# Lives in context: Facilitating online, cross-course, collaborative service projects

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**ABSTRACT**

An inquiry-based, cross-course, collaborative structure is being implemented toward a graduate program's goals of using project-based learning as a consistent, core learning experience in each course cycle. This paper focuses upon the course collaborative structure and the two key forms of assessment used in each collaborative cycle: a progressive development rubric for discussion threads and a products, inquiry, and evaluation web conferencing rubric.

Keywords: Cross-course collaborative, project-based learning, inquiry-based learning

## INTRODUCTION

The author believes in inquiry-based (IBL) and project-based learning (PBL) environments, due to the results of successful implementation and seeing graduate students invest greater time on task with greater satisfaction, overall, to their meaningful application of course learning outcomes. The proposed framework within this paper was derived when seeking to expand the technology-infused PBL experience with local service and possible global interactions.

## DEFINITIONS

Lives In Context (L.I.C.) is a framework for graduate student project-based learning (PBL) designs created with and for a educators or instructional designers toward PBL student learning outcomes applied to local service projects. Similar global partnerships preferred.

Inquiry-based learning (IBL), according to Karen Sheingold (1987) is a complex process that includes formulating a problem or question, searching through and collecting information to address the problem or question, making sense of the information, and developing an understanding of, point of view about, or 'answer' to question.

Project-based learning (PBL), according to Douglas (2012), can be characterized as a student-centered approach focusing on solving, communicating, and discussing meaningful problems in a purposeful sequence to construct and understand concepts.

A cross-course collaboration, in this context, is a combination of learning outcomes from two or more courses and students toward a meaningfully applied, real-world project.

## BACKGROUND

The lived experience of students' greater investment on time and task is best supported by the notion of self-regulated learning skills by English and Kitsantas (2013):

> In order for the potential of student-centered, inquiry-based approaches to be realized, students must make the shift to their new role as active learners and develop self-regulated learning (SRL) skills. SRL refers to the extent to which learners are metacognitively, motivationally, and behaviorally active in their own learning process (Zimmerman, 1989). Self-regulated learners are able to set goals, plan a course of action, select appropriate strategies, self-monitor, and self-evaluate their learning. They are also intrinsically motivated to learn and report high self-efficacy for learning and performance (Zimmerman & Kitsantas, 2005). (p. 129)

English and Kitsantas (2013) also note that students make "a gradual shift to increased use of SRL processes that takes place when teachers intentionally support their development" (p. 132).

## CONTEXT & FRAMEWORK DEVELOPMENT

Graduate students in and instructional design and educational technology program in a southern state university experience their courses in a 7-week online course cycle model. Students can take one to two courses in the major simultaneously. Class sizes range from 8-15 students, generally speaking. Students from other majors seeking a technology elective are also

involved in some of the courses, but usually only one course at a time. The desire for the students was that of extending the project-based learning with local community service outreach to other students and professors. However, the challenge of being able to communicate the process and quest for streamlined integration with other courses existed.

Having experienced success with students developing SRL skill, the author sought to extend the learning environment to her other colleague of the program. Although her peer and other peers have agreed that such learning strategies are beneficial, they have questioned whether or not they would be able to employ such a strategy within their courses, considering the needs to cover vast content and to streamline such a process. The SRL model provides a supported base to the Lives In Context framework.

The author's L.I.C. framework provides that developmental support toward SRL processes within one course and as majors repeat course cycles using the same process with different learning outcomes. This invites cross-course collaborations in which students can find meaningful application of combined major course learning outcomes toward greater community service and connections. It also allows students a chance to experience PBL design six different times throughout their program. This allows for the graduate students to experience the shift from teacher direction to self-regulation and knowledge as students within the cross-course collaborative framework, and as designers challenged to create similar instructional designs. English and Kitsantas (2012) provide an excellent visual of this process:

