Design Research Report

Innovative Teaching Practices Supported By CourseWorks:

The Case Of Online Video/Audio Archive Of Students’ Presentations In A Language Course

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Introduction

In Spring 2002, Columbia University launched CourseWorks@Columbia, a course management system that allows faculty members to develop their course Web sites by creating and organizing digital content and activities for their classes.

Since the launching of the system, the Columbia Center for New Media Teaching and Learning, CCNMTL1, has been collaborating with faculty to assist them in understanding the system and envision possible uses of its features for the enhancement of their teaching practices. These experiences have created a unique research opportunity to explore the pedagogical uses and potential ways of enhancing CourseWorks’ features.

Framed within a Design Research approach, CCNMTL partnered with faculty members and studied the uses of CourseWorks for addressing some of the educational challenges they face in accomplishing their curriculum goals. The point of departure for such a research approach is rooted in genuine teaching and learning challenges that prompted the development of educational activities within CourseWorks.

Grounded in actual teaching praxis, this approach fosters an understanding of the role of CourseWorks’ in teaching and learning, as well as the potential enhancement of the system based on the experiences of the faculty and students.

This report presents and discusses one such research experience, and suggests ways in which course management systems can be studied in order to advance the current understanding of these systems as they are utilized in institutes of higher education.

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1 The Columbia Center for New Media Teaching and Learning www.ccnmtl.columbia.edu
A Design Research Approach for Studying CourseWorks@Columbia

We have recently witnessed the proliferation of discussions and debates focusing on the role of course management systems [CMS] in higher education. These discussions usually conclude by emphasizing the need to exploit pedagogical potential CMS for the enhancement of learning experiences (Carmean & Haefner, 2002.) This is generally based on the assumption that CMS can enable a series of principles that represent constructivist teaching and learning practices, such as collaboration, ongoing communication among students, active participation of students through different learning activities, and multiple ways of representing content and materials, among others (Carmean & Haefner, 2002.).

Undoubtedly, digital technologies offer new opportunities to foster these important principles in the classroom. However, in order to effectively explore pedagogical experiences that are enabled by a particular course management system, it is important to understand how the instructors’ teaching challenges and purposes inform the potential uses of the system. In other words, it is important to reflect upon the pedagogical uses of a particular CMS based on how actual pedagogical challenges can be addressed through its tools and resources within a specific context.

Examination of the pedagogical potentialities of a singular system and its features will generate new insights and understandings with regard to the benefits and constraints of CMS, as well as how instructors implement the system to enhance their teaching practices. Ultimately, these insights will lead to a grounded process of improvement of the system, one that is based on actual pedagogical experiences.

The Columbia Center for New Media Teaching and Learning is currently examining the Columbia University CMS - CourseWorks@Columbia - within a Design Research framework (Edelson, 2002; Bereiter, 2002; Collins, Joseph & Bielaczyc, in press) in order to explore the pedagogical uses of the system and develop understandings for its improvement.

The Design Research approach adopted and implemented by CCNMTL can be summarized as the identification of educational problems or challenges, followed by the iterative design, development, and assessment of interventions to address them. By implementing this approach, CCNMTL seeks to create a context-based understanding of how certain innovative practices unfold in educational settings, as well as the insights they provide. Hence, the Center ultimately aims to build on these innovative experiences through collaborative research with faculty and to contribute to the construction of a knowledge base for the purposeful use of CourseWorks@Columbia in teaching and learning.

From a Design Research perspective, studying the pedagogical uses of CourseWorks@Columbia involves partnering with faculty members and discussing their
teaching practices. This conversation unfolds through a series of discussions according to stages:

1. Initial Understanding of Curriculum: understanding the course context, content, goals and activities.
2. Problems and Challenges: exploring the teaching and learning challenges involved in accomplishing the course goals or developing course activities.
3. Design Hypothesis: discussing pedagogical principles and activities that can address the course challenges.
4. Design of Educational Experience: defining and developing a pedagogical intervention based on the identified hypotheses.
5. Educational Experience: implementing and monitoring the intervention in the classroom.
6. Discussion of Research and Evaluation: assessing the process and articulating conclusions for its improvement.

It is important to emphasize that the design research process flexible and iterative: for example, discussion of the hypotheses to address teaching challenges augments our understanding of the curricular context, thereby enabling the development of refined interventions. As we engage in implementing the intervention, we gain information to resolve possible problems and address the drawbacks of the experience in the classroom.

CCNMTL’s approach for studying the university CMS involves another important aspect: the collaborative nature of the research experience with faculty partners. One of the Center’s missions is to create a culture that integrates new media in education, one that is rooted in purposeful pedagogical uses of technology. Approaching the study of CourseWorks@Columbia from a Design Research perspective allows the Center to explore and promote actual innovative uses developed through the university CMS by a diverse range of faculty and instructors. This contributes to the creation of a repertoire of pedagogical practices that represent the university experience with the system.

During the Fall semester, 2002, CCNMTL partnered with Professor. Leila May-Landy to design and study a pedagogical intervention that integrates CourseWorks@Columbia within the curriculum of her course, “English for International and Public Affairs”. This report presents and discusses the research experience resulting from our collaboration.
Part I: Project Context, Purposes and Challenges

We first present and discuss the four stages of the design research process: understanding the curricular context and pedagogical framework of Prof. May-Landy’s course; defining the central pedagogical challenge; formulating a design hypothesis to address the challenge; and description of the designed pedagogical intervention.

I.1 - The Course: curricular context and pedagogical framework

I.1.a - Content, purposes and activities

“English for International and Public Affairs” is an English language course developed for graduate students in the School of International and Public Affairs [SIPA]. The course is designed to assist non-native students to improve their communication skills in the English language, in particular, for oral presentation and listening comprehension, which are essential skills in their professional careers. Students engage in developing oral presentation competencies through weekly in-class presentations and listening comprehension assignments, thereby improving their English grammar, pronunciation, and style.

Each student is assigned at least two class presentations during the semester, which consist of two types:

- Individual presentation: students present on a topic of his/her choice.
- Individual oral critique of an article: students present a critique of an assigned article or a listening comprehension review and lead a group discussion.

Students are also required to submit four short essays, complete in-class summary writing tasks as well as one in-class midterm essay exam. The purpose of these assignments is to provide international students with the opportunity to become familiar with the analytic discourse required from SIPA graduate students as well as to acquire the confidence necessary to examine texts critically and participate effectively in their graduate courses.

After each presentation, students receive feedback from both the professor and their fellow classmates. Peer feedback is provided in two forms:

- a) The “Audience Feedback Form for Presenting a Topic of General interest”: a survey developed by Professor May-Landy, containing 9 questions that focus on different aspects of the presentation.
- b) “Blue books”: students express their thoughts about the presentation in free form.

Professor May-Landy provides feedback to each student after his/her in-class presentation, pointing out the strengths and weaknesses of the presentation, as well as
indicating common errors and areas for improvement. In addition, she meets with students at twice during the semester to provide feedback on their presentation skills.

Professor. May-Landy has incorporated different uses of technologies in her teaching. For example, she has been using CourseWorks@Columbia to present and distribute the course syllabus, and to provide online resources to her students, such as video presentations of English native speakers and relevant Web sites containing articles and other information related to American and international politics. She has also utilized CourseWorks@Columbia to post guidelines for developing oral presentations and for providing feedback. In addition, she has used the Discussion Board section with her students to practice their writing skills as they comment and critique articles in their fields.

