Improving the Impact of Learning Communities at UNC Charlotte through Research-Guided
Program Development
A SoTL Grant submitted by the Learning Community Program Steering Committee and
University College

Kim Buch
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Chair of Learning Community Program Steering Committee

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Member of Learning Community Program Steering Committee
Director, First Year Programs, Student Support, and University College

Units Involved: Academic Affairs, Academic Services, and University College
Units Affected: All Colleges and some individual academic departments with a Formal Learning
Community (University College, Business, CLAS, Education, Engineering, CHHS, CCI; Criminal
Justice, English, History, Political Science, Psychology, Sociology, Women's Studies), Academic
Services, and Student Affairs Units

Abstract

We are applying for a SoTL Grant to support an extensive evaluation of the Learning Community Program at UNC Charlotte to better understand how and why they are successful. The program currently consists of 17 learning communities in seven colleges and several units within Academic Services and Student Affairs. The study would produce a set of best practices that could be used to improve the impact and cost-effectiveness of the Learning Community Program and its results would also help to develop a comprehensive vision and direction for the first year experience at UNC Charlotte. The study would utilize quantitative (regression analyses) and qualitative (brainstorming sessions and focus groups) methods to identify which design elements of learning communities have the greatest impact on the academic success and retention of learning community participants. Tangible products of this project include a design elements rubric; a longitudinal database of multiple learning community outcomes (over time and across the 17 communities) and design elements; and an evaluation template that could be adapted for evaluating and improving other first year programs and initiatives. Finally, this study would support the research of faculty in the area of SoTL (the scholarship of teaching and learning), which simultaneously contributes to faculty and university program development.

Budget Request for SOTL Grant
Year ___ 2010 ___

Joint Proposal?   x   Yes ____ No

Title of Project   Improving the Impact of UNC Charlotte Learning Communities through Research-Guided Program Development

Duration of Project   Jan 15, 2010- June 15, 2011

Primary Investigator(s)   Kim Buch, Cynthia Wolf Johnson, & Liz Fitzgerald

Email Address(es)   kkbuch@uncc.edu; cwolfjo@uncc.edu; effitzge@uncc.edu

UNC Charlotte SOTL Grants Previously Received (please names of project, PIs, and dates)   None

Allocate operating budget to Department of   University College

Account #	Award	Year One January to June	Year Two July to June
Faculty Stipend	Transferred directly from Academic Affairs to Grantee on May 15	$3850	$ 0
911250	Graduate Student Salaries	$1920	$1920
911300	Special Pay (Faculty on UNCC payroll other than Grantee)		
915000	Student Temporary Wages		
915900	Non-student Temporary Wages		
920000	Honorarium (Individual(s) not with UNCC)		
921150	Participant Stipends		
925000	Travel - Domestic		$1000
926000	Travel - Foreign		
928000	Communication and/or Printing		
930000	Supplies		
942000	Computing Equipment		
944000	Educational Equipment		
951000	Other Current Services		
	Subtotal	$5770	$2920

	GRAND TOTAL	$8690

Attachments:

Budget Narrative

1. Faculty stipend for Dr. Kim Buch to oversee the project during summer 2010
2. Graduate Student Salary
   Grant will pay Organizational Science PHD student Daniel Bonilla to work 3 months during summer 2010 at the rate of $16.00/hour for 20 hrs/week.
3. Grant will cover partial travel expenses for Liz Fitzgerald to present project findings at the Annual Conference for the First Year Experience.
4. Has funding for the project been requested from other sources? __x_ Yes ____ No.
   If yes, list sources.

Daniel's salary for the grant period from Jan 15- May 15 will be paid for by Academic Services. University College will match support from this grant for Liz Fitzgerald to disseminate findings at the Annual Conference for the First Year Experience in Spring 2011.

John Smail
jsmail@uncc.edu

22 October 2009

Dr. Richard Hartshorne
Chair
SoTL Grants Committee:

I am writing to formally endorse the SoTL proposal that is being submitted by Kim Buch, Cindy Wolf Johnson, and Liz Fitzgerald.

Since assuming my position as Dean of University College in July 2007 I have been extensively involved in the university's learning community program. In addition to the fact that one of the largest learning communities is partly in University College, I sat on the Learning Community Steering Committee for two years during which time we conducted a comprehensive review of the learning community program.