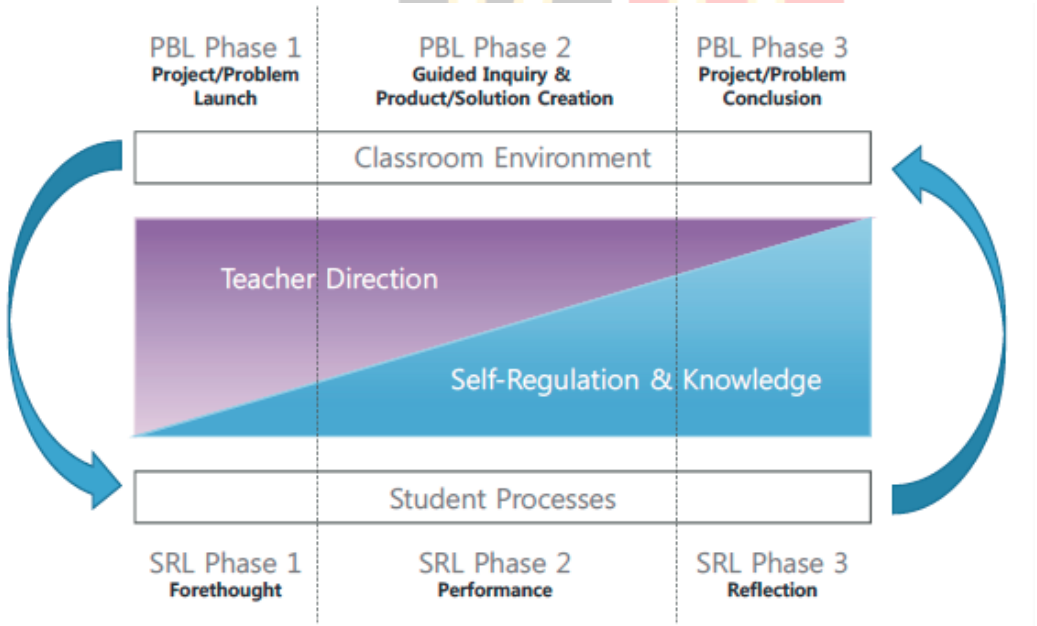


**Figure 1:** English and Kitsantas (2012) model of relationships among PBL and SRL phases

Note the correlation of the cyclical stages of the classroom environment and the student processes: In phase 1, students are able to give forethought to their learning through the project or problem launch. Phase 2 supports students' performance through guided inquiry and the creation of a product or solution. In phase 3, students reflect upon the process conclusion.

Their model directly supports the Lives In Context framework, which also has a similar process within the 7-week cycle. The main components that directly correlate are listed in the table below:

**Table 1: Alignment of L.I.C. stages with PBL/SRL phases**

| *L.I.C. Phase* | *SRL Phase* | *Environment* |
|---|---|---|
| 1- Preliminary Planning | 1- Forethought | 1- Project / Problem Launch |
| 2- Treatment Plan and Development<br>3- Implementation | 2- Performance | 2- Guided Inquiry & Product/Solution Creation |
| 4- Evaluation and Implications | 3- Reflection | 3- Project/Problem Conclusion |

An L.I.C. framework was created that was supported by the SRL research to accomplish the task of dividing the four L.I.C. PBL steps throughout three phases of design within each seven week session of courses. The framework approach to the issue is three-pronged: (1) a consistent BlackBoard L.I.C. cross-course collaborative structure, (2) a progress development rubric, and (3) a web conferencing rubric.

## THE LIVES IN CONTEXT (L.I.C.) FRAMEWORK

Major goals, a prime issue and an approach were conceived to approach the framework. The goals of this particular introspective study were to efficiently analyze, design, develop, implement, and evaluate projects through the focus of cross-course curricular, project-based learning with community service within the Instructional Design and Educational Technology (IDET) Lives In Context (L.I.C.) program; and 2) to increase social presence in online courses for more meaningful community interaction. The issue was that of consistent implementation of the goals, which involve many communication and collaboration needs among multiple levels of program students, first time, and ongoing target design partners. A concise, effective approach in protocols and resources was needed through the BlackBoard environment for program students that involve direct contact with graduate student contacts.

The approach within this design has been proven over two semesters of implementation as being a feasible approach to a PBL cross-course design in which students apply major course learning outcomes in a local service project. Each prong of the approach to help faculty combine major course learning outcomes is described in more detail below.

### Cross-Course Collaborative Structure

IDET graduate courses all follow a 7-week session folder structure to better help graduate students plan weekly work. Units are contained within the session folders.

The 7-week course content session folder structure (attachment 1) parallels all IDET graduate courses and is made available in all simultaneously offered IDET courses within a separate L.I.C. BlackBoard course shell. All cross-course collaborations, project analysis, design, implementation, and evaluation components are archived in the L.I.C. Bb shell for project sustainability. Project teams are ideally formed by combining a student from each simultaneous course offering. Students then combine their individual course learning outcomes from two or more courses toward a collaborative project.