Finally, it is also important to note that the course is held in the University’s experimental digital classroom. The key feature is the SmartBoard, which is a touch screen, networked computer display with an electronic whiteboard that includes VCR and DVD players. This classroom, then, enables Professor May-Landy to access her CourseWorks site during a class session and use its resources. Moreover, such a classroom encourages her students to work with additional online material and presentation software.

I.1.b - Pedagogical framework, assumptions, and challenges

A central principle underlying Professor May-Landy’s pedagogical practice is grounded in the importance of timely and detailed feedback on students’ performance in a foreign language in order to assist them in gaining proficiency. This feedback can be expressed in a number of different ways, depending on the competency that needs to be developed or improved: model pronunciation, corrected grammar structures, appropriate use of vocabulary, and so forth.

Timely feedback helps students to avoid turning mistakes into patterns of language use, and therefore improves their language proficiency. Detailed feedback involves identifying common mistakes and problems in students’ oral performances related to various competencies: pronunciation, grammar, vocabulary, logical organization of presentations, and efficacy of the presentation delivery.

The activities described above form an integral component of Prof. May-Landy’s strategy to incorporate timely and detailed feedback to the students. By employing several feedback strategies, Professor May-Landy attempts to generate numerous opportunities for students to develop and improve their language competencies. However, she also recognizes the complex the process of providing adequate and timely feedback.

The notion of feedback, which is based on learning theories, constitutes one of the most important principles of second language acquisition, since feedback plays a crucial role in error correction. “Allwright [1975] states that the effectiveness of the treatment of error

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2 Experimental Digital Classroom: [www.ccncmtl.columbia.edu/services/classroom/](http://www.ccncmtl.columbia.edu/services/classroom/)
will depend on how it is perceived by the second language learner rather than what was intended to be by the native speaker. Vigil and Oller [1976:228] claim that feedback creates ‘desired instability’ which encourages the learner to make the appropriate changes."

Moreover, a fundamental principle of any sound approach to education views self-assessment as the ultimate goal. In other words, students must learn to evaluate their own performance. Change in language patterns does not result merely from language instruction. Students must assimilate the standards of good practice and apply them in their work. They must then be able to step back and engage in a process self-assessment.

According to Professor May-Landy, it is difficult to present students with adequate opportunities to identify, review, and discuss their difficulties during class presentations. Oral language is momentary, and although it is easy to identify specific errors, it is difficult to take notes and capture them all during the actual presentations. Even when feedback is provided on a regular basis, students lack the opportunities to relate it to their actual performance, that is, to identify errors, weaknesses and strengths, and then to engage in reflection. Students also lack opportunities to review and compare their own performance with other presentation models. They cannot assess their progress in delivering presentations, since they have no opportunity to return to their presentation once it has been delivered.

I.2 – Design Research Problem

Based on the considerations described above, we collaborated with Professor May-Landy to identify two pedagogical challenges:

- Faculty difficulty to provide timely and detailed feedback on oral presentations: this entails adequate opportunities to review, identify, and monitor individual students’ performances in order to provide them with relevant information and resources to improve their language and presentation skills.
- Lack of opportunities for students to engage in meta-cognitive reflection, immediately or over time, of their own performance: this involves the students’ capacity to reflect upon their own performances, to become aware of their learning needs, and to monitor the development of their language skills.

These two problems illustrate the central role of feedback in this course. They involve both the professor and the students’ opportunities to reflect upon the learning processes throughout the semester in order to direct the learning experience towards effective communication competencies.

I.3 – Design Hypotheses

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By analyzing the pedagogical framework of this course and its challenges, the following hypothesis was suggested by Professor May-Landy and CCNMTL to lead the design of a pedagogical intervention:

If the professor and the students are provided with records of students’ performances, as well as the tools and activities with which to analyze them, then the professor will be able to identify and provide detailed timely feedback that will increase the students’ awareness of their patterns of errors.

This hypothesis is grounded in two central and underlying assumptions. First, the notion of records refers to the possibility of creating a series of objects, each of which serves as a locus for analysis and reflection immediately and over time. Thus, these records allow students’ performances to be available for public and self-revision, as well as for ongoing reflection.

Second, these records should be presented within the context of tools and activities that provide the means for developing a detailed analysis of students’ performances, thereby enabling students to focus their efforts on addressing their common problems and patterns of mistakes.

Our hypothesis and assumptions are based on theoretical principles about how people learn and how to facilitate the learning process. From a constructivist perspective (Merrill, Jonassen, date?), learning should first be active, so that the learner takes ownership of the process. Second, learning should be reflective, thereby providing learners with adequate opportunities to reflect upon and assess their errors. Finally, learning should be contextualized, thus engaging learners in realistic and meaningful collaborative experiences which allow for adequate and immediate evaluation.

These assumptions led to the development and design of the intervention described in the following section.

I.4 – The Pedagogical Intervention: Main Design Decisions

To provide students with detailed feedback and self-assessment opportunities, we decided to construct an online video/audio performance archive within CourseWorks, intended to serve as an individual chronology of presentations that can be analyzed by each student, as well as reviewed by peers and the instructor. The archive is organized within the existing course site to provide students with feedback on their presentations within 3-4 days following delivery of the presentation. The archive is also accessible from both on- and off-campus locations. In the following paragraphs, we present the rationale that supports the design features of this intervention.

I.4.a - The online archive within the Discussion Board

Providing students and instructors with tools for annotating or commenting on clips of class presentations thus became an immediate priority. We therefore decided to construct
the archive of the clips within the Discussion Board [DB], rather than in the “Class Files” section of the system. We identified three main characteristics of the DB section that can engage students and support their analysis. The first two are applicable to all DB in general; the third one is specific to CourseWorks’ DB.

First, the DB consists of a space for people to communicate and maintain conversations over time. Though Discussion Boards generally promote the exchange of ideas and opinions, comments and replies can also be generated by the individuals’ analysis in conversation with themselves as they engage in self-assessment of their performances.

Second, the DB allows all the members of the class to read, respond to, and review each other’s comments. In addition, the DB enables students to engage in self-assessment activities, as well as in peer review of class presentations.

Finally, CourseWorks’ Discussion Board incorporates “ThirdSpace”, which is a tool that allows students and instructors to share and comment on video and audio clips. Class members can utilize ThirdSpace to analyze an entire video clip or select specific, timed segments to quote within a discussion topic. For example, students and instructors can select and analyze specific aspects of students’ presentations in order to increase students’ awareness of their strengths and difficulties.

It is important to note that the decision to construct the archive within the DB was also supported by Prof. May-Landy’s expectation that her students’ academic schedule might hamper consistent participation in the DB. Therefore, constructing the archive within the DB would not impinge upon other tasks that the students were expected to complete.

To summarize, then, constructing the archive within the DB allowed us to address three main goals of the intervention:

- Encourage students to analyze specific aspects of their language learning as they reflect upon their language use in oral presentations.
- Support the instructor’s rationale for analyzing students’ performances to provide detailed feedback on specific language errors.
- Facilitate the exchange of commentaries and peer revisions between students and the instructor, in order to enrich their reflections about oral presentations.

