuanced understanding of the problem examined in the first phase. While the focus of the second phase was slightly different from that of the first, the key aspects of an explanatory design (QN methods first, then analysis and use of data, followed by a subsequent QL phase) were in place in this evaluation. After the results of the QN survey of students and staff were reported, it was deemed appropriate by the evaluator and the primary users (PEP administrators) to move on with research and pursue the second phase, wherein QL methods would be useful. In the second phase, the users needed more QL-type data (teacher and student opinions) to answer their questions. While it is impossible to know for sure what would have happened had the results turned out to be negative (in the sense that they would have shown PEP students to be unprepared to utilize SCOL), a different second research phase, likely QL as well, would have been implemented in order to find out in more detail why that would have been the case: a perfect example of the second phase being used to explain the results of the first.

Figure 1. A flow chart depicting the evaluation design and the dates on which evaluation actions occurred. Each study was conducted to answer different questions. Study 1 sought to determine the extent to which PEP students were prepared to use SCOL, while Study 2 sought to determine the extent to which SCOL use was beneficial to or hindering PEP teachers and students.

STUDY I: SURVEY OF STUDENTS AND TEACHERS

In order to determine the extent to which inherent technological limitations of using SCOL (as an online tool) would limit its usefulness at PEP, data was collected from the students and teachers regarding their internet-use habits. As SCOL is accessed via the internet, any lack of familiarity with the internet would likely add to the difficulty of learning how to use SCOL. Data was collected using a common method of data collection in CALL evaluations: a survey (Levy & Stockwell, 2006).

Participants

All PEP students were surveyed in person about their internet-usage habits on a Friday, when workshop attendance is mandatory. Taking advantage of a "captive audience" (Brown, 2001), 37 of the 41 students enrolled at the time returned the questionnaire, so the information obtained through the questionnaire was fairly representative of all PEP students, or at least those that came to class during that semester. While the survey did not ask for information pertaining to age, gender, or nationality, the students at PEP can be broadly characterized as adults from various countries who do not speak English as a first language. Note that, although Long (2005) acknowledges the benefits in obtaining student input, he also stresses caution in using ESL

students as primary informants. For this survey, the administrators deemed all questions to be easily understandable by all PEP students, which means the students were able to contribute reliable and useful information, though additional informants were also included.

In addition to surveying all students (and receiving answers from 90%), all nine active PEP teachers were surveyed, and all responded. Again, the questionnaire did not ask for age, gender, or nationality, but PEP employs a wide variety of ESL teachers from many countries, many of whom are or have been graduate students an applied linguistics department at the university.

Materials and Procedures

The student questionnaires (see Appendix B), were printed out and given to the assistant director of PEP, one of the evaluation's PIUs. Prior to administering the survey of the students, the questions and rationale for asking them were explained to the PIUs and deemed appropriate for the PEP students. Because the PIUs had seen and approved the questions, the data obtained from these questions would be relatively easy to understand, as they themselves were able to anticipate the results. Using a mandatory Friday workshop to our advantage, the assistant director gave the questionnaires to all attending students. Students were split into classes based on their level (100, 200, 300, 400), and each class was given the questionnaire by the assistant director, who took time to visit all classes that morning. The evaluator collected the student questionnaires for analysis in the early afternoon on the same day, while attending the staff meeting to explain the teacher questionnaire to the teachers.

The students were given questionnaires which asked: (a) what level class they were enrolled in at PEP (see Table 1); (b) whether they were familiar with SCOL and, if so, to what extent (see Table 2); (c) how many hours a day they used the internet (see Table 3); (d) by what means they accessed the internet (see Table 4); (e) how comfortable they felt using the internet in English (see Table 5); (f) what percent of websites they accessed were in English (see Table 6); and (g) how often they used university related web-resources like university mail or university portal (see Table 7).

The first question, and the only true biodata question[1], sought to determine student level in the program (100, 200, 300, 400). The information gained from the first question was used to analyze data obtained from other questions, by grouping responses into four groups. The remaining six questions were asked of students to determine which students would adapt to SCOL use the quickest. It was hypothesized that, all things being equal, those students most familiar and comfortable with accessing the internet in English would learn SCOL the best (a hypothesis partially confirmed by the teacher interviews and student questionnaires in the subsequent part of the evaluation). In addition, as SCOL is intended to be used out of class, one question was asked to determine if students had the means to regularly access the internet, at times convenient to them. The data from all these questions was to be used to determine which students would be most likely to adapt to SCOL the quickest (ideal conditions for a pilot class) and subsequently could be looked back upon to interpret some of the findings from future, QL phases of the evaluation.

As for the types of questions: numbers 1-4 were closed-response and provided responses for students to check. In the case of question 4 (How do you access the internet?) multiple responses were allowed and an "other" option was given and checked by only one participant (without elaboration on what "other" meant in their case: a mistake likely due to a misunderstanding of exactly what was being asked of the student). Questions 5 and 6 were open response, in the sense that they asked students to write a number. This may have been a mistake, as student responses varied greatly, and in the case of question 6, some students changed the unit of the scale (times per day) to another unit (times per week/month) complicating analysis of the data. Long (2005) warns of such problems with using ESL students as data sources. In addition to the information the data provided the users, the misunderstandings that occurred in these questionnaires provided the evaluator with a lesson to be more careful and explicit in question design and choice of response type.

The teacher questionnaire (see Appendix C) was written in a Microsoft Word file and emailed to the teachers. Like the student questionnaires, the questions were explained to the PIUs prior to the survey of the teachers. Also, the questionnaire was designed to identify teachers who were most cooperative and interested in learning to use SCOL in their classes. Upon receipt,

---

[1] The questionnaire did have a space for first names (a measure to ensure no student accidentally filled out the questionnaire twice, but the students were told to leave this blank by the administrator, as there was no need to gather this information.

teachers opened the file and edited it with their answers on their own time, and then sent the file via email back to evaluator. All teachers responded, but many had different methods of indicating their preferences on the file. While there was no difficulty in understanding their answers, it would have been more desirable if this questionnaire were easier to fill out than it was. Perhaps an online questionnaire that requires no downloading or emailing would have been preferable. A 100% return rate was achieved, but it likely would have been achieved sooner, had the questionnaire required less effort for the teachers to fill out.

Data/Results

The results of the student questionnaires were used to inform the administration and teachers about the practicality of using SCOL with their students. Due to this purpose, the data was primarily reported by frequency counts and, in some instances, analyzed using descriptive statistics. At this stage, the users of the evaluation (the administration) needed enough information to convince themselves that PEP students were reasonably prepared to use SCOL. The frequency counts, raw data, and descriptive statistics were all presented to the users in a meeting. The implications of the data were discussed and conclusions were reached as to what the data meant for the evaluation, and how to proceed. The data seemed to show that all students were somewhat prepared and that certain groups were more prepared based on the hypothesis shared by the evaluator and users (higher level students have more ease in and familiarity with using the internet in English), which aided in a future decision on which classes would be best suited to experimenting with increased SCOL use. Details of this first round of findings are provided below.

