

**Promoting Service Learning as a Byproduct of Academically Oriented, Community Based
Practicum Courses.**

Elaine Parent, Lars Rossen

Laboratory of Comparative Human Cognition

University of California, San Diego¹

Abstract

A review is presented of the academic and affective outcomes of college student's participation in a practicum course named *the 5th Dimension* situated in an after school program. The students supervise children in a series of activities that mixes play and learning. Findings show the course provides students with a view on the teaching practice as tied to social interactions rather than linear didactic processes, which has significant implications for education in the social science where students are rarely provided with the opportunity to combine theory and practice. Where the effects of participation in practicum courses have traditionally been traced by indirect means, the current paper draws on data authored by the participants as a reflection on their participation.

Introduction

It has now been well established that if properly supervised and organized, service learning enhances academic progress. Several successful studies have reported positive effects on students' academic performance (GPA, writing skills, critical thinking skills) (Astin, Voegelsang, Ikeda & Yee 2000), life skill development and sense of civic responsibility (Astin & Sax 1998), leadership skills (Astin, Sax, & Avalos 1999), intention to serve others in acute need while enhancing tolerance for diversity and general appreciation of others (Markus, Howard & King 1993), a deeper understanding of community problems, as well as the ability to place these issues within a larger societal context, thus augmenting academic, critical thinking

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(Eyler & Giles 1999). Furthermore, there is evidence suggesting that service-learning programs play a crucial role in fostering higher quality engagement between university students and faculty members (Eyler & Giles, 1999). In addition, participation in service learning programs has been reported to motivate and direct students to the teaching and counseling professions (Astin, Voegelsang, Ikeda & Yee 2000).

The general theoretical explanations for these positive effects focus on the confrontation between theory and practice that requires students to synthesize their knowledge by inducing them to reflect on their personal experiences of their social worlds. We find this line of explanation plausible (Astin & Sax 1998; Speck, 2001). Nevertheless, the data supporting such conclusions are based on after-the-fact surveys and inferences drawn from student papers that were produced for other purposes. Our intention in this paper is to provide more direct evidence, collected virtually in situ, of the forms of interaction and reflective practices that others have sought to document by more indirect means (Eyler & Giles 1999).

To accomplish this goal we report on a project that fulfills the purposes of service learning as a byproduct of a laboratory, practicum-style course designed for social science majors. This kind of course, which has been implemented in many colleges and universities (see www.uclinks.org) is itself part of a longstanding research effort to design, implement, and sustain development-enhancing activities during "critical hours" between the end of the school day and parents' arrival at home (Distributed Literacy Consortium, 2006). These are the hours identified by researchers as key times when children are likely to be unsupervised and therefore increasingly apt to fall into trouble (Miller 2003). They are also hours when undergraduates are available to attend courses, even courses located in community settings.

In effect, the strategy adopted in this research inverts the looking glass through which service learning is usually conceived of and evaluated – that is, to start with the idea of service and then demonstrate that academic benefits will ensue. Rather, the strategy of this project was to create special courses for purposes of enabling faculty research and improving student

learning (the traditional priorities of most institutions of higher education) and then to argue that community service is a natural byproduct of those courses. As described below, the courses in question were designed for Psychology, Human Development, and Communication majors (but open to students from any major) where the students play a key role in providing staffing of after school activities. The courses are intended to arrange for them to learn a variety of research skills including how to promote children's learning, how to document interpersonal interactions, how to analyze the social processes in which they are key participants, and how to write research papers based on their experiences.

There is no doubt that through their class-related activities that students are providing a service to local community institutions charged with the care of children during the after school hours. Youth clubs, churches, and libraries eagerly welcome their participation, and programs run after school at the schools themselves. In fact, demand from the community is difficult to meet owing to the chronic under-funding and related staffing problems that such institutions routinely face (Pittman, Tolman, & Yohalem 2005) and the pressure on colleges and universities to limit the number of small classes owing to economic constraints.