We now describe the set-up of the archive in the Discussion Board.

*Individual Categories were created for the students:* We created one category (or top level discussion topic) within the DB, which included each student’s name. This implied an archive organization structure by presenter rather than by date or topic. It was important to allow students to access all their presentations in one location so that they could reflect upon their overall progress. Therefore, each student’s archive was created as

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4 In CourseWorks’ Discussion Board, from a hierarchical perspective, a “Category” is the top level of messages. Categories are like folders containing different topics that unfold in subtopics creating threads.
a separate category, so as to initiate a new topic with each presentation. In addition, comments regarding the presentation consisted of subtopics or messages. In this way, we attempted to introduce a general organization method for the multiple messages we expected for the DB. Though personalized by student name, every member of the class was able to access these folders to peruse its content, or to post a comment. Categories were created in the order of their presentation throughout the semester.

“Third Space” was used to identify segments for focused analysis: Third Space was primarily used by Professor May-Landy to select a random, five-minute segment of each student's presentations and to provide feedback on the clip following the student’s self-assessment. It is important to mention, however, that Third Space CourseWorks was still under development when this project began. Therefore, it was only possible to utilize the tool in mid-semester. However, this delay allowed us to compare the impact of our intervention with and without the use of this tool.

I.4.b- Feedback and assessment activities

A variety of activities were developed to support feedback and self-assessment. As in previous semesters, students were required to deliver a number of presentations, exchange feedback on their own and on other presentations, as well as write papers. The main strategies related to the online archive of students’ performances are described below.

Self-Assessment activities: In order to direct students’ self-assessment process, Professor May-Landy provided them with a series of guidelines that defined procedures for analyzing the oral presentation [see appendix]. These guidelines provided students with a checklist of aspects on which they should focus: topic selection, outline, delivery, voice, body language, grammar, rhythm, and pronunciation, among others. The guidelines were posted in the “Assignment” section of the CourseWorks site. After delivering their presentations, students were asked to watch or listen to their presentations online, and then to assess themselves following the provided guidelines. They then submitted their assessment to their digital archive.

Instructor’s Feedback: The instructor’s feedback was provided by means of a sequenced set of activities: Following the students’ in-class presentations, Professor May-Landy provided a brief overview of their errors. The following day, Professor May-Landy recorded audio feedback which provided general impressions on the presentation, modeled pronunciation and pointed to grammar corrections.

Once the students complete their own assessment, Professor May-Landy first comments on the overall effectiveness of their presentation, and then provides detailed feedback on a five-minute video segment of the presentation through ThirdSpace. The assumption underlying the analysis of a short, five-minute segment is that students usually repeat the same mistakes throughout the presentation. Therefore, identifying patterns, rather than quantity of errors, constitutes the most important aspect of effective feedback. In addition, a detailed analysis of the entire presentation may be frustrating and
overwhelming for students who are not very proficient in English, which results in numerous pronunciation and grammatical mistakes.

Finally, the instructor meets individually with students twice during the semester to assess their overall experience and progress.

*Peer Feedback:* As part of the procedure to assess their performance, students were also asked to work in pairs or dyads. It was assumed that if students reviewed their presentations in pairs, then they would be more thoughtful and objective in assessing their weaknesses and strengths as they develop oral presentation skills in a foreign language. To support this task, guidelines for peer assessment where also provided.

I.4.c- Recording and archiving process

Throughout the semester, students’ presentations were recorded and uploaded to each individual archive within the Discussion Board. As already mentioned, the instructor also created and uploaded an audio file containing feedback on the presentations. Once all the material was saved in the server, she posted a message in the student’s individual archive with links to the presentation, audio feedback, and guidelines for the critique. A five-minute video or audio segment of the presentation was also inserted, which was intended for detailed analysis via “Third Space.” Below we describe this recording and archiving process in detail:

*Recording students’ presentations:* Professor May-Landy installed the equipment prior to each class session: a video camera and microphone to videotape the presentation, a laptop computer, and a wireless microphone for the audiotape. During the class session, Professor May-Landy recorded two presentations. In addition, one student was videotaped while another was audiotaped.

Working with both video and audio in class was a pragmatic decision since the instructor was unable to videotape two presentations simultaneously. In the beginning of the semester, Professor May-Landy used analog video equipment, which was eventually replaced by a smaller digital camera that was easier to handle. Recording the audio presentation was a relatively simple process. Professor May-Landy ran the microphone into a laptop and digitized the audio directly into RealMedia using free software. This allowed her to produce an audio file with no post-production, that she could upload to the server and link to the portfolio immediately.

*Archiving students’ presentations:* Professor May-Landy saved the audio files and made them available to students through the online archive. The video clip tapes were brought to CCNMTL to be digitized and uploaded to the server. CCNMTL’s staff created the links to these presentations in each student folder.
Part II: Implementing and Assessing the Project

We now introduce and discuss the implementation and assessment strategies developed in collaboration with Professor Leila May-Landy throughout the Fall semester, 2002. We first describe how the project was implemented and assessed in the classroom. We then summarize the findings and understanding gained throughout the implementation process.

II.1 – Implementation and assessment strategies

II.1.a – The intervention in the classroom

Professor May-Landy introduced the project to the students in the second week of the semester by explaining the purposes and expectations of the intervention as well as its technical requirements. Students then began their self-assessment activities and Professor May-Landy started to provide feedback online.

CCNMTL and Professor May-Landy collaborated to record and archive the presentation process. However, as mentioned earlier, it was not until mid-semester that thirdSpace was available for use. Prior to the implementation of thirdSpace, students reviewed and commented on their presentations. By the end of October, when thirdSpace was ready for implementation, Professor May-Landy made video materials available online in two ways: first, through the former method of providing the link to the entire video file, and second, by means of a 5-minute clip of the presentation which opened in the same window as the message itself. Students listened to the segment in order to identify their pronunciation and grammar errors, and then to try to correct them.

During the semester, Professor May-Landy also conducted two individual meetings with the students in order to discuss their progress. They compared notes from recorded presentations, and sometimes Professor May-Landy made audio recordings so that students could actually hear correct pronunciation.

Students accessed, reviewed, and analyzed their presentations regularly as planned. However, the required peer feedback was eliminated by mid-semester.

II.1.b – Assessment questions and strategies

Throughout the implementation process, our assessment strategies were guided by two main goals. The first was to assess the adequacy of the intervention and its design decisions in the classroom. That is, we were interested in understanding the development of the intervention as it was unfolding in the classroom in order to make necessary modifications in the design.
The second purpose of our assessment strategies was to evaluate the *effectiveness* of the intervention and its design decisions. In other words, we were interested in understanding whether our initial hypothesis effectively addressed the pedagogical challenges of this course.

In sum, we were interested in answering the following questions:

- Did the intervention allow timely and detailed feedback?
- Did students develop strategies to identify patterns of errors by analyzing their presentation archive?
- Were the design decisions (use of the Discussion Board, feedback activities, recording and archiving procedures) adequate to support students’ and instructor’s engagement with the presentations archives?
- What were the students’ perceptions about the impact of the intervention on their learning process and its outcome?
- What were the instructor’s perceptions about the impact of the intervention on the teaching process and its outcome?