Student questionnaires. The first question was asked to determine the numbers of higher and lower-level students at PEP. Through placement tests and performance in previous courses, students are split into four levels, which restricts the types of courses they may take at PEP. For example, a class designated with a course number between 200 and 299 is only open to 200-level students. At PEP, higher-level classes (300-499) can be taken by both 300- and 400-level students, so these students were grouped together. As will be seen in Table 1, the differences between the higher and lower-level students are noticeable. In Table 1, we see there were 21 students enrolled in 100- and 200- level classes. In the 300- and 400-level classes, there were 16

students. These numbers are not terribly interesting, but they allowed for the grouping of PEP
students that would aid in the analysis of the other questions.

Table 1

PEP Students by Level

Level	100	200	300	400
Number of students	7	14	7	9

The second question was designed to determine the level of familiarity the students already
have with SCOL. Were it to be the case that students had a high level of familiarity, it was
theorized that implementation would be easy. The results, as seen in Table 2 below were quite
surprising.

In Table 2, we see that 2/3 of the students had not even heard of SCOL. The six who did
know what it is were likely continuing students who had used it in the grammar class taught by
the one PEP teacher who had been using SCOL frequently in the two terms prior to this study.
What was assumed from this data, was that these students, who had already been using SCOL in
previous classes, would need far less instruction on how to use SCOL than their counterparts
with no experience. However, we could not be certain exactly which students had actually had
experience with SCOL, and thus the real conclusion drawn from this data was that most students
were unfamiliar with SCOL and that instruction on its use would be needed in just about any
class. One of the problems observed with many CALL resources is that they are capable of
taking more time through their instruction than they save through their use (Weston, 2007). As
seen in Table 2, familiarity with SCOL was greatly lacking, and as a result, precious time (of
which there is relatively little in a 32-hour course) would need to be dedicated to instruction of
SCOL in any PEP class.

Table 2

Student Familiarity with SCOL

Response	100-200 level	300-400 level	Total
Know what it is	2	4	6
Have heard of it, but are unsure	3	3	6
Don't know	15	9	24

Other questions that were asked of the students were designed to determine their internet usage habits. First, it needed to be seen whether PEP students already used the internet, as SCOL is accessed through the internet. Its usefulness lies namely in being a convenient way for students to increase access to their class and resources using technology they are already familiar with. If the students did not already use the internet, then SCOL would not be as convenient a tool as was initially thought. As seen in Table 3, this was not the case with PEP students, though.

Table 3

Student Daily Internet Usage

Daily hours of internet use	100-200 level	300-400 level	Total
0-1 hours	4	2	6
1 hour or more	4	4	8
2 hours or more	9	7	16
3 hours or more	2	2	4
4 hours or more	2	0	2
No Answer	0	1	1

What we see in Table 3 is that nearly all students used the internet daily, with most having used it between one and three hours daily. Only one student did not answer. In any case, it would seem that virtually all students could be found online at some point every day. Even if they were online for just a few minutes to check email, this is no more time than that required to log on to SCOL and check for messages, assignments, and so on. The findings in Table 3: that PEP students were already online daily, and that SCOL use would not be adding anything particularly unusual to their daily routine, were discussed with and agreed upon by the PEP administrators.

PEP students could log onto SCOL when checking their e-mail. In this way, SCOL retained its usefulness as a convenient tool. One key flaw here, however, is that the question unfortunately did not leave a space to make a complete lack of internet use clear. This problem, however was mitigated through the small number of students who signaled less than one hour daily (a minority in both student groups), and the data obtained was deemed useful enough to act upon by the evaluator and the users. However, determining whether or not the students accessed the internet daily was not enough to justify implementing it at PEP.

SCOL is an online resource and is intended to be used outside of the class. While all students may access the internet at PEP and at university libraries, they may only access the internet there during hours of operation. In order for SCOL use to be completely successful, it was desired that students would have had access to the internet at times and places of their choosing. As seen in Table 4, this was largely found to be the case.

Table 4

Internet Access

Method of internet access	100-200 level	300-400 level	Total
Home computer	18	12	30
Laptop	4	4	8
School computer	3	4	7
Other	0	1	1
No Answer	0	0	0

The responses to this question indicate that nearly all students accessed the internet either at home or outside the home with a laptop computer. Only one student chose neither "home computer" nor "laptop", choosing the "other" option without specifying what that meant for them. Several students chose two answers as evidenced by a total of 46 answers from only 37 respondents. Had it been seen that there were students who relied solely on PEP and university internet access, it might have been concluded that SCOL may not be a terribly convenient tool. This, however, was far from the case, and so, it was determined that SCOL was a tool that could be accessed by all students outside of school, as part of an activity they already did daily: using the internet.

While it was determined that all students were accessing the internet daily outside of school, it remained to be seen whether one of the biggest problems inherent with SCOL use in an ESL setting, its accessibility only in English, would be a problem for PEP students. For these questions, analysis of data according to learner level was most useful, and as seen in Table 5 below, there were apparent differences

Table 5

Student Comfort with Using the Internet in English

Level of comfort	100-200 level	300-400 level	Total
Very Uncomfortable =1	3	1	4
2	5	1	6
3	10	6	16
4	2	4	6
Very Comfortable =5	1	3	4
Mean	2.66	3.44	3.00

Here we see in Table 5, that, with an average answer nearly a full point higher than their lower-level counterparts (mean of 3.46 compared to 2.66), the higher-level students (300-400) felt more comfortable using the Internet in English. We also see in Table 6, that higher-level students used English language websites more frequently than lower-level students. The higher-level students reported on average that 38% of the websites they accessed were in English, which is much higher comparatively than the average of 25% of websites the lower-level students reported accessing in English. What was taken from this data was essentially a confirmation of what was already anticipated by the PEP administration and staff. Using SCOL was likely to be easier for the higher-level students, because SCOL should have fit more conveniently into the daily routine for higher-level students, as its use is similar to something they did frequently enough already: accessing websites in English.

Table 6

Use of English Language Websites (by Level)

How often do you use English websites?	100-200 level	300-400 level
0-9%	4	2
10-19%	6	0
20-29%	2	1
30-39%	5	4
40-49%	0	4
50-59%	1	3
60-69%	2	0
70-79%	0	1
80%	1	1
Mean	24.70%	38.40%
Standard Deviation	21.63%	20.06%

With students accessing the internet outside of school daily and higher-level students having done so fairly frequently and comfortably in English, one last aspect of student internet-use needed to be examined. SCOL automatically assigns students to the university classes they enroll in online. The catch is that their email address attached to their university ID is the account which is added automatically. Students' personal email addresses may be used to add students to a class's SCOL page, but this is not done automatically. In this case, teachers must invite the students to the page using the students' email addresses. If students give different teachers the same email address for each class, they are able to access all class pages with one log-in. If they give multiple addresses (e.g., one address at hotmail.com and another at yahoo.com), however, they will be required to log in separately for each class page they wish to access. This can all become complicated quickly, and is easily avoided by the simple use of a student's university ID to log in. Students who do not use their university IDs to access university web resources (e.g., email) frequently may not be likely to access SCOL with those same IDs. For this reason, the final question of the questionnaire aimed to determine the frequency with which students were using their university IDs to access university web resources. High usage would indicate easier facilitation of SCOL in PEP classes. As shown in Table 7, students' habits were quite surprising.