For the present, if we can be granted our assertion that these practicum courses provide a valued service to community organizations and the children they care for, our challenge is to show the educational value of the courses to the students. This is sought done in a manner that illuminates what it is about community based practicum courses that produces positive outcomes that match those cases shown for service learning where such outcomes have been demonstrated.

We believe that we have something of value to contribute to this effort because, by virtue of the writing requirements placed on the college students, we have been able to obtain a rich picture of undergraduates' experiences at the after-school sites. As a consequence, we have myriad first person accounts of student practicum/service activities that help to pinpoint what it is in community-based service learning programs that produce such effects.

The system of activities involving the undergraduates is most usefully described at two levels of analysis, respectively: UCLinks at the institutional level and both the 5thDimension enrichment activities and the classroom-based interactions at the level of student experience.

Linking universities and communities: UCLinks

UCLinks involves collaboration between a university (or college) and a community organization that takes supervision of children during the after school hours as a central mission (See Figure 1).

We assume that some form of the institutional arrangements depicted in Figure 1 exists, de facto, in all service learning programs although the locations and content of the activities may differ substantially. What distinguishes UCLinks is the following: rather than have students enter into an existing form of activity that is an ongoing part of the way the community institution functions, the University and the Community organization agree to engage in a new, enriched program that is jointly run and the specific form of which emerges from their collaboration.

As it exists at present, UCLinks is an inclusive network of after school programs operating in various parts of the United States, as well as in Brazil, Mexico, Finland, Spain, and Sweden. It is aimed at both supporting children who are struggling in school, as well as those who do well. UCLinks activities are open to all children and youth in the host school or community organization. By giving youth from low-income or language-minority communities extra support early in their school careers, UCLinks works towards enabling them to overcome obstacles they face to their academic development.

As noted above, UCLinks engages undergraduate students in practicum coursework that places them in after-school programs in school and community settings where they are key players in implementing the enrichment activity. Each program site selects and adapts available resources and materials to co-construct the program on the basis of local concerns. These local concerns include participants' language, culture, and community perspectives. While challenges at this first level of analysis are significant we will not address them here (see Distributed

Literacy Consortium 2006, Vasquez, 2002). Rather, we will assume for present purposes that they have been met in a manner that is sufficiently robust to permit the students to engage with children and each other, as well as their professor and adult members of the community, on a routine basis, year in and year out. (Cole 1996).

The Practicum Class & the Shared Enrichment Activity (The 5th Dimension)

The second level of analysis concerns the specific activities in which the undergraduates participate. The 5th Dimension is the name given to the community-based activity and the classroom-based interactions involving professor and students. For purposes of exposition, these two aspects of student experience will be described separately.

The ideas underpinning design and implementation of a 5th D evolved from efforts to develop an inclusive after school activity system where children, undergraduates, and researchers could come together to engage in activities that could not find their place in traditional classrooms. The development of the 5th Dimension methodology draws heavily upon the Russian cultural-historical psychological tradition represented by L.S. Vygotsky, A.R. Luria & A.N. Leontiev (for a summary of the use of these men's ideas, see Cole 1996). The organization of the activities draws upon the concept of a zone of proximal development (Zoped) promulgated by Vygotsky (1978). Importantly, Vygotsky argued that zones of proximal development could occur both in play and in deliberate educational activity. With respect to education settings he defined the Zoped as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky 1978). In play, he argued, the relative freedom provided by an imaginary situation provided psychological supports so that a child could be "a head taller than herself."

In the 5th Dimension, play and deliberate learning problems are mixed with peer interactions and intergenerational cooperation to provide a rich set of motives for children's participation.

It is worth noting that these ideas are congruent with the American pragmatist tradition (e.g. Dewey, 1963). This is an important connection because Dewey's pedagogical philosophy has been involved in numerous discussions regarding the structure and efficacy of service learning courses (Simpson, 1998, Kahne, 1994, Giles & Eyster, 1994). Human development and learning is thus understood – both in the context of the 5th Dimension as a specific research framework and in the general field of service learning – as a social and material enterprise. This shared approach differs significantly from traditional theories of education and development. Here the emphasis is on students as active participants involved in their own learning.