An additional question was of special interest for CCNMTL:

- What lessons can be drawn from this experience to better understand the pedagogical uses of CourseWorks within the university?

The following assessment strategies were implemented in order to answer these questions:

*Periodic meetings with Professor May-Landy*: During the semester, we held four meetings with Professor May-Landy, during which we discussed implementation strategies, as well as changes in the design, progress, and outcomes. Informal meetings were also convened to address some technical aspects of the project.

*Class observations*: CCNMTL conducted several class observations in order to understand Professor May-Landy’s teaching strategies and to observe the actual recording of the presentations.

*Student interviews*: In order to collect information about the students’ experiences, CCNMTL conducted 20-minute interviews with seven students from the class. These interviews took place prior to their final examinations.

*Analysis of student presentation archive*: Throughout the semester, CCNMTL observed and analyzed the students’ work in their presentation archive. They also discussed their conclusions with Professor May-Landy.
II.2 – Summary of findings

II.2.a – Overall impact of the intervention on students learning experience

All the interviewed students agreed that the digital archive assisted them in identifying and reviewing their errors. All of them accessed their presentation files regularly, and they reviewed them to identify and correct their mistakes. Students stated that the digital archive was a very effective tool in terms of allowing them to return to their presentations at any time through access from any on- and off-campus location. As the following quotes illustrate, students found the online archive a very useful resource with which to reflect upon their language skills and to prepare for their presentations:

“This is a good procedure, because you have no opportunity to listen to your own English, that’s why this class is so helpful” [Student 1]

“It was the first time I used CourseWorks to get information from the Internet, to have discussions, to listen to recordings to check my grammatical errors. This is quite interesting, and very useful, very helpful.” [Student 2]

“I did my oral presentation last Monday, and I check myself of the course web site. It’s very useful, to check myself as if I am a part of the audience, I found a lot of grammatical errors, and some of my weak points in my oral presentation. I find it really useful and helpful for me to improve my English skills ...I am very satisfied with the technology in this class” [Student 3]

“I think it’s very useful for us. I can use this tool to improve my English language, improve my speaking speed, and we can use this tool to find out what kind of mistakes we make, for example, grammar mistakes, pronunciation mistakes.... Last time I saw my presentation on this digital system, I found I’ve made tons of mistakes, grammar mistakes and pronunciation mistakes, and I wrote down what I have made, why I made it. So I can find my mistakes using this system” [Student 4]

Thus, the activity of watching or listening to their performances, followed by an analysis according to the instructor’s guidelines, enabled students to not only become aware of their mistakes, but to also understand the impact of self-assessment and reflection on their language and communication proficiency:

“Even though my improvement is gradual, the arrangement is reminding you to watch over your grammar, your expression, so I think it’s very helpful and a lot of fun... Recording is a good way to remind the speaker, just like our video and audio, to improve our pronunciation or speed in speaking. I think that would be a very helpful and a more powerful tool in improving people speaking abilities. It’s just like a mirror to see how you present yourself; impression that you make; it’s a very good review of your performance.” [Student 2]
“I think, to check and find my mistakes by myself is very important, it’s very useful ... I feel I am improving. At least I pay more attention when I am talking that I did before, I try as much as possible to decrease my errors.” [Student 3]

In assessing the overall impact of the experience on students’ learning, Professor May-Landy believes that the intervention allowed them to both improve their language skills and understand the importance of being reflective and accountable for their own performances:

“You can go through a whole lot of the skills. I think everybody did make some progress in speaking, in different aspects of speaking, fluency, just the speed of it, and accuracy, and overall effectiveness. To some extent they all made gains in all of those areas. Some people by nature think that grammar is an unnecessary bothersome element, and they won’t attend to it, but they’ll speak fast, they’ll gain in speed. So I get them close to my standards to a certain extent, but you’ve got learning styles that differ. So I do feel that it facilitated their language learning, and I do feel that they understood my message that you’ve got to be accountable for what you are saying.” [Professor May-Landy]

In sum, the students and the instructor agreed that the intervention was effective in creating opportunities for detailed feedback, as well as for fostering self-monitoring skills to assess language use. Moreover, students were able to analyze performance records over time and to exchange comments during the process of reflecting about their oral communication skills.

II.2.b – Feedback and Assessment activities

The section, below describe the findings related to feedback and assessment exercises. In order to analyze each component of the intervention, we distinguish between three feedback and assessment activities: students’ self-assessment, instructors’ feedback, and peer feedback, all of which contributed to meaningful reflections about oral presentations. Due the students’ workload and conflicting assignment priorities, however, the sequence of activities was not always followed as planned.

II.2.b.1 – Self-assessment activities

Following the guidelines provided by Professor May-Landy, students were able to watch or listen to their presentations and recognize their errors by focusing and attending to specific aspects of their performance and understanding the relationship between them. Below are some examples of students’ self-assessment analysis:

Subject: self-review
Date Posted: Oct-18-02 at 10:30 AM by XXXXXXX
... The first 3 minutes was full of mistakes. I recognized how my English is poor in fluency. There were so many pauses, which hinders listeners from understanding each sentence. I just start speaking and jump to another idea without finishing the previous idea. As Korean is different from English in word order I should not just start speaking without a concrete concept. Sometimes I just try to finish my sentence just for the grammatical purpose. As I think of grammar I frequently pause when I finish my words. My attitude in taking questions from students was not good. As a presenter I should focus on the students' questions, not mine. But I tried to fix their questions in my frame of idea. I had better let students discuss their matters of interest. I forgot I was just a moderator. There were lots of grammatical mistakes.
- Similar [similar to]
- Too many 'and and and'
- One another [another]
- Is [was]
- Are [were]
Etc.

Subject: Re: Oral Presentation 10-7
Date Posted: Oct-11-02 at 7:54 AM by XXXXX
Thank you very much for your comments in my presentation. To carefully watch my behavior, myself, by video is so nice. I can see advantages and disadvantages. First of all, whereas my expression seems to be calm, the posture of my body is little bit discomposed. Standing more stable and more eye contact make audience be persuaded more effectively, like the situation when the President makes a public speech on T.V. Second, there are a lot of simple grammatical errors. For example, singular / plural, German/ Germany, Scandinavia/ Scandinavian. Finally, I ought to place a special emphasis on the beginning and ending. In my presentation this time, I did not state main idea and its supporting sentence clearly at the beginning; therefore, whole presentation at the first quarter was ambiguous to audience.

As evidenced by these examples, students focused on both overall effectiveness of their presentations, and specific language aspects of their performances.

In order to assess the design of the intervention, we were interested in examining the students’ interactions with the digital archive as they engaged in self-assessment. We found that students watched or listened to their presentations several times, compared their own presentations to those of their peers, and took notes of their patterns of mistakes or weaknesses.