Table 7

Student Use of University Web Resources

Frequency of university mail or university portal use	100-200 Level	300-400 Level	Total
None/Never	6	9	15
Once a month- twice a week	3	2	5
3-6 times a week	1	0	1
Once a day	9	1	10
Twice a day	2	2	4
3 times a day	0	1	1
4 times a day	0	0	0
5 times a day	0	0	0
6 times a day	0	1	1

As seen in Table 7, nearly as many students checked their university mail daily as never checked it. What is more, higher-level students, who were more likely to encounter SCOL in their PEP class, checked their university mail far less frequently than students in lower levels. This was due, in part, to many students claiming to not have had university mail accounts or IDs, which is very possibly true for new PEP students, but surprising nevertheless.[2] While frequent use of university IDs would have indicated that accessing SCOL would easily fit into the daily internet routines of the students, it was found that this simply was not something the higher-level students did regularly (or at all!). This could be overcome by the manual addition, by teachers, of students' personal email addresses to the SCOL page, but would not be nearly as convenient.

The administration had hoped that SCOL use would help the PEP students to feel like part of the university community. As seen in the data above, many students did not use the university resources, which may have been a sign that they did not feel part of the community. While use of their university IDs would have made implementation of SCOL easier in PEP classes, there may have been something to gain from the lack of university ID use. The administrators had hoped SCOL use could be the step that forced PEP students to use their university web resources and feel like the members of the university community that they, as PEP students, were.

---

[2] Also notable are the uneven units of time given in students' responses. Students were asked to write how many times *per day* they used university web resources, but many students revised the questionnaire to allow for different units, such as *per week* or *per month*.

Discussion of Survey Results

With all of the survey results compiled, the following conclusions were made by the evaluator and PIUs and passed on to PEP teachers, as stakeholders in the evaluation:

1. PEP students already accessed the internet daily from locations outside of school. SCOL use as an out-of-class resource to enhance the contact students had to their classes and class resources had the potential to be successful, as it fit conveniently into the daily routine of the PEP students.

2. Higher-level students were more comfortable using websites that contain English and did so more frequently. 300- and 400-level students would likely adapt to SCOL use more quickly than the lower level students, as English would not have been as much of a barrier for them.

3. Higher level students checked their university mail and portal far less frequently. Teachers would need to keep this in mind and be sure to manually add the email addresses of students who either did not have or did not check their university mail accounts. The ease with which students can be added to SCOL using their university IDs, however, may serve as an impetus for increased use of university IDs and web resources by PEP students, which was one of the goals PEP administrators had for increased SCOL use at PEP. The lack of university mail use may not have been problematic after all. Nevertheless consideration for this surprising result was needed from the teachers.

When compiled, these results ended up supplying a tentative answer for the first research question: To what extent is it feasible to implement SCOL in PEP classes? While all students had internet access outside of the school (a major prerequisite for successful use), we also saw that technological issues (like the lack of university IDs) might impede a speedy implementation. Because of these potential time wasting issues, it was determined, that for a trial run of SCOL implementation, it would likely be easiest to use with higher level students, who were more familiar with using the internet in English.

Decisions

As is often the case with an explanatory design, findings of the first study are reported and discussed prior to moving on with the next phase. In the previous section, the findings reported to the evaluation users were shown. In a meeting with the users, the next steps of the evaluation were discussed. Having tentatively outlined the evaluation prior to the first stage, it was

anticipated that some class would likely emerge as a good candidate for careful study in its implementation of SCOL the next term. From the data, it was concluded that a higher-level class would be best, although with the caveat that many of the students would not have prior knowledge of SCOL and perhaps even university IDs or email addresses at the beginning of the semester. In the meeting, it was decided that a teacher less experienced with SCOL would be offered assistance in implementing SCOL in the upcoming term on the condition that the evaluator, who would be assisting the teacher, could also observe the process. The teacher, who was not present, was later approached and agreed to take part in the next, more formative part of the study.

Along with future actions to be taken, the methodology of the next phase of the evaluation was discussed at the same meeting. The PIUs at this stage were convinced that SCOL could be implemented in PEP classes with enough effort, but wanted to gauge the extent to which such efforts were necessary. They wanted to find out whether or not the purported benefits of VLE use were being enjoyed by students and teachers alike. Because the users were primarily concerned with the opinions of a relatively small group of people, it was determined that qualitative methods, including a careful observation of one teacher as well as elicitation of opinions from a second teacher (also implementing SCOL) and all students using SCOL would be needed. Both the close observation of a teacher learning to use SCOL and an open-ended questioning of students regarding their opinions were anticipated before the evaluation started. At the meeting, a change in plans was made, and interviews with all teachers using SCOL were added to acquire more perspectives on the extent to which SCOL should be used at PEP

STUDY 2- TEACHER INTERVIEWS AND STUDENT EXIT SURVEY

Phase 1 – Qualitative Observation and Interviews

Context. After the results of the first study were discussed with PEP administrators, it was decided that an evaluation of SCOL use in a PEP class was, as anticipated, needed. The results of the first study satisfactorily answered the users' questions pertaining to the feasibility of implementing SCOL in higher-level classes. It was found that most PEP students frequently used the internet, in English, at places outside of school (where building hours limit access to the internet). It was also found that 300- and 400-level students, due to higher frequency and comfort

with using websites in English, would likely take to SCOL use more quickly than lower-level students, and thus a higher-level class, in which SCOL could have been implemented was needed. Through discussion with the administrators, a 400-level class with a cooperative teacher was found.

Predating the data collection measures (interviews and questionnaire) was an observation of one teacher. This observation constituted a large component of the summative aspect of the evaluation. The evaluator initially met with the teacher five days before the start of the semester to discuss the use of SCOL in the forthcoming class. Since the teacher had indicated interest in learning to use SCOL in the questionnaire, this first meeting was intended to zero in on the specific goals and purposes for trying to increase SCOL use in class. At this meeting, the various tools were presented and explained to the teacher. As the class dealt with reading and reporting on current events, tools were suggested which might aid the teacher in guiding students to useful websites and which might foster discussion among the students on the current events they read about. The week following the meeting, several emails were exchanged, primarily discussing troubleshooting issues. Then, over the course of the term, the teacher and evaluator kept in touch, via email and by meeting in person, to discuss the successes and failures involved with SCOL use. The evaluator took notes of the meetings and had access to the class's SCOL page to see how it was being used. As a result of this observation, certain SCOL tools became known to the evaluator as particularly useful or difficult to use. Despite this record keeping, specific data from these observations were not presented to the administrators (PIUs). Instead, at the end of the term, a more formal interview was conducted, in order to give the teacher some control over the opinions and suggestions that would be shared with the PIUs (and in this report). This observation period was, however, useful in deciding what types of questions needed to be asked in the interviews.

Participants. In the teacher questionnaire, one teacher (of current events) had indicated a strong desire to learn how to use SCOL as a teacher for the second spring term. This was the teacher who was given some help in choosing applications to use and consulted with several times over the course of the term while being observed by the evaluator. In addition to this teacher, another PEP teacher had been using SCOL in a grammar class in the two terms prior to this study and had indicated (on the questionnaire) the intent to continue doing so in the second spring term. While the experiences and opinions of both teachers were valued, the current events

teacher was followed more closely over the course of the semester. Near the end of the second spring term, though, both teachers were interviewed regarding their experiences with SCOL, having used it for one and tree terms (respectively) at that point. The students of these two teachers' classes were also given open-ended questionnaires, in order to obtain student feedback on the use of SCOL in their class.