As a result I can say with some confidence that the proposed project is both timely and crucial to the future development of the learning community program at this university. We know from our data that, in aggregate, learning communities are effective in promoting all sorts of good outcomes from academic performance and retention to student engagement and satisfaction. We do not, however, have much sense at all about why and how these good effects are induced by the learning community experience. This study proposes to address exactly this question and the resulting information will allow both the First Year Experience Steering Committee (which I will chair) and the Learning Community Steering Committee to make informed judgments about the development and modification of learning communities on campus, and it will also provide information to individual departments, learning community coordinators, and the faculty who teach students in learning community curricula. In short the potential impact on campus, both in support of students and faculty, is significant.

Finally, I have every reason to believe that the results of this research will be an important contribution to the body of research on these issues that is discussed at national meetings and in publications.

In short, I give my unreserved endorsement—this is a project that deserves funding.

Sincerely,

John Smail (signed copy forwarded via campus mail)
Dean, University College

Abstract

We are applying for a SoTL Grant to support an extensive evaluation of the Learning Community Program at UNC Charlotte to better understand how and why they are successful. The program currently consists of 17 learning communities in seven colleges and several units within Academic Services and Student Affairs. The study would produce a set of best practices that could be used to improve the impact and cost-effectiveness of the Learning Community Program and its results would also help to develop a comprehensive vision and direction for the first year experience at UNC Charlotte. The study would utilize quantitative (regression analyses) and qualitative (brainstorming sessions and focus groups) methods to identify which design elements of learning communities have the greatest impact on the academic success and retention of learning community participants. Tangible products of this project include a design elements rubric; a longitudinal database of multiple learning community outcomes (over time and across the 17 communities) and design elements; and an evaluation template that could be adapted for evaluating and improving other first year programs and initiatives. Finally, this study would support the research of faculty in the area of SoTL (the scholarship of teaching and learning), which simultaneously contributes to faculty and university program development.

V.   Project Narrative

A. Specific Aims

1. The **overall purpose** of this project would be to conduct an in-depth assessment of the Learning Community Program and use the results of the assessment to develop a set of best practices that could be used to improve the impact and cost-effectiveness of the Learning Community Program and that would contribute to the academic literature on learning communities as a pedagogical strategy. In addition, the results would inform best practices for other First Year Initiatives (i.e., freshman seminars, linked courses) coordinated by University College.

2. **Specific objectives** of the proposed project include:

- To extend our current understanding of the effects of learning communities on student performance and learning outcomes. Previous research, described in #3 below, has already demonstrated a significant positive impact on students participating in a learning community at UNC Charlotte. However, additional research is needed to understand the important questions of **why** they work and **how** they work. The proposed study would attempt to get at the why and how by focusing on the following research questions:
  - Which design elements of learning communities (e.g., size, discipline- or theme-based, extent and types of co-curricular components, extent and types of service learning components, characteristics of student participants (e.g., race, gender, first-generation, at-risk status), characteristics of faculty and staff participants (e.g., continuity vs. turnover, tenure-track vs. non-tenure track faculty, faculty vs. staff), strategies used to recruit, role of advising, residential or non-residential, type and extent of curricular components, etc.) have the greatest impact on student performance and learning outcomes?
- To use the research findings to guide the future development of learning communities and first year initiatives on campus.
- To support the research of faculty in the area of SoTL (the scholarship of teaching and learning), which simultaneously contributes to faculty and university program development.

3. **Rationale** for the proposed project.

- The answers to the research question in #2 above would inform the new **First Year Experience Committee**, whose purpose is:
  - To clarify a comprehensive vision and direction for the first year experience at UNC Charlotte.
  - To share what is being done across campus and what else might be done to fulfill the institution's vision.
  - To provide a structure to pilot new programs and initiatives; review proposals for groups of new students we are not reaching.
  - To develop a coordinated communication plan for new students, transitioning from admissions and recruitment through the first year experience.
  - To examine how to best transition students out of the first year experience smoothly with appropriate expectations and support.

- Likewise, the answers to these research questions would inform the **Learning Community Program Steering Committee**, whose renewed purpose includes:
  - o Overall Learning Community Program planning, policy and review committee.
  - o Strategic Planning: develop a 5 year plan in light of enrollment increases.
  - o Review of Annual Reports; Completion and Distribution of Overall LCP Annual Report.
  - o Individual Learning Community Reviews: complete annually by examining longitudinal data and annual reports; work collaboratively with Learning Community Coordinator and Associate Dean/Dean and meet as needed to explore options for strengthening LC.
  - o Review of Proposals and Selection of New Learning Communities.
  - o Make recommendations for residential space allocation.
  - o Advisory to Provost, Vice Chancellor for Student Affairs, and Deans about the Learning Community Program.