“I compared two things, two movies, so that I could check the difference between the two...I usually listen to the segments, 30 seconds, or 1 minute, and listen to them 3 or 5 times. I repeat myself again, first time, listen to my voice, and correct myself, compare it to the native speaker or Leila, and double-check” [Student 1]
“I have one formal oral presentation, but we had two moderator presentations and one listening presentation. If I need to type a summary, or my critique, I had to listen to it at least 2 or 3 times … When we deliver the presentation in class, Leila would record our presentation and put on the discussion board. Then we will listen to it and find out the errors in our wording, so to this I would listen 3 times and take notes. And then I will write down an email to Leila to tell her that I have finished my work, and she would give us her opinion. We cross-examine my word usage, my grammar, that’s useful, I think” [Student 2]

“I play and I listen, and watch the presentation I made, and I write down my mistakes. Sometimes I would go back and I listen to it again, and find what mistakes I have made. Last time I listened to my presentation for 3 times, and I found so many mistakes that I have made. If I didn’t use this digital system, maybe I couldn’t find it. I check my whole presentation. I don’t just focus on a 5-minute segment. I have discussed the presentation with Leila one time, another time I worked by myself, and found these mistakes I have made. And I remind myself not to have these mistakes the next time.” [Student 4]

The activity of repeated watching/listening, as well as that of taking notes, seems to be related to our initial hypothesis regarding the importance of creating the digital archive in the DB section of CourseWorks. In other words, we assumed that students would post their reflections, compare them with the instructor’s notes, and eventually use them to reflect on their progress over time.

Indeed, students were watching and listening to their own presentations and those of their classmates. They also continued to take notes and compare them with Professor May-Landy’s comments in their individual meetings. However, as the semester progressed, we found that students were conducting their self-assessment without posting their comments in the DB. Three reasons account for these findings:

Privacy Issues: Students did not feel comfortable with public access to their assessment notes or to the instructor’s comments. This is an important finding, since it implies the need to revise some of our design decisions concerning peer feedback and public access to class records and comments.

Usability Issue I: Some students might have been unaware that they were able to watch the video and listen to the audio while writing their comments at the same time. In other words, they may have attempted to type in the DB without having set up the video panel to remain on their screen. This might have created an uncomfortable working space.

Usability Issue II: Even if students had been able to set up their video panels to remain on top of their screen, and had indeed been able to watch/listen to the record and write comments simultaneously, they preferred to write down their notes in their notebooks.

In sum, students were engaged in self-assessment activities through their effort to watch their performances and reflect upon them over long periods of time. They were therefore
able to identify patterns of errors and recognize areas for improvements. However, they generally developed their own strategies to post and share their comments with the instructor. Although the DB supported the focused study of performances, their comments were expressed outside the discussion board, and so were not posted with the actual video/audio record. These strategies provide us with important insights for improving the intervention.

Another interesting aspect of the students’ strategies to engage their digital archives is related to the function of the comparisons they made between different presentations. Specifically, the students compared their presentations to those of their peers as a way to improve their own performances. Though the intervention was aimed at encouraging students to analyze their classmates’ presentations, we did not anticipate that students would undertake that task in their own self-assessment and revision process. Hence, the DB section seems to support this comparison exercise, and its implications will be discussed in a later section.

Finally, students mentioned that even though they were required to analyze a 5-minute segment of their own presentation, they had actually watched the entire video in order to practice correcting themselves. The 5-minute segment helped them to focus their attention on certain aspects of their performance, but the overall presentation record provided them with a valuable resource for extending their analysis. This suggests that it is important to provide students with the complete video/audio as well as pre-selected segments.

II.2.b.2– Instructors’ Feedback

As noted previously, one important purpose of this intervention was to provide useful and detailed feedback for students in order to help them identify and correct their patterns of errors. According to Professor May-Landy, two aspects of the experience were central to the achievement of this goal.

First, Prof. May-Landy recognized that recording the presentations freed her from the need to take detailed notes during the presentation in order to provide meaningful feedback at a later point in time. These records, then, especially the videos clips, allowed her to concentrate on listening to the presentation to provide a detailed initial feedback.

Second, the use of Third Space for selecting specific segments of students’ performances enhanced the feedback process significantly. As Professor May-Landy explains, selecting a segment for analysis assisted students in focusing on specific problems for reflection.

“It’s interesting but... technology shapes the practice, it forced me to limit myself to those 5 min., otherwise I would overwhelm the students by responding to all 20 minutes, and that’s information they cannot deal with. It’s too much error, too much comment; they can’t digest that much information. So in fact it streamlined my practice, and I focused on just that, and we dealt with just that. And in some instances I would listen to a
little bit more, or I’ll start a little earlier or do something like that if I felt like it, particularly in the instance of students whose speech is fairly well-controlled, than it’s easy.”

All students evaluated the instructor’s feedback as very positive, noting that Prof. May-Landy’s comments contributed greatly to their language improvement to a great extent. Moreover, the students’ found the audio feedback an important source for correcting and practicing their oral skills.

Using the guidelines for self-assessment activities, Professor May-Landy and the students were able to compare notes and discuss different aspects of performance that required special attention. We believe that one important component of these interactions is related to the students’ preparation for discussing their performance. That is to say, by analyzing their performances in advance, students were able to review their language skills with the instructor in more active way, thereby bringing to the conversation their own self-critique. In addition, they were able to return to the actual performance record to point out error patterns and review them together. According to Professor May-Landy, the possibility of review enhanced the process of helping students to become accountable for their performances.

II.2.b.3 – Peers’ feedback

Peer feedback failed to function as had been expected. Although it was included among the required feedback activities, students did not engage in analyzing each other’s presentations. Most students attributed this finding to a lack of time due to their workload obligations and the different schedules of their peers. As one student stated:

“To tell you the truth I was only checking other people’s presentations for 2 or 3 times, which I was really interested in doing, but I had no time...As far as other students’ feedback, it’s too much assignment I feel, I never received any (online) feedback from other students about my presentation.” [Student 3]

Peer feedback activities required students to analyze each other’s presentations together. It was assumed, then, that if students reviewed their presentations in pairs, they would be more thoughtful and objective in assessing their weaknesses and strengths. According to Professor May-Landy, such lack of engagement as evidenced by the findings, could also be related to the cultural characteristics of Asian students who did not feel comfortable criticizing their peers. Nevertheless, students provided and received feedback after each individual presentation in class, which seemed to be the only source of peer feedback:

“I have my classmates’ comments on the presentation, they write their comments on paper and give them back to me. I think their comments are useful for me.” [Student 4]

Thus, several students felt that peer feedback could have provided a useful activity if implemented as intended. But in general, most indicated that such feedback was
unnecessary. As mentioned previously, though students compared their performances to those of their peers, [see II.2.b.1.] the requirement to watch the videos together probably resulted in an additional obligation that hindered the benefits of peer feedback.

II.2.c – Recording and archiving procedures

As the semester progressed, the video component of the intervention proved to be a resource-intensive aspect of the project. Professor May-Landy succeeded in the task of recording and archiving audio files from her computer or in the digital classroom:

“... no question, audio was simple: I attached the wireless mic (a couple instances I didn’t turn it on in the computer), but once you had this thing going I had very few lapses in fact. Or they have a stationary mic in front of them, and it’s recorded onto the laptop…. Once I got back to the office I could just upload them to CW… or I could do it directly in 308 [the digital classroom.]” [May-Landy]

However, Professor May-Landy was mainly concerned with the video component because of the conversion process required prior to uploading the video files:

“My understanding was that it didn’t matter if it was video (VHS) or digital video cassette. He had to encode it, which takes time... So that’s why audio is totally self-monitoring, I do it all by myself, nobody has to deal with it.” [Prof. May-Landy]

It is important then to distinguish between the production and post-production aspects of creating video recordings in class and uploading them for access by students in CourseWorks. The production process seems to be feasible and manageable for the instructor in the classroom. For example, Professor May-Landy was able to set up the equipment – especially when she started using a small digital camera – and produce high quality video recordings of the students’ presentations.