Procedures. A series of 11 interview questions (seen in Appendix D) regarding the teachers' experiences with SCOL were developed. The teachers were asked to state and elaborate on the aspects of SCOL they liked and disliked. They were also asked to elaborate on problematic issues with using SCOL in their classes as well as discuss the extent to which they felt students were enjoying SCOL. Finally, the teachers were asked to hypothesize on changes they would have liked to seen made to SCOL. The questions came primarily from the observation of the teacher learning to use SCOL. These teachers often commented on the functions they found useful and those they did not, as well as making frequent complaints about interface issues with this site. The questions for the interview were designed to elicit responses, either positive or negative, pertaining specifically to the perceived benefits of and problems with SCOL, as the evaluation users were largely interested in finding out if the benefits outweighed the costs of implementation.

The interviews were recorded with a laptop computer, and the same laptop was used to take notes on the teachers' responses as the interview progressed. The interviews were conducted on PEP premises. With the grammar teacher, the interview was conducted in the vacant teachers' lounge. The other teacher's interview was conducted in their shared office, which was vacant at the time of the interview.

Data/results. Throughout the interview, teachers were guided to talk about the tools and features of SCOL they liked (or disliked) most and why. The teacher interviews were then searched for comments that were explicitly positive, neutral (containing both positive and negative comments), or negative of some aspect of SCOL use. All unique comments were then put into tables and shown to the users (PEP administrators). Instances in which teachers made the same remarks about the same aspect of SCOL were not repeated in the table. Some questions had the teachers revisit earlier answers; however, teachers' opinions did not change over the course of the interview, suggesting reliability in their answers. Had their opinions changed, those answers would have been recorded in the table. Within Tables 8 and 9, trends as to what was

found by both teachers to be positive or negative about SCOL use emerged. These opinions were later considered in deciding on the extent to which PEP wanted to increase SCOL use.

The first teacher interviewed was using SCOL in a grammar class for a third consecutive term. In Table 8, we see the positive and negative perceptions the teacher had experienced in using SCOL. It should be noted that the teacher was using SCOL in a 200-level class as opposed to the 300- and 400-level classes in which they had used SCOL in the past. As seen in the grammar teachers' comments, the resource tool was appreciated as it freed up time from having to deal with tasks related to distributing and collecting papers. However, the majority of the positive comments pertained to the collaborative and community-building aspects of SCOL use associated with blog publishing and chat room participation. On the negative side, a pattern pertaining to interface issues emerged, a trend that was mirrored in the other teacher's comments. SCOL was simply not user-friendly enough and it was not perceived to be a saver of time as a whole. The grammar teacher reported spending more than 30 minutes (the amount of time budgeted in the 16 hour class based on experience with higher-level student) in two different lessons to teach the students how to use SCOL. The planning time required of this teacher was also not reduced, as new tasks were created for the teacher. As evidenced by this teacher's repeated use of SCOL, the benefits seemed to outweigh the problems, but nevertheless, improvements, especially pertaining to ease of use, would have been appreciated.

Table 8

Comments from the Post-Term Interview with the First Teacher

Positive comments	Negative comments
+ The "resources" tool is great for storing handouts and other important files the students may need. After a few weeks, there is no more need for the teacher to hand out assignments.	- It could be more user friendly to be better. User interface is a bigger problem than English, [but] English is also a problem.
+ I like the private discussion, message and blog.	- This is one function I don't like, because comments are hiding…
+ One benefit of SCOL is the collaborative learning.	- also, the "go-back" function…I don't like that.
+ It's a friendly atmosphere	- For some functions, the instructions are not so detailed,
+ It's more flexible they can access whenever they want	- One problem I encountered was adding students to the site. With hotmail was no problem, but Yahoo was often a problem
+ One benefit is cooperative learning, because you can see others homework.	- one third of the students had a technical problem. They had a hard time logging in.
+ For homework assignments, it's the best.	- 30 minutes is not enough time to teach [100 and 200 level] students how to use SCOL, everybody has different problems.
	- SCOL creates completely new tasks, so it's hard to say if it saves time.

Table 9

Comments from the Post-Term Interview with the Second Teacher

Positive Comments	Neutral Comments	Negative Comments
+ For students sticking around, I think it's really beneficial [to learn SCOL]… and even for those who aren't	+/- "Web content" is awesome…but it all looks the same, it's hard for the students to know what the tabs are or mean	- If anything, there are no time savers involved with the program at all…none.
+ The resources [tool] is great.	+/- I would use it again, but would stick with more advanced students.	- 99% of problems I'd like to see fixed are interface related.
+ The announcement tool is really helpful	+/- Higher-level students and those who are familiar with technology pick it up a lot quicker. Those not familiar with technology really struggle.	- SCOL has no spell check, and students who compose only in SCOL have lots of mistakes.
+ After the third or fourth week, I stopped printing out weekly assignments, which were mostly the same each week.		- The computer lab is not conducive to example lessons
+ Half-way through, I found it was extremely beneficial	+/- It's nice to have a record of everything, but I'm not sure how to use it.	- students who are not familiar with the web or technology at all are completely [lost].
+ Calendar was nice… it helped me bring attention to events the students might not have know about.	+/- Assignment feature is nice, I guess, but I don't like the way it is set up at all.	- I don't like the user interface of 'gradebook'
	+/- I don't know what is better, making my own website or using this.	- to be aware of all the options and how to use them in 8 weeks is impossible.

The other interview was conducted with the current events teacher who worked with the evaluator to implement SCOL. As seen in the comments in Table 9 as well, this teacher also reported benefits in using the tools that potentially save time by eliminating housekeeping measures like handing, collecting, and explaining various papers (e.g., the "resources" tool). However, while these tools were enjoyed by the current events teacher, there was no mention of time saved. Instead, this teacher focused more on which tools were most beneficial. As mentioned in Table 9, this teacher specifically liked the "web content" tool for their current events related class, which allowed to the linking of webpages while keeping students logged into SCOL. While the teacher did state, that they thought it was beneficial for all students to have exposure to SCOL, the teacher's experiences were far from exclusively positive, with many positive comments qualified by some negative aspect of SCOL use. Like the other teacher, this interviewee saw the interface issues related to SCOL as sometimes getting in the way. As was to be expected, the teacher noted that higher-level students did better with SCOL. For them,

English was not so much limiting their ability to use SCOL as much as the interface did. This teacher too would have used SCOL again, but would have preferred to see improvements made to the interface to make SCOL more user-friendly.

Phase 2 – Exit Survey of Students

Participants and procedures. For this last portion of the evaluation, the students of both classes that used SCOL were asked to fill out questionnaires regarding their experiences using SCOL. The questionnaire (See Appendix E) consisted of seven open-ended questions designed to elicit comments pertaining to the use of SCOL and the perceived benefits or problems related to its use, much like the questions in the teacher interviews. The teachers gave these questionnaires to their students (nine in the grammar class and six in the current events class) in class and were available to assist students who had difficulty understanding the questions. All students received and returned a questionnaire; however, it was not uncommon for questionnaires to come back with few responses, or with a response of 'no' for some questions. This methodological flaw meant that only those students with an interest in giving their opinion on SCOL did so. By not making responses mandatory, some data were no doubt missing and some potentially different opinions have gone unheard. This is an inherent risk in using open-ended questions.