A Prototypical 5th Dimension

Every 5th Dimension offers school aged children a specially designed environment in which to explore a variety of off-the-shelf computer games and game-like educational activities during the after school hours. The computer games are a part of a make-believe play world that includes non-computer games like origami, chess, and boggle and a variety of other artifacts. "Task Cards" or "Adventure Guides" written by project staff members for each game are designed to help participants (both children and undergraduate students) orient to the game, to form goals, and to chart their progress toward becoming an expert. The task cards provide a variety of requirements for the school-age students to externalize, reflect upon and criticize information, to write to someone, to look up information in an encyclopedia, and/or to teach someone else what one has learned. These activities are in addition to the intellectual tasks written into the software or game activity itself.

As a means of distributing the children and undergraduates' use of the various games, the 5th D contains a tabletop or wall chart maze consisting of some 20 rooms. Each room provides access to two or more games, and the children may choose which games to play as they enter each room.

Further, there is an electronic entity (a wizard/wizardess, a Maga, el Proteo, etc.) that is said to live in the Internet. This mysterious entity writes to and chats with the children and

undergraduates via the Internet. In the mythology of the 5th D, the wizard/ess acts as the participants' patron, provider of games, mediator of disputes, and the source of computer glitches and other misfortunes. Because it is located in a community institution, the 5th Dimension activities require the presence of a local "site coordinator" who greets the participants as they arrive and supervises the flow of activity in the room. The site coordinator is trained to recognize and support the pedagogical ideals and curricular practices that characterize the 5th Dimension.

The role of the Undergraduate Students

The undergraduate students are believed to perform a crucial role in sustaining and developing this enrichment environment for the children. The students, in accordance with standard ethnographic approaches, immerse themselves in a community for the purposes of understanding local cultural dynamics (Malinowski 1944). At the same time, they are enrolled in a practicum course or special research seminar where they read theoretical materials and discuss those materials with their professor. The current study draws upon ethnographic data authored by 40 students from the winter and spring quarters of 2005.

The two groups of students (both those in the course and those registered in an independent study format) attend the same research site. This procedure differs from traditional academic work in that it focuses on authentic competence instead of bureaucratic or academic dictates. This is further emphasized by the fact that when enrolled in the courses, the students are provided with a paper specifically concerned with the role of students in participatory-based research. They are told that "We believe that because the undergraduates are legitimate co-participants in the activity, they have at their disposal excellent resources not only for identifying the task that the children are working on, but in diagnosing the strategies they use, and specific areas where they have special difficulties or exhibit strengths" (Olt, Cole & Woodbridge 1994). It is clear that the students are not professional ethnographers - yet they are expected to act as such. This responsibility placed on the students makes them accountable to organizations and people outside themselves.

Overview of courses

The formal class, entitled “Media & Design of Social Learning Contexts,” is a combined lecture/lab course cross-listed in the Department of Communication and Human Development Program. This group of students meets twice weekly for an hour and 20 minutes and the students attend the 5th Dimension site twice a week for an hour and a half session. The “Media & Design” course focuses on the structure and implementation of educational media. It requires students to engage with the children in the design and development of a variety of media-based activities. Examples include the recording and editing of a digital story, designing a web page with children or planning and executing the way in which an off-the-shelf computer game is to be played to maximize its developmental potential.

The second source of data is from students who participate in a research seminar devoted to the 5th Dimension. The students taking the research seminar have the same responsibilities and amount of time spent with children, but they have a lighter set of reading assignments and these are focused around their specific research topic. Whether in the more formal “media design” class or the more specialized research class, the students and professor discuss, among other things, ethnographic methods as a source of information about development. Issues related to their personal experiences at the community site are connected with theoretical topics from their readings.