Further Rationale for the Project
- o The answers to the research question in #2 above would allow the creation of learning community best practices which would inform and guide growth and continuous improvement.
- o Our proposed methodology (as described below) would provide a template that could be adapted for evaluating and improving other student support programs and interventions.
- o To build bridges between the teaching and scholarship work of faculty who contribute to the success of student support programs.

Pilot Work that Supports the Project
This study is designed to extend the findings of two previous studies. The Learning Community Program Comprehensive Review Report was conducted by the Learning Community Steering Committee and submitted to the Provost in July, 2009. Results of this review found that learning communities have had a significant positive impact on student participants on the following measures:
1) higher academic achievement (as measured by first year GPA)
2) greater rate of persistence (as measured by first year retention and time-to-degree)
3) increased awareness of departmental, college, and University resources
4) higher level of satisfaction with the University experience (as measured by campus-wide student surveys)
A second study examined the impact of the Psychology Learning Community (PLC) on students' academic success, satisfaction, and engagement for every PLC cohort since 2003. Results of this study also revealed that learning community students had significantly higher student success and learning outcomes than did comparison students.
Although both studies show a positive impact of learning communities, neither study addresses the important questions of **why** or **how** they work. Building on the findings from these two studies, the proposed study would get at the questions of why and how. This will be done through a more sophisticated research design and statistical analysis and the addition of qualitative methodology, as described in the Methods section below.

Impact of the Study on Undergraduates' Success and Learning

The studies described above have demonstrated the positive impact of learning communities on student learning and success. The proposed project will allow us to understand the dynamics behind this impact so that a set of best practices can be developed. This has the potential to impact a large segment of our student population because 25% (N=799) of entering UNC Charlotte freshmen currently participate in a learning community.

B.   Literature Review

Learning Communities in Higher Education

Learning communities are most typically small groups of preselected first year students brought together in a block of courses, based on some common interest, to form a community of collaborative learning and social development. A group of faculty who are an integral part of the learning community facilitate the experience. There are many variations on this model, but most learning communities have three things in common: shared knowledge, shared knowing, and shared responsibility (Tinto, 2000). Shared knowledge and shared knowing are concurrently achieved through co-enrolling students in two or more courses organized around a theme or discipline. Because students are immersed in a shared learning experience with other students who have similar interests that spans multiple courses, students benefit from a coherent curricular experience that promotes higher levels of cognitive complexity. Socially, students benefit by getting to know other like-minded students more quickly, and perhaps more intimately, than typically occurs for first year students. Shared responsibility is achieved through collaborative group projects and service learning activities (Buch & Spaulding, 2008).

Learning communities are applicable to any content and are most often developed around disciplines or themes. Although learning communities can target any group of students, the vast majority of learning communities in higher education serve first year students. The focus is on first year students because of their low retention rates and the recognized need for programs that facilitate students' successful transition to the college experience. There is a growing body of research evidence suggesting that learning communities can have a significant impact on a variety of desired outcomes of college including higher grades and persistence rates, greater levels of intellectual and social development, and higher levels of co- curricular involvement and engagement (Zhao & Kuh, 2004).

Learning Communities at UNC Charlotte

The Learning Community Program at UNC Charlotte was established in 2001 to positively impact retention and academic success of first year students. The Learning Community Program is a joint initiative between Academic Affairs and Student Affairs, fully supported by the Provost/Vice Chancellor for Academic Affairs and the Vice Chancellor for Student Affairs. Designed for new incoming students, UNC Charlotte now has 17 learning communities initiated by academic departments and colleges, and support units within Student Affairs and Academic Affairs. The Learning Community Program is advised by the Learning Community Program Steering Committee, composed of faculty, staff, and students representing Academic Affairs, Student Affairs and the Learning Community Coordinators.

The first official learning community at UNC Charlotte, the Freshman Learning Community, was established by the then College of Arts & Sciences, to promote the academic success of students who had not declared a major field of study. Since 2001, several colleges and departments have created learning communities for the varied purposes of assisting students in the major who are "at-risk," recruiting new students into the major, and engaging students in the first year experience to assist with retention. Today UNC Charlotte has 17 learning communities, representing all colleges except one (College of Arts & Architecture), and several departments and support units. All learning communities at UNC Charlotte target first semester freshmen, with the exception of a newer community which targets transfer students, as a result of the large number of transfers traditionally in that major (Criminal Justice).