Student responses were aggregated for each question and then sorted into three categories: positive, neutral, or negative. Due to their limited numbers, much like the teacher interviews, all answers were presented (see Table 10) to the administrators in a final meeting to discuss the extent to which of SCOL use would be continued at PEP. However in an effort to save space, only the unique answers are seen in Table 10. For instances in which several students felt the same way about the same function, one response was selected to represent the sentiment of the other students.

Data/results. In Table 10, we see that the students' comments were a mix of positive and negative reviews. Looking at the positive answers, we see that students did seem to appreciate the opportunities SCOL provides, especially in terms of sharing their work with peers. The negative comments all seemed to deal with the technical difficulties they encountered with SCOL use. Much like the teachers, they would have liked to have seen changes made to SCOL that would have made it easier to learn and use. They did not seem to have issues with the tasks

they were being asked to perform in SCOL, as much as they had issues with the way in which SCOL let them accomplish those tasks. What was extremely useful in this data is the added perspective the students brought. Much as anticipated prior to the study and seen in the teacher interview responses, these student responses showed that interface issues were a huge problem with SCOL use. Getting this data from different sources and measures made the argument, that SCOL use had some serious problems that needed to be considered, that much more believable to the users.

Table 10

Final student questionnaire- Responses

Positive Comments	Neutral Comments	Negative Comments
+ It's fast and practical.	+/- it's not bad software to learn English but sometimes computer do not work well.	- Sometimes it's overwhelming to have so much information.
+ I think the Resources [tool] worked well.	+/- Good but annoying.	- I think SCOL [needs] to improve.
+ It was good to see other people's writing & to attach pictures and documents.		- I don't like it because it's hard for me.
+ In SCOL I could read my classmate's writing.		- Sometimes my internet connection was bad, so I couldn't do homework one time.
+ I like writing something at SCOL.		- I am not young, so I cannot use computer well.
+ I don't need write to paper, so easier.		- Maybe I want to make own password, because SCOL's password is difficult to remember.
+ Using computer type homework is easy.		- The picture is not very easy to use.
+ I like to write blog in SCOL, because teacher can have a feedback on me		
+SCOL is a good tool to use English. It is easy to use.		

Discussion of phase 2 results. In the past, VLEs have been seen to work both well and poorly in studies. For example, a study by Pajo and Wallace (2001) found no serious differences in improvement between a group of university students enrolled in a VLE in comparison with a group of similar students enrolled in the same course, but not in a VLE. They additionally found that participants in the VLE group reported being less satisfied with the learning process. The results of the current study, however, seem to resemble the more recent findings of a study by Chou and Liu (2005), in which they found that students in the VLE environment achieved higher levels of satisfaction. The students gave many positive comments focusing on different aspects of SCOL use that they enjoyed (e.g., doing homework, getting feedback, seeing other students' work). There were also many neutral and negative comments, but these focused on problems with SCOL's user-interface or technology in general. Overall, the students seemed satisfied with the VLE, and the extent of this satisfaction was reported to the administrators in order to assist them in their decision-making process, with the caveat that, like the teachers, interface and technological barriers needed to be considered as well. Unfortunately, student opinions on whether they felt SCOL use made them feel like a part of the university community were not obtained. In hindsight, this information would have been interesting as well.

OVERALL EVALUATION RESULTS

After the teacher interviews and final student questionnaires were completed, a meeting was held with the administrators to make a decision regarding whether or not to include SCOL use in all classes. Data from the more quantitative initial student survey as well as from the qualitative teacher interviews and open-question student questionnaires were reviewed and discussed.

The PIUs had initially felt that using SCOL would better prepare PEP students for university classes, where SCOL is frequently used, which led to the initial research question: To what extent is it feasible to implement SCOL in PEP classes? The answer to this question was found in the initial survey, which led us to believe that PEP students, for the most part, would be able to use SCOL in PEP classes. This conclusion was found in the observation of the current events teacher and in the student questionnaires to be, more or less, true. There were a few comments in the final student questionnaire that mentioned the difficulty with which students were able to use

SCOL (and computers in general), but essentially, implementation of SCOL in PEP classes found few obstacles on the student side of the equation.

However, the PIUs' wish to serve students came with the caveat that they did not wish to create extra work for the teachers, and thus a second research (or evaluation) question needed to be answered. The second question (To what extent would it be beneficial to use SCOL in all PEP classes?) was answered with the qualitative data coming from students and teachers who discussed their opinions and shared their experiences with SCOL use. While the teachers had many good things to say about SCOL, especially regarding certain tools, like "resources", neither of the teachers found it to be a time saver and both were frustrated with the interface. One teacher theorized that time required to teach SCOL to students was too much, requiring more than 30 minutes, which is a lot to ask of a 16-hour course. The other mentioned that it saved virtually no time at all, as using SCOL created tasks the teacher wouldn't have otherwise done. As for interface, one teacher stated that it was the biggest hindrance to student use of SCOL, greater than difficulty due to the use of English. The other teacher stated that 99% of the things that needed to be fixed were interface-related, a comment which captured the overall frustration that teachers and even students had with SCOL in terms of interface.

There were many positive comments made about the use of SCOL, but ultimately, they were not enough to convince the administrators to move on with their plan to require SCOL use in all classes. Would it be beneficial to use SCOL in all PEP classes? To answer the second research question, it seemed that there would be certain benefits, but these benefits would not come without costs, the greatest of which was time. Because both students and teachers complained about the interface issues with SCOL (something that was beyond the control of the evaluator or anyone at PEP), SCOL became a program recommended to, but not required of, PEP teachers.

DISCUSSION

When it comes to CALL evaluations, Levy and Stockwell (2006) state that "too often decisions regarding the introduction of new technologies in schools, colleges, and universities are made at the administrative level without the input of the people who will be using them" (p. 226). In this evaluation, this was not the case. The administrators had hoped to introduce a new technology to their curriculum, but changed their mind when they considered the input from the

people who would be using SCOL: the students and teachers. The keys in this evaluation were collecting the right data from students and teachers with the right methods and presenting it in comprehensible ways to the administrators. In order to do that, it would not have been appropriate to approach the evaluation in such a way that only one type of methods, either QN or QL, would be on the table. All methods needed to be considered. In this evaluation, as in many others no doubt, this meant to the use of MM was the most appropriate way to get the evaluation questions answered and the evaluation findings used.

At each stage in the evaluation, it was crucial to decide what kind of data was needed and which method was best for collecting those data. In the first stage, more QN-type data were required. A survey seemed the best way of efficiently getting fairly straightforward and predominantly objective information from the entire student body. Mostly closed questions were used, and thus it was easy to identify general trends, which was enough specificity for the users to make decisions on how to proceed. They wanted to know if the students were ready enough to use SCOL at PEP. The data seemed to indicate that the higher level students were likely to be more prepared, something the more experienced SCOL teacher observed through the use of SCOL with both higher and lower level students. Due to the results of the questionnaire, it was decided that the evaluation should move on to a second, more formative phase of assisting with and observing the implementation of SCOL at PEP.