In contrast, the post-production process proved to be more complicated and time consuming, since it involves sophisticated technical skills and resources. The tape is created in the classroom, but then must be delivered to a digital video specialist. It is then encoded – a real-time, minute-for-minute process that involves converting the video to a computer file. This file is then uploaded into the streaming server. The encoding process alone doubles the time required to deliver the media file to students.

Consequently, the distinction between production and post-production of video recordings is an important one if we are to understand the implications of creating such an archive within CourseWorks. The archive was constructed within the course web site to allow students and instructors to access these materials quickly and easily. Therefore, Professor May-Landy’s concern regarding the additional technical support that is required, reveals an obstacle in providing instructors with an environment they can control and manipulate as they shape the experience in the classroom.
In view of the differences between archiving audio and video files, Prof. May-Landy considered the possibility of using only audio files. Although grammar and pronunciation errors can be monitored more effectively through audio than video clips (the image often distracts attention from the voice), the use of videotape contributes immensely to the analysis of the overall effectiveness of a presentation and its relationship to language use. In other words, since delivery of a presentation consists not only of its content but also of the manner of communication, (e.g., gestures, eye contact, non-verbal cues, etc.), video images provide the students and the instructor with rich and visual source of information to assess presentation skills and language use.

“I found that when I did the audio recordings alone, I had to make comments such as “read paper aloud”, “didn’t make eye contact with the students”, “inappropriate gestures” or “gestures ineffective” or “no gestures” or “hugged the table and didn’t move” … because you don’t have this visual cue...I don’t know if that gets the full effect, because ... one thing that video does communicate is it gives you a little bit of an idea of the success of your presentation, whereas the audio doesn’t tell you as much about how well or poorly it was received.” [Prof. May-Landy]

The recording and archiving process entailed decisions about the kinds of technologies that can be integrated in the classroom and the management strategies required to utilize them efficiently. Thus, the experience has allowed us to identify the need for new strategies in order to improve the recording and archiving processes, both within and beyond the classroom. From CCNMTL's perspective, such new strategies are also essential if we are to understand the ways in which other instructors can implement this intervention in their classrooms.

II.2.d – Online Presentations Archive Design within CourseWorks

As discussed previously, the design of the digital archive in the DB allowed the instructor and the students to assess and comment on the presentations by means of focused individual and group analysis.

By the end of the semester, each student compiles his/her own digital archive of audio/video presentation recordings, as well as comments from the instructor. Our analysis of the digital archive organization structure has revealed some design aspects that can create confusion.

As described earlier, each student archive was created through DB categories. Organizing the portfolio according to the students’ names, rather than by topic or in chronological order, allowed students to access their archive and to reflect upon their progress from presentation to presentation. However, each individual archive does not indicate the corresponding name of the student. Therefore, students as well as instructors may find browsing through the presentations rather confusing.

As a result, the need for a naming convention to categorize each presentation is clearly evident and necessary. Such categorization will facilitate browsing through by allowing
the user to locate specific presentation files, thus enhancing the effectiveness of the archive.

Students were very positive with respect to the technical aspects of the intervention and encountered no difficulty in accessing or interacting with the system. It is also important to note that they accessed the digital archive through fast Internet connections at home or from CU facilities. By the end of the semester, however, the DB contained almost twenty portfolios, which increased the download time considerably due to the expanding archive.

Regarding the organization of the digital portfolio within the Discussion Board, students agreed that the portfolios should be contained in a separate area, unless the Discussion Board is not utilized for other purposes.

“If our discussion on the web is more active, it’s better to separate the video part and the discussion part” [Student 3]

“I think if you have it in the discussion board it may be better for us, for all our classmates to discuss presentations. After we look at other classmates presentations we can make our comments directly” [Student 4]

“I want to have an opportunity to download presentations” “I would prefer to see it in the discussion board, because I can compare my video portfolio with others ... If we had in the discussion board presentations from different people on the same topic together, that would be much more educational” [Student 5]

The section below presents some considerations for the design of next semester’s archive.

**Part III: Discussion**

Learning to engage in self-assessment by through the support of such activities represented the ultimate goal of this intervention. As Professor May-Landy states “Change simply does not occur when someone else is telling you how to improve - students must assimilate the standards of good practice and apply them in their work. They must then be able to step back (a difficult position indeed) and self-assess.” The development of this project enabled us to to gain insights into some of the aspects involved in encouraging students to engage in this type of learning experience. In the following paragraphs we present and discuss these insights in order to improve the next iteration of the intervention and reflect upon implications that inform other projects involving the use of CourseWorks@ Columbia.

**III.1. - Design decisions re-visited**

III.1.a – **Assessment activities and the digital archive as a study resource**
The findings summarized above allowed us to draw two important conclusions about the students’ experiences with the digital archive.

First, the archive represents more than just a space for reviewing one’s own performances. The video and audio presentation files also comprise valuable resources for all the students in the course. That is, students worked with their own and their classmates’ performance records in order to reflect about oral presentations and English proficiency. The archives thus represent an expanding repository of study resources for students and a way of documenting the experiences of the class throughout the semester.

Second, the self-evaluation and instructors’ feedback process should remain private. According to Professor May-Landy’s analysis, both the cultural background of the students as well as their overall level of exposure to their classmates, inhibits their willingness to publicly share their own and their instructors’ performance critiques.

These conclusions present new obstacles to the design of the online archive, since it requires both public and private sections to fully benefit the students’ learning experience.

Peer-assessment activities and its challenges are also rooted in the problem of private versus public space. As described previously, students were reluctant to assess and provide feedback to their peers. Professor May-Landy attributed this finding to the overall workload required in the course, as well as to students’ cultural background. Therefore, peer assessment activities did not generate significant learning opportunities. Instead, students focused on their own error patterns and compared their peers’ presentations to gain insights on language and communication skills.

We suggest that peer feedback activities can present genuine learning opportunities for studying language use if we emphasize the purpose of “assisting” peers in reviewing and correcting their error patterns, rather than “assessing” the effectiveness of their presentations. In addition, such peer activities can be conducted in the private workspace.

Regarding the overall organization of assessment and feedback activities, Professor May-Landy’s analysis confirms the importance of improving the sequence of assessment activities. As evidenced by the intervention, the students’ engagement in an extensive analysis and assessment of their language use requires identifying their errors and comparing their own evaluation with the instructor’s feedback.

**Recommendations**

It is important to provide access to all the performance recordings (video/audio) so that students utilize them to engage in analysis and self-assessment. It is also important to maintain a consistent organization structure of these recordings.
Self-assessment and instructor feedback should be limited to a private performance evaluation archive, where comments and analysis can be shared between the student and the instructor, and with a fellow classmate if so desired.