**Progress Development Rubric**

This generic rubric (attachment 2) is designed to progressively experience and prepare the final PBL project within a PBL-designed experience. Responses, static document attachments, and links to progressively developing tools are posted to discussion threads. Students are instructed to read rubric rows in their entirety. Progress development threads due at the end of sessions 1, 3, and 5.

**Web Conferencing Rubric**

This generic rubric (attachment 3) guides a student's synchronous or asynchronous participation in the L.I.C. web conferences. The overall purpose is for greater social presence among faculty, students, and community. Included are progress celebrations, collaboration, and higher-level thinking challenges to applying course content through peer review. Conferences held at the end of weekly course sessions 2, 4, and 6.

## FUTURE DIRECTIONS

Informal, formative questions have been used to this point in time. Future plans for the Lives In Context Framework include more formal studies include:

- students' perceptions of the L.I.C. Framework
- the communication processes within the shared LMS
- the communication process with the greater local and global community
- target design site students' learning outcome performances;
- perceptions of target design educators and global contacts

In conclusion, in order to be successful in PBL, educators need to assume their own design process; students need to assume their own learning process. For many educators and students, PBL is still a developing frontier in our geographical location. Therefore, The L.I.C. Framework presented here resulted from a synthesis of PBL and IBL research, as well as the author's lived experiences within those frameworks and a desire to frame learning environments toward greater, meaningful, local community service to better "serve out" to others.

## REFERENCES

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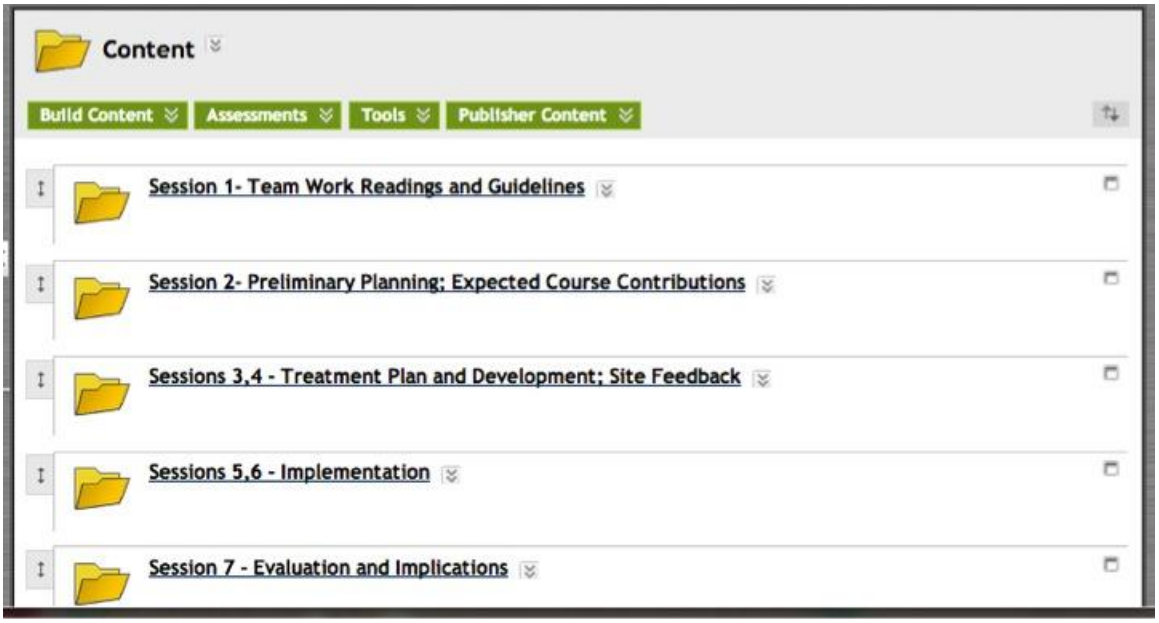
**APPENDIX**

**Attachment 1- Cross-Course Collaborative Structure**



## Attachment 2- Progress Development Rubric

### Progress Development #[1,2,3] General Discussion Thread Rubric: [Development Stage]

Start a team thread, then reply with each of the four below topics. Individually reply to each of the topics. Write in essay style, restating the question(s).

1. Planning: What factors, if any, caused changes to the initial tasks and milestones team-planning document in relation to my role? How were the solutions to those challenges created?