After the first research question (To what extent is it feasible to implement SCOL in PEP classes?) was answered to the administrators' satisfaction, it was time to focus on the second research question: To what extent would it be beneficial to use SCOL in all PEP classes? The administrators really wanted SCOL use to benefit teachers, so the best kinds of data to answer this research question were teacher opinions and observations. By working closely with one teacher and getting convincing qualitative data from teachers in interviews, it was possible to answer the question for the administrators: SCOL use had the potential to be beneficial for PEP teachers and classes, but it came with serious challenges as well. By talking with the teachers, these problems were not only easy to identify, but the extent to which they were a problem for the teachers was also easy to identify and thus easy to convey to the administrators.

Finally, the end-of-term student questionnaires, which too provided qualitative data, were useful in confirming the claims of both the initial survey which proposed that PEP students would be able to use SCOL and the teacher interviews which stressed that SCOL had serious

user-interface issues that would pose a hindrance to successful introduction of SCOL in PEP classes program-wide. In addition, several benefits of VLEs as seen in the professional literature, like increased co-operation and communication (Beauvois, 1992; Chun, 1994; Darhower, 2002; Kern, 1995) and the facilitative nature of computer mediated peer review (Ho & Savignon, 2007) were confirmed in these student responses (e.g., 'In SCOL I could read my classmate's writing', 'It was good to see other people's writing'). The choice to use this method at that stage in the evaluation was a good one, as it served to validate some of the other claims being made with the data presented to the evaluation users.

CONCLUSION

While the result of this evaluation led to changes in the PIUs' initial plans to introduce SCOL into all PEP classes, it was successful to the extent that the data collected were used by the PIUs to make an informed decision. Two general purposes of evaluation, to "assist program management so that quality processes are assured," (Kiely & Rea-Dickens, 2005, p. 19) and specifically in language program contexts to influence short-term decision making (Rea-Dickens & Germaine, 1998), were both realized. This decision bucks a pattern Levy and Stockwell (2006) warn of, wherein administrators make decisions to implement technology in classes without teacher and student input. In this evaluation, teacher and student opinions were elicited and used as the basis for making the final decision, to promote SCOL use without requiring it, a good compromise given the findings. SCOL was clearly perceived to be additional work for the teachers and had some salient problems in interface that could not be addressed by anyone in the PEP organization. However, teachers and students alike did note some benefits, the likes of which the administrators are now aware of and can share with new teachers looking for help with curricular decisions. SCOL use certainly has a place at PEP, but not in every class. Arriving at this nuanced, informed decision, to encourage but not demand that teachers incorporate SCOL in PEP classes, was an evaluative success.

The key to the success of this evaluation was no doubt a MM approach to evaluation and the use of a MM explanatory design. As Creswell and Plano Clark (2007) put it, "The combination of qualitative and quantitative data provides a more complete picture by noting trends and generalizations as well as in-depth knowledge of participants' perspectives" (p. 33). Starting with

a QN measure allowed crucial student information to be quickly obtained and an informed decision to proceed with a monitored introduction of SCOL at PEP to be made. However, after this stage, the research question became more nuanced and new methods were needed. Switching to QL methods of data collection was beneficial, not just due to the small number of participants, but to the kind of data that would be useful to the evaluations users, the opinions and experiences of teachers and students.

Successful as the evaluation may have been, there are limitations that should be considered. First of all, the evaluation was rather short, and only focused in depth on one teacher and class. This may have been sufficient for the PIUs to make a decision, but further observations of other teachers and students may have produced data that could have led to another decision. As for the theoretical implications, it should be noted that the initial survey, due to the inclusion of some partially open-ended items, could be viewed by some as not purely quantitative in nature. In addition, the analysis of the surveys was limited to some fairly basic QN data analysis techniques (descriptive statistics). While sufficient for the purposes of the PIUs, this may not be enough to satisfy researchers who wish to see a mix of more drastically QN or QL methods in a design that calls itself mixed-methods.

The current utility-focused trend in evaluation stresses the importance of being, among other things, adaptive (Patton, 2008). In adapting to the unique situation of an evaluation, it serves the evaluator well to have a wide array of methods to select from. By making use of mixed-methods, evaluators retain more methodological options at each stage of their evaluation, and thus more possible ways to elicit the right kind of data to make the important decisions their evaluation calls for. Thirty years ago, Cronbach and associates (1980) asserted that what is needed in an evaluation is "information that supports negotiation rather than information calculated to point out the 'correct' decision" (p. 6). By mixing methods and choosing different methods to collect different kinds of data in this evaluation, the process of negotiation was facilitated and observed in the end decision. It was a mixed methods approach that led to the elicitation of the right data to negotiate a final decision. This evaluation was just one example showcasing the use of mixed methods in evaluation. This use was not out of preference, but out of necessity, as mixed-methods allowed the evaluator to find the right tools for the job. This connection between the use of mixed methods and evaluation use is a natural one. It seems only natural then, that the use of

mixed methods shall be a more widely accepted norm in evaluation, as mixed-methods grows as an acceptable way to do research and evaluation maintains its focus on evaluation use.

ACKNOWLEDGEMENTS

References

American Evaluation Association (2003). *Scientifically based evaluation methods.* Retrieved from http://eval.org/doestatement.htm

Beauvois, M. H. (1992). Computer-assisted classroom discussion in the foreign language classroom: Conversation in slow motion. *Foreign Language Annals, 25*(5), 455-464.

Bergman, M. M. (Ed.) (2008a). *Advances in mixed methods research: Theories and applications*. London: Sage.

Bergman, M. M. (2008b). Introduction: Whither mixed methods? In M. M. Bergman (Ed.), *Advances in mixed methods research: Theories and applications* (pp. 1-7). London: Sage.

Bergman, M. M. (2008c). The straw men of the qualitative-quantitative divide and their influence on mixed methods research. In M. M. Bergman (Ed.), *Advances in mixed methods research: Theories and applications* (pp. 11-21). London: Sage.

Brown, J. D. (2001). *Using surveys in language programs.* New York: Cambridge University.

Bryman, A. (2008). Why do researchers integrate/combine/mesh/blend/mix/merge/fuse quantitative and qualitative research? In M. M. Bergman (Ed.), *Advances in mixed methods research: Theories and applications* (pp. 87-100). London: Sage.

Caracelli, V., & Greene, J. (1997). Crafting mixed-method evaluation designs. In J. Greene & V. Caracelli (Eds.), *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. New directions for evaluation* (No. 74, pp. 19-32). San Francisco: Jossey Bass.

Chou S. W., & Liu C. H. (2005) Learning effectiveness in a Web-based virtual learning environment: a learner control perspective. *Journal of Computer Assisted Learning, 21*, 65-76.

Chun, D. (1994). Using computer networking to facilitate the acquisition of interactive competence. *System, 22* (1), 17-31.

Creswell, J. W., Plano Clark, V. L., & Garrett, A. L. (2008).Methodological issues in conducting mixed methods research designs. In M. M. Bergman (Ed.), *Advances in mixed methods research: Theories and applications* (pp. 66-83). London: Sage.