Student activities

Following every visit to the 5th D, the undergraduates write and post detailed field notes in which they describe their interactions with the children. These field notes are written using the standard template provide and is sent to the professor and to a database where they are stored for later analysis. In addition to standard data such as date, name of children interacted with and the names of the specific games or other activities engaged in, the field notes are divided in the template into the following fields:

(a) The general observation section describes the students’ first impressions upon arriving at the

site and describes the flow of the day from a wide-angle perspective.

b) In the narrative description, the students are asked to zoom in on the exchanges and the activities that they directly engaged in, describing in detail the interactions they engaged in at the site.

c) The game/task summary offers a brief and concise account of the day's activities and

d) In the reflection section, students state their thoughts and opinions about what went on at the site that day. They often relate several site visits to each other, commenting on the progress with a child and benefits or problems with a specific task. The reflection sections also offer the students room for suggesting improvements and changes and direct constructive critique regarding the daily dynamics at the site (Cole, Olt & Woodbridge, 1994). They are required to submit each field note within 24 hours of their site visit. The undergraduates are provided access to the database for their papers. Usually they focus on the field notes collected during their time at the site, but at present there are 26,000 individual field notes, dating back to the initiation of the intervention. Both undergraduates and researchers have access to this collection.

At the end of the quarter, at which time they have attended the site and written field notes an average of 18 times, students write a two-part term project. The first part requires them to read their field notes in sequential order and to write a paper summarizing their reflections on the trajectories and their personal learning outcomes. The second paper is based on a research topic of interest: (i.e. a case study of a child, the use of a specific a game, gender issues, etc.).

The role of supervision

A large share of the supervision that students receive takes places on-site by responsible site coordinators, staff members and the responsible professors, minimizing differences between the two courses. Furthermore all undergraduates receive written, personal feedback on their field notes from the responsible professor. These are posted directly on the web board as a means of further facilitating their observations and reflections on their interactions with the children. Suggestive comments are made on possible student improvements in both the practical, onsite

work and in the account of their interactions. The comments offered by the professors may focus on specific theoretical issues related in the student's field notes, by referring the student's comment back to the academic framework promoted by the associated coursework. The following excerpt illustrates such feed back.

“Jenny -- Your interactions with the kids seem fine, but you provide little detail about what the kids do and do not accomplish. For example, what did Sofia get right and what did she have trouble with in her game? When I stopped by to watch [the computer game], Simon was trying to make animals happy. Did he use any strategies at all? Which ones? Its clear that he had an attention issue, but not much else is clear except your rapport with the kids was good and you actively engaged”.

Furthermore the open web board technology that is being used for field note submission and commentary encourages the students themselves to examine the work submitted by their peers. As a result, they will often post critically reflected comments and expand on theoretical issues recognized in the descriptions posted by their peers:

“I did the same thing with the boy I was working with, Brian: I gave him the tools to come up with his own ideas for a story. I think that the assignment really did promote the idea of the Zone of Proximal Development. I agree with you that Selma did seem to be quite excited that day. Good job trying to keep her on task.”

Evidence of change in the self-reflective papers.

For purposes of analysis here, we will focus on the students self reflections at the end of the quarter, following their review of their own field notes. These data are most central to assessing what it is about the experience of working with the children in the 5th Dimension that brings about the academic and other changes that are widely valued in the service learning literature.

As we have noted, the 5th Dimension program differs from traditional service learning

interventions in the close integration of experience at the community site and the ongoing academic concerns of the university. The university students and the community institution share in a process of learning about both human and organizational development, instructional methods and social issues.

These developments are recorded in the students' reflective field notes and final papers.

An example:

“Instead of being taught the 5th Dimension rules, we are supposed to learn about it by ourselves because it is a type of culture. The 5th Dimension environment is a small community of children with their own ideas, rules, and beliefs making it a culture that I have to learn by being exposed to it. Having knowledge of this now, I will not be worried about the chaotic and unorganized atmosphere the next time I visit the field site. I have to learn the 5th Dimension rules and culture by interacting with the children.”

These student field notes have thus been found to provide evidence of the dynamics of the teaching/learning process that plausibly can be claimed to play an important role in the bringing about of cognitive change. They also offer valuable insights into student learning processes and their adaptation to this unfamiliar challenge.

Results.