2. Individual Application: How did I specifically apply course content related concepts and skills to this stage of development? What specific advice related to this stage would I give to anyone pursuing an extension of this project or a similar content or process project in the future?

3. BRIGHT Team Assessment: Bragging Rights- What makes a good teammate? Individually Going Higher for the Team- What can I do to improve upon my individual accountability to the team process?

4. Peer Review: How can I apply additional course concepts or provide further reflection upon a peer's applied course concepts at this stage?

| | Levels of Achievement | | |
|---|---|---|---|
| **Criteria** | **Novice** | **Competent** | **Proficient** |
| **Planning** | **0 to 6 points** Links and/or documents may be missing. Googles electronic records of individual accountability within the team planning not evident or lacking in comparison to team. OR- Violation by assuming more responsibility than agreed upon in tasks and milestones document may occur. | **7 to 8 points** Quality of completion missing components as directed in course content folder per session(s). | **9 to 10 points** Include hyperlink to the team planning document shared Google folder. Documents are updated and record individual contributions per Google account participant. Planning documents linked and attached as static representations of current process. |
| **Individual Application** | **0 to 6 points** Elements missing or submitted with poor quality. Individual application is to NOT be assumed a responsibility of a teammate. | **7 to 8 points** Links or static document attachments missing as per course content guidelines, and/or reflections to the description questions above lacking. | **9 to 10 points** Questions in above description include APA citations related to course readings. Introspective thought obvious in future implications advice. Progressive tool explorations or project developments linked to demonstrate tool and feature exploration. Peer questions can relate to practical implications of tool features. |
| **BRIGHT Team Assessment** | **0 to 1 points** One or both of the assessments are missing. | **2 to 3 points** Contributions / statements lacked quality, value-added reflection and contributions. | **4 to 5 points** Bragging Rights: Quality contributions. State specifics regarding one or more teammate's contributions to this stage with regards to individual and/or team facilitation contributions. "IGHT" has value-added response to the question in the above description. |
| **Peer Review** | **0 to 1 points** No peer review posts, or posts greatly lacking value-added content. | **2 to 3 points** Peer review posts made within 24 hours of your initial post deadline. Posts, however, do not include APA citations of course readings or theoretical framework used. | **4 to 5 points** Constructive critique to two other peer posts as directly related to course concepts, including unique APA citations. If the third reviewer, find another peer for comment. Vary APA citations. Reply to your peer reviewers as appropriate. |

## Attachment 3- Web Conferencing Rubric

### WebEX #[1,2, or 3] Discussion Thread- [General Rubric Overview]

Guiding Question: *What key, reflective question(s) do I have for the community (faculty, students, target design contacts, service site contacts) as I quickly overview the most current project developments within my time allotment at the web conference or the asynchronous screencast beforehand?*

* screen share *(screencastomatic.com)* project planning and tool developments while appraising the current stage of your project according to your chosen research framework or Rheingold's 5 social media aspects;
* share current stage successes and roadblocks;
* provide feasible suggestions to overcoming roadblocks;
* generate extensions of peer project ideas and/or frameworks for your current project development or "future implications" written evaluation.

| | Levels of Achievement | | |
|---|---|---|---|
| Criteria | Novice | Competent | Proficient |
| **Detailed Conference Planning** | **0-6 points**<br>*elements missing or not fully developed per L.I.C. developmental stage<br>*verbal presentation needed more planning | **7-8 points**<br>*minor elements are still in progress for L.I.C. stage of development<br>*verbal presentation was obviously planned in advance; shared screen for peers to follow | **9-10 points**<br>*Google Doc project folder complete, updated to L.I.C. course content session; individual contributions electronically dated by Google<br>*team verbal presentation time equally outlined in advance with quality peer questions; shared screen for peers to follow<br>* target and service site contacts given agenda and invited |
| **Quality Conference Participation** | **0-6 points**<br>*screencast (screencastomatic.com) or project files not uploaded to the thread | **7-8 points**<br>Lacking in quality, reading referenced input, or a minor item may be missing. | **9-10 points**<br>*Pre-Conference: Asynchronous screencast attached 24 hrs prior or present synchronously;<br>*During: notes taken to ask questions of speaker;<br>*Post Conference: Two peer-to-peer quality project comments as to a) framework application and/or b) extension of project idea for designer's "future implications" evaluation section, such as framework, applications, best practices. |