In its 2009 Comprehensive Review Report, the Learning Community Program Steering Committee updated the mission and core characteristics of learning communities at UNC Charlotte, as follows:

- A common community with a defined thematic or academic focus, sponsored by a college or department.
- A minimum duration of two semesters, of which one semester may be non-curricular engagement.
- A minimum of two common courses in addition to other defined mechanisms (residence, schedule, co-curricular activities) related to the outcomes of the community, one of which must be a course reserved exclusively for the LC student cohort.
- Clearly identified and sustainable program administration and support structure.
- Clearly articulated learning outcomes that reflect the goals and learning objectives of the University and the sponsoring academic program.
- Clearly defined assessment and evaluation procedures that provide useful data for meeting program and learning outcomes.
- Identified connections between Academic and Student Affairs programs that foster students' personal, professional and intellectual development.
- Collaborative, active learning experiences for students.

C. Methods

The purpose of this project is to extend our current understanding of why and how learning communities positively impact student success and learning outcomes, then to use those findings to guide the future development of learning communities and first year initiatives on campus. Specifically, we propose to answer the following research question:

- o Which design elements of learning communities and characteristics of faculty and staff participants, have the greatest impact on student performance and learning outcomes?

This will involve the following steps:

1) Creation of a rubric of all possible design elements on which the current 17 learning communities (as well as any new ones added in the future) may differ. This rubric would be developed by the researchers using their knowledge of LCs on campus and knowledge of the LC literature, along with input from faculty, staff, and student participants via brainstorming sessions and focus groups.

2) Classification of each LC on each design element in the rubric. This would be done by consulting with each LC coordinator and by reviewing the proposals and annual reports for each LC.

3) Creation of a longitudinal database that combines the classification data for each LC (from #2 above) with existing data (from Institutional Research) on 1st year retention in major and college, GPA, and graduation rates for all participants in a learning community since 2001. The database would allow analyses that collapse findings over time for each LC and for all LCs, as well as the ability to run trend analyses that track changes over time as well as analyses that regress the design elements on the outcome variables.

4) Running regression analyses that show which design elements have the greatest impact on the outcome variables.

5) Conducting follow-up focus groups with faculty, staff, and student participants to triangulate the findings from #5 above, and to gain insight into how and why the design elements have the observed effects.

6) Translating the findings from the quantitative and qualitative analyses into a set of learning community "best practices" that can be shared internally and externally as described in E. below.

D. Evaluation
The expected outcomes and impact of the project have been addressed in earlier sections of this proposal. Again, we hope to gain an understanding of what factors (design elements of learning communities) have the greatest impact on student success and learning outcomes (as operationalized in #3 above). Tangible products of this project include the design elements rubric, the longitudinal database of LC outcomes (over time and across the 17 communities) and design elements, and a set of best practices based on the results of the project. This project will supplement and extend previous evaluation efforts (described in A3 above) and can inform future decisions about learning communities and other first year experiences for undergraduates.

E. Knowledge Dissemination
The tangible products (design elements rubric, longitudinal database, and best practices) produced by this project will be useful to many campus groups and decision-makers, including the Learning Community Program Steering Committee, the new First Year Experience Committee, colleges, departments, LC coordinators, and others involved in student support programming and assessment. In her role as Associate Provost for Academic Services, Co-PI Cynthia Wolf Johnson can ensure widespread dissemination of these products and encourage thoughtful consideration of the findings as they may inform and guide program decisions. In addition, we would also value the opportunity to share our findings and products with the campus community via a Teaching Week presentation, as well as other opportunities to share our methodology with staff and faculty involved in the assessment of other student support programs. We are also eager to contribute to the literature on the first-year experience and, and would prepare manuscripts for submission to such outlets as the *Journal of the First-Year Experience and Students in Transition*, *Journal of College Student Retention, The International*

Journal for the Scholarship of Teaching and Learning, *Research in Higher Education*, and the *Learning Communities Research Journal*. Finally, we would disseminate our findings to the higher education community through presentations at SoTL and first-year experience conferences.

F. Human Subjects
In progress

G. Extramural Funding
The graduate student that we propose to fund for his work on this project during the summer is funded by Academic Services during the academic year, and this funding will support the work of this proposed project from January to May, 2010. Deam Smail has also offered matching travel funds in the amount of $1000.

H. Timeline
Activity   Date
1. Creation of design element rubric   Spring 2010
2. Classification of each LC using design element rubric   Spring 2010
3. Creation of longitudinal database   Summer 2010
4. Running regression analyses   Summer 2010
5. Conducting follow-up focus groups   Fall 2010
6. Translating the findings into "best practices"   Fall 2010
7. Dissemination of products and findings- internal   Fall 2010
8. Dissemination of findings- external   Spring 2011