Creswell, J.W., & Plano Clark, V.L. (2007). *Mixed methods research.* Thousand Oaks, CA: Sage.

Cronbach, L. J., Robinson Ambron, S., Dornbusch, S. M., Hess, R. D., Hornik, R. C., Phillips, D. C., & Weiner, S. S. (1980). *Toward reform of program evaluation: Aims, methods, and institutional arrangements.* San Francisco: Jossey-Bass.

Darhower, M. (2002). Instructional features of synchronous computer-mediated communication in the intermediate L2 class: A sociocultural case study. *CALICO Journal, 19*(2), 249-278.

Datta L. (1997). A pragmatic basis for mixed-method designs. In J. Greene & V. Caracelli (Eds.), *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. New Directions for Evaluation* (No. 74, pp. 33-46). San Francisco: Jossey Bass.

de Leeuw, E., & Hox, J. (2008). Mixing data collection methods: Lessons from social survey research. In M. M. Bergman (Ed.), *Advances in mixed methods research: Theories and applications* (pp. 138-149). London: Sage.

Grabe, W., & Kaplan, R. B. (1996). *Theory & practice of writing.* London: Longman.

Greene, J., & Caracelli, V. (1997). Defining and describing the paradigm issue in mixed-method evaluation. In J. Greene & V. Caracelli (Eds.), *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. New Directions for Evaluation* (No. 74, pp. 5-17). San Francisco: Jossey Bass.

Guba, E., & Lincoln, Y. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.

Ho, M. C., & Savignon, S. J. (2007). Face-to-face and computer-mediated peer review. *CALICO Journal, 24*(2), 269-290.

Howe, K. R. (1988). Against the quantitative-qualitative incompatibility thesis: Or dogmas die hard. *Educational Researcher, 17*(8), 10-16.

Howe, K. R. (2009). Positivist dogmas, rhetoric, and the education science question. *Educational Researcher 38*(6), 428-440.

Kelm, O. R. (1992). The use of synchronous computer networks in second language instruction: A preliminary report. *Foreign Language Annals, 25*(5), 441-454.

Kern, R. G. (1995). Restructuring classroom interaction with networked computers: Effects on quantity and characteristics of language production. *Modern Language Journal, 79*(4), 457-476.

Kiely, R., & Rea-Dickens, P. (2005). *Program evaluation in language education.* New York: Palgrave Macmillan.

Levy, M., & Stockwell, G. (2006). *CALL dimensions: Options and issues in computer-assisted language learning.* Mahwah, NJ: Lawrence Earlbaum.

Long, M. H. (2005). Methodological issues in learner needs analysis. In M. H. Long (Ed.), *Second language needs analysis.* (pp. 19-76). Cambridge: Cambridge University.

Lynch, B. K. (1996). *Language program evaluation: Theory and practice*. Cambridge: Cambridge University.

Lynch, B. K. (2003). *Language assessment and program evaluation.* Edinburgh: Edinburgh University.

Lynch, K. B. (1983). Qualitative and quantitative evaluation: Two terms in search of a meaning. *Educational Evaluation and Policy Analysis, 5*(4), 461-464.

McGill, T. J., & Hobbs, V. J. (2007). How students and instructors using a virtual learning environment perceive the fit between technology and task. *Journal of Computer Assisted Learning, 24*(3), 191-202.

Pajo, K., & Wallace, C. (2001). Barriers to the uptake of web-based technology by university teachers. *Journal of Distance Education, 16*, 70-84.

Patton, M. Q. (2008). *Utilization focused evaluation.* Thousand Oaks, CA: Sage.

Perrin, B. (1998). Effective use and misuse of performance measurement. *American Journal of Evaluation 19*(3), 367-379.

Piccoli, G., Ahmad, R., & Ives, B. (2001). Web-based virtual learning environments: A research framework and a preliminary assessment of effectiveness in basic IT skills training. *MIS Quarterly, 25*, 401-427.

Rea-Dickens, P., & Germaine, K. P. (1998). The price of everything and the value of nothing: Trends in language program evaluation. In P. Rea-Dickens & K. P Germaine (Eds.), *Managing evaluation and innovation in language teaching: Building bridges.* (pp. 5-20). London: Longman.

Reid, J. M. (1993). *Teaching ESL writing*. Englewood Cliffs, NJ: Prentice Hall Regents.

Sanders, R. (2006). A comparison of chat-room productivity: In-class versus out-of-class. *CALICO Journal, 24*(1), 59-76.

Spear, K. (1987). *Sharing Writing: Peer response groups in English classes*. Portsmouth, NH: Heinemann Educational.

Warschauer, M. (1996). Comparing face to face and electronic discussion in the second language classroom. *CALICO Journal, 13*(2 & 3), 7-26.

Weasenforth, D., Biesenbach-Lucas, S., & Meloni, C. (2003). Realizing constructivist objectives through collaborative technologies: Threaded discussions. *Language Learning and Technology 6*(3), 58-86. Retrieved from http://llt.msu.edu/vol6num3/weasenforth/

Weiss, C. H. (1998). *Evaluation (2nd ed.).* Upper Saddle River, NJ: Prentice Hall.

Weston, T. (2004). Formative evaluation for implementation: Evaluating educational technology applications and lessons. *American Journal of Evaluation, 25*(1), 51-64.

APPENDIX A

RESEARCH PROPOSAL

PROPOSAL

Description of the study:

Starting just prior to PEP's second spring term and continuing through that same term, I would like to work with PEP staff in integrating university's SCOL website into PEP classes. In order to do that, a brief needs analysis will have to be conducted to determine the students' and staff's familiarity with the site and general internet usage habits. Once the survey has been conducted and PEP staff volunteer to work with me, we will collaborate on finding ways to effectively use SCOL in their classes. While the teacher uses SCOL in their class, I will observe and consult with them to evaluate its effectiveness in the class. Just prior to the end of the term, my evaluation of SCOL use in the classes will be written and made available for all at PEP/

Purpose of the study:

While the main purpose of the project is to increase the use of SCOL at PEP, my purpose for conducting this study is to produce a paper, which will be handed in as my final project for Class 630 at the univerisy: a class devoted to program (curriculum) design. By working with teachers to develop practical uses of SCOL and writing up a report of the various stages involved in doing so, I am meeting all requirements for my project, and thus the class.

It is my understanding that PEP is looking for ways to use SCOL more often in its various classes. PEP stands to gain from this study, as I am unpaid help motivated to assist PEP in meeting its goal of increased SCOL use. I will offer my time and effort in working with PEP's staff. The paper I write may also aid PEP in further integrating SCOL into the class after the term has ended and those involved in the project have moved on.

Methodology:

Through a series of surveys, I will evaluate student and staff preparedness for the use of SCOL in PEP classes. After evaluating the internet usage patterns of the students and after consulting with PEP staff, goals for and effective uses of SCOL would need to be developed. Once uses are developed by myself and cooperating PEP teachers, they will be implemented in PEP classes. As the term progresses, evaluations of the effectiveness of SCOL in the classroom will need to be done. Ideally, Teachers would be consulted regularly (at the end of each week) to discuss their experiences using SCOL. Through analysis of these weekly consultations (interviews) and an anonymous exit survey of all participants, use of SCOL in PEP will be evaluated. This evaluation will be written up and will hopefully be useful in further integrating SCOL into PEP instruction.