Part of the transformative experience for undergraduates involves becoming acculturated into the mores and actual structure of the 5th Dimension program. For many undergraduates, because of their own preconceptions, their involvement challenged their assumptions about children, about children's development and the teaching-learning process. The dominant themes in their reflection papers are grouped below.

As is to be expected, students differ greatly in their ability to 'tune into' their own personal changes in thinking as well as their willingness to engage in self-disclosure about these changes, particularly those that referred to their own cognitions about themselves. It simply is

not possible to repeat here the observations of each of the students registered and participating in the 5th Dimension during winter and spring quarters, 2005. For the purposes of brevity, we have presented below a selected representative sample of student observations made in each of the following categories.

1. How the linking of course work with hands-on lab experience deepened their knowledge of children.

Most of the students commented positively on the opportunity to learn more about children first-hand and a number said the experience was a way of ‘connecting’ with their own experience as a child - and to re-experience that phase of their own life once again.

L.A. From the program, I learned more about children, my ability to adapt to them and about relationships in general. Working with these kids is probably the most fun I will have in a course here at UCSD.

J.K. I understand the crucial role that language has on children, and on any other human, in forming relationships, getting what you want, expressing yourself. I am more observant, reading more deeply into each thing that a kid says. I hear the words but also note the facial expression, the tone of voice.

A.A. My task was to find out who these kids were, to observe their behavior, and see if I could find out why they behaved this way. But in order to do so, I had to be a kid again.

The more I acted like an adult, the more the kids backed away from me.

2. How the linking of course work with hands-on lab experience deepened their knowledge of developmental psychology.

S.S. I feel that I have learned a lot about child development. I am able to see the different theories that I have only been exposed to in the classroom and in texts. It helped me remember these topics after this experience. I expanded my knowledge of child development more than I could have anywhere else!

T.C.N. This experience made me more knowledgeable about the development of

children, but also the current development and research of after-school programs. I did not know at the beginning that I was embarking on an adventure of fantasy, technology and learning that will forever change my perception of children, adolescence and the informal education that takes place after school.

L. D. [The program] helped me in finding my calling, my career choice. I will go into developmental psychology.

3. How the linking of course work with hands-on lab experience affected their career choice.

A.A. Children are so strongly influenced by the images they see over and over again, and after observing the behavior of this group of girls, I see that their biggest influence is the media, and that is why I have chosen to center my research on the effects and influence of media and popular culture on today's children.

M.N. My experience at the site has also put another thought into my head. Who knows: maybe child research will be my newfound career! My experience at the site has only widened my horizons as an individual and I have a newfound respect for adolescents.

J.K. After taking this class and working with children weekly it has put me into a predicament. I have changed my goals and am now inspired by working with the kids. I want to know why kids act the way they do and say some of the things they do. One thing is for sure. This class has left me with many questions waiting to be answered!

C.E. I realize how much I enjoy teaching others; just how much I would truly enjoy being a teacher. It has inspired me down that career path.

4. How the linking of course work with hands-on lab experience deepened their knowledge of the research experience.

A.N. Coming into the 5th Dimension – I was book-smart. I knew the terms, the research methods and of theories...but I had yet to apply it and hear and use the lingo in everyday conversations with my fellow undergraduates. For this reason, I feel as if my prior knowledge was one-dimension, shallow and limited.

S.H. The abilities to observe, make field notes, and apply theory to practice are all valuable skills I gained from the course.

A.L. For the first time in my career at UCSD I was able to step outside the box and outside of the lecture hall, and it was an amazingly refreshing experience. I learned a lot about myself, about children and the process of participant observation and research.

I.P. This experience has taught me that to really understand human behavior it is important to let go of structure and observe what happens when there is no pressure.

5. How the linking of course work with hands-on lab experience deepened their understanding of the learning process.

J.P. I was able to put theories into practice at the 5th Dimension. At the beginning of the course, I had time management problems. I have learned to manage time better. My interactions with children of different ages give me a clear idea of which grade level I want to teach in the future.

K.V. I think the technique of teaching a class this way is extremely effective, as you are able to relate your personal experiences to the concepts that some expert writes about. The material is easier to learn that way.