To emphasize the importance of students’ self-assessment, the instructor should evaluate the first presentation without providing any feedback until students conduct their own self-evaluation and report their conclusions to the instructor. Professor May-Landy believes that such a sequence will better serve her pedagogical purposes. In other words, the initial identification of their own errors allows students to develop an awareness of patterns they need to control.

To overcome the students’ difficulty in assessing their classmates, peer feedback strategy should be focused on identifying error patterns in specific language use. In addition, this activity should be optional and developed in the private space which is accessible to the presenter, the reviewer and the instructor.

Finally, to distribute the workload more meaningfully, it is necessary to modify the course syllabus so as to accommodate the presentation archive tool prior to the beginning of the semester.

III.1.b – Discussion Board organization to support assessment and study activities

Our decision to develop the digital archives within the DB aimed to facilitate the exchange of commentaries and peer revisions among the students and the instructor, as well as to enhance their reflections about oral presentations. As explained above, the students’ interactions with the archive posed new challenges to the process of annotating and sharing commentaries, specifically, the need for a “private working space” between the instructor and an each individual student.

The importance of a private space is also related to the fact that some students presented handwritten reports on their self-assessment activity. The instructor believes that some students preferred to write directly on paper because of the privacy it allowed for self-evaluation. Therefore, the ability to "opt out", or create a private space for evaluation is essential. Although we acknowledge that some students may nevertheless prefer handwritten notes and a private evaluation process, we believe that documenting students’ comments on the archive can support the analysis of their progress over time, and help them monitor aspects to be addressed in future performances. Hence, we should provide students with strategies to maximize the different DB options in order to support on-line commenting for the analysis of their performance records.

In addition, as already noted, our findings revealed the need to classify the archive assets in a consistent manner so as to support the students’ use of archived files for their own study purposes.

Finally, ThirdSpace was particularly critical to support the instructor’s analysis of the students’ performances in order to provide detailed feedback on specific language errors.
Professor May-Landy identified, selected, and commented on segmentd of presentations. This allowed her to direct the students’ analysis towards particular patterns of errors and language use.

**Recommendations**

In order to support feedback and assessment activities, the DB should provide opportunities for both public and private communication processes as described below.

**Private Archive:** The CourseWorks group feature can create a private workspace comprising of one student and the instructor. Eventually, another student can be incorporated into the group for a peer review activity. Each group in CourseWorks maintains its own DB category to enable private communication between its members.

**Public access to records:** Links to all the presentations clips can be included in order to allow students to access the class presentations through ThirdSpace. In addition, students can refer to the errors of their peers in their own self-evaluation. In order to facilitate students’ use of such resources, we suggest the following convention for classifying performance records within each student's group/category/portfolio space: PRESENTATION DATE – TOPIC - STUDENT NAME. This would reduce the time required to download the entire DB for each student.

In order to support on-line commentary as students analyze their performance records, we should provide them with an online document to explain how to set up their RealMedia Player panel so that it remains on the upper part of their screens. (view ‹ remain on top)

Professor May-Landy will continue to assign comprehension activities through short excerpts using ThirdSpace to improve students’ listening comprehension skills. As an assessment strategy, students then comment on the excerpts in written form.

Given the value of ThirdSpace as a tool to with which to analyze specific segments, students should select a segment of their own performance that illustrates effective language and presentation skills, as well as the accomplishments of their self-assessment. These segments can be incorporated into a “Class Digital Archive,” where particular language uses can be showcased.

**III.1.c - Recording and Archiving procedures**

The main difficulty encountered in recording and archiving procedures was associated with the post-production phase of video recordings. Both the time required, and the need for special technical support, emerged as issues of concern for Professor May-Landy and CCNMTL. These issues must be resolved if we are to provide instructors with an
environment they can control and manipulate as they shape the learning experience in the classroom.

**Recommendations**

The video post-production phase can be facilitated by installing a digital video camera connection to the SmartBoard that is currently available in the classroom. As already described, the production of RealAudio files required less intervention by CCNMTL because audio was captured in the encoded format directly to a laptop through a software encoder. The process of creating video can be simplified through the use of a wall-mounted and SmartBoard-controlled camera which feeds audio and video directly into the software encoder.

**III.2. - What we have learned – Implications for Future Projects**

This project has allowed us to reflect upon how a designed intervention can assist other courses and faculty in addressing similar or related educational challenges, as well as the way in which we engage collaboratively in studying the uses of CourseWorks at Columbia. In this section we summarize the important implications as they inform these two aspects.

*Role of CourseWorks to shape and document classroom activities*

The archives developed in this project represent an expanding repository of study resources for students and a means to document the experiences of the class throughout the semester. These resources were generated by the sequence of learning activities, and were utilized by the students in order to extend their study about the topics of the course. In addition, these resources were also used to monitor the progress and development of the class throughout the semester.

We believe that these resources can provide a powerful means for engaging students in reflection and analysis of course activities and learning experiences. Archiving notes from class discussions, students’ work, or significant events in the semester, as well as returning to these materials in class discussions can support the students’ and the instructor’s tasks in making connections among ideas and reflecting about their overall learning goals.

*Design Framework*

We believe that the implications of this project can be applied to other similar interventions, both within the same or different content areas.
This experience may help us develop educational interventions to address similar issues that arise in second language acquisition, such as oral presentation, feedback and assessment. First, given the second language acquisition context, the particular sequence of activities developed in this project (presentation – self-assessment – instructor’s feedback – error correction – another presentation) proved to be critical, as it provided students with opportunities to practice speaking a second language, assess and reflect upon their own performance, take ownership in the learning process, and immediately test the skills gained from the process. Moreover, the experience increased students’ confidence to speak and to present in English, as well as to continue self-monitoring in the language learning process. In designing similar future interventions, we recommend developing a sequence of learning opportunities that foster such engagement.

Since feedback plays a very important role in second language acquisition, we believe that other language instructors may choose to implement this intervention in their own courses. They may not necessarily integrate oral presentations, as this type of activity cannot be achieved during the early stages of second language acquisition when students have not yet mastered a threshold of adequate language proficiency. Nevertheless, instructors can record students’ pronunciation along with exercises which can be uploaded to an archive of resources for students. A laptop computer with a cordless microphone will be required.

Future iterations of the intervention may include ways for students to record their pronunciation and upload the files to CourseWorks. If the instructors assign presentations, they may wish to create video recordings of presentations for uploading into an archive of presentation resources.

Across domains

We believe that this experience may have important pedagogical and learning implications throughout Columbia University.

Oral presentation, feedback and assessment comprise typical academic activities across the university curriculum. The purposes of such for these activities are numerous and varied: teaching presentation style, ability to deliver ideas in oral speech, and engaging students in critical thinking about their performance. A number of University Faculty already implement certain strategies to address these challenges. They record presentations and provide general or individual feedback to their students during the learning process. Hence, CourseWorks enhances these strategies by allowing access to presentations and feedback from anywhere, at anytime, and with minimal equipment and software requirements (Internet browser and RealPlayer).