What access to PEP students is needed?

Ideally all students would be surveyed prior to development of materials. Surveys would be conducted anonymously, although information like student level (100/200/300/400) may be useful in interpreting the results. In addition to the entrance surveys, all students who are part of a class that uses SCOL would ideally be asked to fill out an exit survey as well. At no time will it

be necessary to obtain any identifying information about the students outside of the level of their PEP class.

Potential benefits of the study:

By allowing me to survey its students and staff and to work with it's staff in developing practical uses of SCOL in its classes, PEP stands to gain from this study without significant risk. PEP teachers will be given a chance to collaborate on the implementation of this technology, which should benefit them professionally in addition to any benefits this technology brings to the classroom. If proven to be beneficial, PEP will have experienced staff and recommendations on how to continue use of SCOL in various classes.

Checklist/ Timeline

Email surveys-	prior toFeb 16th
Discuss surveys-	prior to Feb 20th
Attend staff meeting / conduct teacher survey	Feb. 20th
Conduct student surveys (in class)	Feb 23th-26th
Work with teachers on determining uses for SCOL (small introductory activities need to be ready before term starts)	Feb 27th to March 8th
Term begins	March 9th
Weekly consultations with teachers	March 13th- mid April
Exit surveys of students and staff	mid-April(20th-23rd)
Evaluation of SCOL use (outside of PEP)	last week of April
Report due	May 11th

APPENDIX B
STUDENT QUESTIONNAIRES

First Name: _____   PLEASE DO NOT FILL THIS OUT MORE THAN ONCE!!!

INSTRUCTIONS: Please put an 'X' next to your answer for each question.

1. What level are your PEP classes this term?
100____   200____   300____   400____

2. Do you know what SCOL is?
No____   I heard of it before, but I am not sure ____   Yes____

3. How many hours a day do you use the Internet?
0-1____   1 or more____   2 or more____   3or more____   4 or more____

4. How do you access the Internet? (circle all that you use)

A computer at home   A laptop outside of home

A school computer   A mobile phone or PDA

Other: _____

5. How often do you use English websites when you use the Internet?
   (write a number)   _____% of the time, I use English websites.

6. How many times a day do you check your university email and/or login to university portal?

   (write a number)   _____times a day

7. From 1-5, how comfortable are you using the Internet in English?

Very uncomfortable 1   2   3   4   5   Very Comfortable

APPENDIX C
TEACHER QUESTIONNAIRE

TEACHERS
   Please circle one answer for each question, and where applicable write an answer.

1. How familiar are you with SCOL?

   1- This is the first I've heard of it.
   2- I have heard of it before, but don't know exactly what it is.
   3- I know what SCOL is, but I haven't used it.
   4- I have used SCOL before, but not very much.
   5- I have used SCOL and am familiar with it.

---If you circled '4' above, continue, if you circled '1,2 or 3' skip to question "5"---

   Please write your answer for questions 2-4 in the space provided

2. Have you used SCOL as a student? _____

3. Have you used SCOL as a teacher? _____

4. Have you used SCOL for purposes not directly related with your classes university? (For example a club or communicating with other students?) If so, how?

   _____

---please continue below if you skipped 2 through 4 ----

5. Do you have Internet access at home?

 Yes (reliable)_____   sometimes (unreliable)_____   none_____

6. How many total hours do you spend on the Internet in an average day

_____ hours a day

7. How easily is your class able to access the Internet in your classroom?

not easily at all 1   2   3   4   5 very easily

8. How easily are you able to use the Internet for work in your workspace?

not easily at all 1   2   3   4   5 very easily

   As you might know, SCOL is a university website that can be used as an online resource for university classes. Students and teachers are free to do a number of things including uploading and downloading files, conducting class discussions, and maintaining blogs.

9. As a PEP instructor how much interest do you have in incorporating SCOL into your class this next term?
(no interest) 1   2   3   4   5 (strong interest)

Thank you for your answers!   Please list on the back any SCOL applications you currently would be interested in using in your class.

APPENDIX D
QUESTIONS FOR TEACHER INTERVIEWS

Do you mind if I use your quotes in the paper?

1-How long have you used SCOL?

2-What functions do you use?

3-What functions do you like?

4-Which are difficult (don't you like)?

5-What problems did you have at first, that went away after time?

6-Which problems are still around?

7-How do your students like SCOL?

8-Could I ask them to fill out a questionnaire next week?

9-What limitations do you see for SCOL?

10-What benefits do you see overall?

11-What improvement would you like to see?

12-Other comments?

APPENDIX E- Final Student Questionnaire

Using SCOL at PEP: Student Questionnaire

In your PEP class this term, you have been using the SCOL website.
Please answer the following questions to provide PEP with feedback so that SCOL can be used effectively in the future. Answer in as many or as few words as you wish; your honest feedback will be greatly appreciated. Thank you.

1. How was SCOL used in your class?

2. What were the advantages of using SCOL? (What did you like about SCOL?)

3. Did you have any problems with SCOL? (What didn't you like about SCOL?)

4. What changes would you like to see in SCOL?

5. Which tools did you think worked well (ex. Blogs, Resources, Discussion)

6. Which tools didn't work very well…***why not***? (ex. Blogs, Resources, Discussion)

7. Do you have anything else you would like to say about SCOL?

APPENDIX F - Evaluation Timeline

Evaluation timeline for the evaluation of SCOL at PEP

Date	Activity
February 3rd	Discuss plans for the research project with PEP's administrators
February 8th	Offer proposal to administrators
February 20th	Attend a PEP staff meeting and offer my research proposal to teachers
February 20th	Conduct a survey of all PEP students regarding their internet use and familiarity with SCOL
February 20th	Conduct a survey of all PEP teachers regarding SCOL
March 5th	Discuss term plans with the selected instructor
March 10th	Instruction begins
March 18th	Offer data to and meet with the administrators
March 24th	Discuss progress with the selected teacher
April 17th	Conduct Interviews with two teachers who had used SCOL extensively in their class
April 22nd	Conduct interviews with the administrators regarding their perception of SCOL use.
April 28th	Distribute questionnaires to the students in the classes that had used SCOL extensively
April 30th	Classes End

APPENDIX F (continued) - Evaluation Timeline

Gantt Diagram of the Information Shown Above (PEP, 2009)

Week Ending	Feb 7th	Feb 14th	Feb 21st	Feb 28th	March 7th	March 14th	March 21st	March 28th	April 4th	April 11th	April 18th	April 25th	May 2nd
Discuss needs and plans with administrators	3rd												
Offer proposal to administrators		8th											
Attend Staff meeting, offer proposal			20th										
Student surveys			20th										
Teacher surveys			20th	-	3rd								
Analyze data, find teacher to work with			20th	-	3rd								
Discuss term plans with instructor					5th	9th							
Instruction begins							10th						
Offer data / meet administrators								18th					
Discuss progress with teacher									24th	-	-	17th	
Teacher Interviews											17th	23rd	
Administrator interviews												22nd	28th
Student questionnaires													28 - 30th
Classes end													30th