A.G. The readings almost always helped in understanding and then potentially alleviating concerns and problems. Lectures often allowed us to discuss an idea or paper as a group, and then see the same ideas in its concrete form the next day!

6. How the linking of course work with hands-on lab experience helped students deepen their knowledge of self.

M.A. A good way to re-experience one's own childhood, to relearn and get in touch with earlier experience. What I learned this quarter focuses on the things that I forgot about myself. My interactions with children reminded me of them. I have learned some things about myself through this experience. My understanding and empathy has definitely increased with this experience.

A.A. Not only did I gain a deeper understanding of the children that I worked with, but a deeper understanding of myself as well. I learned a lot about who I am, and about my ability to work with children. I saw things I never expected to see, I heard things that made me pinch myself to see if I was awake, and I noticed, and realized things that only this experience could have made me aware of.

K.J.E. The lesson that I learned was that not to be afraid of trying new things. I changed the way I look at this world from one boy! Not only Doran but many other children also helped me build the new identity inside of me. I also found a joy of learning. My experience changed my plan for the future. I really want to work with children in any way possible for my future career.

T.H. While working with the kids the primary thing that I have realized is that my ability to learn and understand theory in the instructional part of the program is not the same as my ability to effectively practice it at the site. This is helpful because it shows me my biases; my personal history, how I was raised, and opinions play a major part despite the fact that I see myself as educated and informed.

K.W. I feel like I learned so much and gained so much just from those minor interactions, about conceptions, my misconceptions, and myself and how I think about education, class, ethnicity and youth. I think I have become a little more open-minded and able to think a little more critically when it comes to some of these issues. About my own abilities and styles when it comes to communication and socialization with others, about how open, or in some cases closed off I am, as well as the various roles that I can adopt depending on the situation I am in.

Conclusions

The comments abstracted above are not easily categorized and occasionally the same student is quoted more than once, if his/her remarks were relevant to more than one category. Written in their own words, these statements provide support for the potential of carefully

structured community-service learning opportunities combined with instruction in the social sciences (Cole 1996). When this combination is achieved it can yield theory-into-practice experiences, and promote the linking of the cognitive and the affective sphere that is so important in transformative learning (Mezirow 1997).

As we stated earlier, the courses themselves were designed to enable students to learn a variety of research skills including how to promote children's learning, how to document interpersonal interactions, how to analyze the social processes in which they are key participants, and how to write research papers based on their experiences.

These academic goals were then linked with the procedures that previous research on service learning has demonstrated to be important. The feedback and reflective activity was built in from the start and included regular posted feedback from each student after each site visit as well as posted observations on each set of field notes by the professors. Instructor feedback also was provided in course and seminar meetings. From the very beginning, students were expected to do reflective thinking, about both the children's' and their own behavior and its subsequent effects.

The undergraduates who participate in the 5th Dimension each quarter continue to experience a learning system that provides a bridge between the academic classroom and real-life settings as contexts for learning. Students are encouraged to try out in practice both the formal theoretical concepts from the classroom and the readings, and the informal concepts that informed their prior understandings of teaching and learning.

The studies from this ongoing UCSD experience demonstrate that over time undergraduates move away from the notion of teaching as a linear, didactic process to the idea of teaching and learning as the outcome of social interactions between children and adults engaged in socially constituted practices (Distributed Literacy Consortium 2006, cp. 7).

This finding has implications for higher education, particularly in the areas of the social sciences where internships (or practicum courses) not only are brief—if they exist at all—but

also most often are disassociated from any courses that would provide students with opportunities to reflect on theoretical concepts and their relation to practice. Prolonged opportunities to engage in practice that reflectively uses core theoretical concepts are needed if postsecondary students are to become proficient in understanding and acting on the public and professional meanings associated with that practice. In addition, the evidence suggests that this kind of education becomes personally relevant, that students have an opportunity to go through the process of determining the “so what” of the “what” they are learning.