We believe that the archive/portfolio tool can also serve as performance based assessment, by collecting and storing student’s projects and assignments in individual folders for later review by the instructor and the students. This type of assessment need not include video or audio files, but can consist of papers, completed assignments, online projects, and so forth.
In order to enhance the pedagogical and learning experiences of faculty and their students, we can design a new feature within CourseWorks that enables easy set-up procedures to implement performance-based assessment in their courses. Such a feature should include the following capabilities:

- Automatically create archive/portfolio folders for all students enrolled in the course
- Allow a choice between public and private folders
- Provide uploading and downloading capabilities
- Allow space within a folder for discussion and communication with the instructor
- Design the space as a module that can be easily added or removed form CourseWorks

*Design methodologies*

Our collaborative experience in the design and implementation of this project has resulted in several important implications for experimenting and studying the use of CourseWorks in the University. Two important aspects to consider when collaborating with faculty are discussed below.

*Contextualizing CourseWorks Features*: Contextualizing the system’s features entails a process by which different aspects of the CMS acquire meaning for a particular course by examining its goals and activities. For example, in the project described above, the Discussion Board was transformed into a feedback and assessment workspace.

Our work with other instructors has allowed us to identify other cases in which this contextualization of the CMS can take place. In general, we have found that the most important aspect of the process is the collaboration between faculty and educational technologists to enhance the CourseWorks features by means of context-based pedagogical practices. Such "pedagogical contextualization" is facilitated by several important strategies:

- Introduce the instructor to the DR process to initiate discussions about the instructor’s pedagogical framework by means of the DR spiral.
- Invite the faculty to a series of open discussions (one or two) which focus on the course rather than on the CMS. Discuss the sequences of learning activities in relation to the learning goals so that an understanding of the course context and content can emerge.
- Arrange periodic meetings with the faculty to discuss and contextualize the project as well as to maintain a good rapport and continuity of the working relationship.
- Conduct class observations to gain better understanding of the curriculum, the instructor’s teaching strategies, as well as and the instructor and student interaction with the tool.
- Conduct student interviews/questionnaires to evaluate the effectiveness of the intervention and ascertain the accomplishment of our pedagogical goals.
• Communicate and discuss CW practices: as mentioned above, it is important to communicate the contextualizing process to other faculty so that they may engage in contextualizing CourseWorks independently. This may be accomplished by incorporating our experiences with faculty into the workshops we develop for instructors.

Conclusion

Two main problems required design intervention: the instructor’s difficulty to provide timely and detailed feedback on oral performance for second language learners, and absence of an effective mechanism for these students to review and assess their oral language skills. To address these problems, we designed an intervention using the CourseWorks discussion board as a platform and ThirdSpace as the main mechanism to deliver audio segments and video materials consisting of students’ presentations, instructor’s feedback, and native speakers’ presentations. As a result of this intervention, students were able to review, assess, reflect upon their errors, and consequently, improve their language and communication competencies. Students were also provided with ample opportunities to receive feedback from the instructor, as it was accessible online from anywhere, at anytime.

Evaluations showed that both students and the instructor were generally satisfied with the experience and considered it useful and effective in most aspects, such as accessibility and availability of the instructor’s feedback, ease and intuitiveness of the environment (with the exception of discussion board downloading), increased opportunities to correct language errors, and an opportunity to compare their presentations and assess their progress during the semester. However, we encountered a number of difficulties in such areas as peer feedback and the use of the discussion board as an outlet for self-evaluation assignments. Lastly, our findings also revealed that the video production process was subject to time constraints which somewhat diminished the value of the experience.

In our design for the next iteration, we intend to address these issues by suggesting an alternative peer feedback scheme, one that provides private space for self-assessment. We also plan to set up a digital camera in the Lewisohn 308 classroom.

In conclusion, this experience has also helped us understand the process involved in studying and experimenting with CMS within an institution of higher education. We have characterized this process as “pedagogical contextualization” to emphasize the importance of collaboration with faculty and educational technologists in order to to exploit the potential and flexibility of the CMS. We expect to continue this approach in the future in order to expand the scope of innovative opportunities for teaching and learning.
References


Appendix 1

Portfolio Analysis Guidelines

Here is the procedure I’d like you to follow when analyzing your oral presentations.

1. Work with a partner - the easiest thing to do is to team up with the person who gave an oral presentation in the same week you did. (For example, <student 1> and <student 2> can work together since they both gave presentations in the week of September 23rd) The rationale for having you work in pairs is quite simply - an objective observer will be able to help you analyze your work more effectively. This collaborative effort should create a constructive environment for demystifying the techniques of public speaking.

2. View the entire video and make comments on the overall effectiveness of the presentation. (Follow the presentation guidelines given below.) Logistics permitting, you can discuss your overall impressions together and then write up a brief summary of your comments to send to me in an email posted to the discussion board.

3. Select a five-minute segment of the presentation and listen carefully for grammar and pronunciation errors. Again, note these errors down and include them in the second part of your joint email message. Be sure to indicate when the segment you selected begins and ends. (Use the timing indicated on the real player video.)

4. Please note that you should post your email to the appropriate section of the discussion board. The message should be the summary of your collaborative effort.

5. Once your message has been posted, I will comment on your comments and give you my own assessment of the overall effectiveness of the presentation. I will also select a five-minute segment to give detailed comments on grammar and pronunciation. I will record some corrections in a voice file that I will also post on the discussion board.

Presentation Checklist

Part 1. Topic Selection
1. Was the topic suitable for this audience? Did it match their interests and background knowledge? (Did you make a seemingly dull topic interesting? Did you provide them with the information they needed to fully understand an unfamiliar or complex topic?)

2. Was the topic interesting and challenging? (Avoid simplistic topics. Make sure your topic is thought provoking or probes a controversial and challenging issue.)

3. Was the topic appropriate for the amount of time accorded? Could you cover everything you needed to in the allotted time?

Part 2. Outline
1. Does the outline convey the main points of the presentation without giving too much or too little detail?

2. Does the outline include key words or unfamiliar words that the audience will need to understand the presentation?
3. How did the outline correspond to the presentation? Did you rely too much on the outline to convey the overall development of the talk? In other words, did you actually lead your audience through each part of the presentation with appropriate transitions at each juncture?

**Part 3. The Presentation**

1. Did you read a prepared speech or paper? (THIS IS NOT ALLOWED. It is a severe impediment to both the quality of the presentation and the ability of the listeners to follow the presentation.)
2. Did you make eye contact with your audience? Did you pick up appropriate signals from your audience? (boredom, non-comprehension, confusion, disagreement, …)
3. Was very voice loud and clear enough? Did you articulate clearly, i.e., make an effort to pronounce every sound? Did you make many errors in pronunciation and grammar? (Remember you should check the pronunciation of key or common words before you give your talk.)
4. Was the rhythm of your delivery ‘English-like’? Did you use thought groups and key word stress to follow an English rhythm? (The idea is to avoid the staccato-like (or machine gun) delivery in which each word has equal weight.)
5. Did you rely on too many ‘hums’ and ‘uuhs’? (In a presentation, this is a sign of poor preparation. If you’re well prepared, you should know what you’re going to say and you should be able to avoid hesitations.)
6. Did you use appropriate expressions to introduce your topic, to signal transitions between the sections of your presentations, to highlight a point, or to rephrase a complex or important point?
7. Were you fully prepared?

**Part 4. Question-and-Answer Period**

1. Did you answer the questions appropriately? (Remember to compliment the questioner: “That’s a very interesting/thought-provoking/good question.”)