Our plans for the future

We know that one way to gather data about the effects of the 5th Dimension on participating undergraduates is to ‘mine’ as much of the self-reflective activity that is built into the present course system. For that reason, we are extending our procedures to include a study of the field notes themselves, to further document the changes that undergraduates go through during the ten-week period. We planned to administer pre and post surveys to undergraduates in each group in order to link the process of change reflected in the field notes and reflection papers to changes in the students academic and social development more generally.

References

Anderson, R., & Speck, B. (2001). *Using Technology in K-8 Literacy Classrooms*. Upper Saddle River, NJ: Prentice-Hall.

Astin, A. W., & Sax, L. J. (1998). *How Undergraduates are Affected by Service Participation*. *Journal of College Student Development*, 39 (3), 251-263.

Astin, A. W., Sax, L. J., & Avalos, J. (1999). *Long-term Effects of Volunteerism During the Undergraduate Years*. *The Review of Higher Education*, 22 (2), 187-202.

Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., Yee, J. A. (2000). *How Service Learning Affects Students*. Los Angeles: University of California, Higher Learning Research Institute.

Cole, M. (1996). *Cultural psychology: A once and Future Discipline*. Cambridge, MA:

Harvard University Press.

- Dewey, J. (1963). *Experience and Education*. New York, NY: Macmillan Publishing Company. Originally published 1938.
- Distributed Literacy Consortium. (2006). *Creating and Sustaining Alternative Forms of Educational Activity*. New York: Russell Sage.
- Eyler, J., & Giles, D. (1996). *The Impact of Service Learning Program Characteristics on Student Outcomes*. Paper presented at the National Society for Experiential Education conference, Snowbird, UT.
- Eyler, J., & Giles, D. E. (1999). *Where's the Learning in Service-learning?* San Francisco: Jossey-Bass.
- Giles, D. E., Jr., & Eyler, J. (1994). *The Impact of a College Community Service Laboratory on students' Personal, Social, and Cognitive Outcomes*. *Journal of Adolescence*, 17 (4) 327-339.
- Kahne, J. (1994). *Democratic Communities, Equity and Excellence: A Deweyan Reframing of Educational Policy Analysis*. *Educational Evaluation and Policy Analysis*, 16 (2), 233-248.
- Malinowski, B. (1944) *A Scientific Theory of Culture, and Other Essays by Bronislaw Malinowski*. Chapel Hill: The University of North Carolina Press.
- Markus, G., Howard, J., & King, D. (1993). *Integrating Community Service and Classroom Instruction Enhances Learning: Results from an Experiment*. *Educational Evaluation and Policy Analysis*, 15, 410-419.
- Mezirow, J. (1997, Summer). *Transformative Learning: Theory to Practice*. In P. Cranton (Ed.), *New directions for adult and continuing education*: No. 74. *Transformative Learning in Action: Insights from Practice* (pp. 5-12). San Francisco, CA: Jossey-Bass
- Miller, B. M. (2003). *Critical hours: After School Programs and Educational Success*. Quincy, MA: Nellie Mae Education Foundation.

- Olt, A., Cole, M., & Woodbridge, S. (1994). *Documenting Children's Problem Solving Behaviors Using Field notes of Participant Observers*. Presented at: The American Educational Research Association (AERA) Annual Conference. New Orleans, LA, April 4-8
- Pittman, K., Tolman, J., Yohalem, M. (2005). *Developing a Comprehensive Agenda for the Out-of-School Hours: Lessons and Challenges Across Cities*. In: J. L. Mahoney, R.W. Larson, & J. S. Eccles (Eds.), *Organized Activities as Contexts of Development* (pp. 375-398). Mahwah, NJ: Lawrence Erlbaum Publishers.
- Simpson, G. (1998). *Extension is Not Just Service, but Service Learning is Important to Extension*. *Journal of Extension*, 36 (5) available online at:
<http://www.joe.org/joe/1998october/ent.html>.
- Vásquez, O. A., (2002). *La Clase Mágica: Imagining Optimal Possibilities in a Bilingual Community of Learners*. Mahwah, NJ: Lawrence Erlbaum Publishers.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Fig 1: Traditional UCLinks model -
Creating a shared community:

