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# Engaging Citizens and Transforming Designers: Analysis of a Campus-Community Partnership Through the Lens of Children's Rights to Participation

Victoria Derr, Laura Healey Malinin, and Meredith Banasiak

#### **Abstract**

While an engaged citizenry is often the goal of community service learning, the rights of children to be active agents in this process are largely considered in a separate academic literature. Yet community service learning and children's participation share much in their goals and approaches to engagement. This paper analyzes a campus-community partnership between undergraduate environmental design and middle school applied science students. The partnership began as a way to promote participatory design processes for the redesign of a middle school and evolved to a proactive co-design program. We describe the goals and approaches to service-learning employed through the partnership, and critique the evolution of the program through the realm of a participation model that has emerged from three decades of children's participation research. By analyzing a campus-community partnership through this framework, we hope to deepen the discourse on approaches to and evaluation of successful service-learning programs.

#### Introduction

Campus-community partnerships are typically undertaken to promote meaningful engagement and to enrich traditional pedagogies through experiential learning. Similarly, children's participation research and advocacy promotes engaged learning through the inclusion of children in decision-making and transformative education (Malone & Hartung, 2010). Both bodies of literature address many of the same topics and goals. Rarely do the two literatures intersect. This paper brings together these two literatures through the analysis of a campus-community partnership between university undergraduates and middle school students. We identify the common threads of each literature, describe the goals of each type of initiative, and critique the evolution of a seven-year partnership using a Seven Realms of Participation model that emerged from analysis of 30 years of children's participation research (Francis & Lorenzo, 2002). This model is used to illustrate a process of growth and to inform awareness about the strengths and shortcomings of campus-community partnerships.

#### Common Threads

Campus-community partnerships that promote service-learning and children's participation scholars and advocates share much in their approach and concern for authentic, dialectic partnerships. Both view the relationship as transformative: faculty, university students, community partners, and children all can be deeply affected by exchanges that give voice to and address issues

of real concern (Carroll, LaPoint & Tyler, 2001; Chawla, 2002; Malone & Hartung, 2010). In addition, service-learning and children's participation both must address issues of equity and barriers to participation that exist within university-community and child-adult relationships (Angotti, Doble & Horrigan, 2011; Carroll et al., 2001; Derr, Chawla, Mintzer, Cushing & van Vliet, 2013; Hou, 2011; Malone & Hartung, 2010; Sutton, 2012). Both need to extend beyond descriptions of the types of activities and interactions that occur to also include the degree of influence and types of impacts among those involved (Gelmon, Holland, Seifer, Shinnamon & Connors, 1998; Iacofano, 1990; Malone & Hartung, 2010). And finally, effective service-learning typically involves reflection and reflective practice (Angotti et al., 2011; Carroll et al., 2001; Sandy & Holland, 2006). Gauging similar reflections among children participants is sometimes challenging, and identifying impacts perhaps even more so, because "it is within the adult-centric structure that all children's participation comes to be recognized" (Malone & Hartung, 2010, p. 33). Yet it is these challenges that make children's participation in service-learning an area of particular significance. Recent initiatives to reinstate democratic education into schooling (e.g., IDEA, 2012; Westheimer, 2008) further support the need for stronger linkages between service-learning and children's rights to participation in meaningful, real-world issues (Carroll et al., 2001; Fusco, 2001).

# Children's Rights and Engaged Learning

Discourse on children's rights to participation began with the Universal Declaration of Human Rights, which recognizes that dignity and equal rights of all people are the foundation of freedom, justice, and peace. The Declaration promotes health and well-being, education, and opportunities to participate in government and civic activities (United Nations, 1948). Though the Declaration specifically states that these rights should be extended to all people, child advocates in the 1980s promoted the drafting of the United Nations Convention on the Rights of the Child (CRC). This led to the United Nations Education, Scientific, and Cultural Organization's (UNES-CO) support of the Growing Up in Cities Initiative (Chawla, 2002; Lynch, 1977). The goal of these projects was to create opportunities for genuine participation of children in development and planning their cities (Chawla, 2002). These projects have provided a framework for the inclusion of children in a variety of projects, primarily focused on planning and urban design.

While engaged citizenry is often the goal of community service learning, the rights of children to be active agents in this process is largely considered in a separate academic literature (e.g., Percy-Smith & Thomas, 2010). Yet the inclusion of children's rights to participate in community life and decision-making about the places where children live is a natural ally and potential contributor to the scholarship of community service learning. Children's rights scholars and young people themselves have expressed both the need for and desire to participate in decision-making in real-world contexts (Chawla, 2002; Derr, Chawla, Mintzer, Cushing Vliet, 2013; Driskell, 2002; Malone & Hartung, 2010; Percy-Smith & Thomas, 2010; Westheimer, 2008). Focus has been given to young people's heightened awareness and agency around international and environmental issues (Chawla & Heft, 2002; Hart, 2001; Malone & Hartung, 2010) but can be equally significant at the local level, where issues of disparity or sustainability also exist (Derr et al., 2013; Tolman & Pitmann, 2001). For example, this model of participation could readily extend to place-based environmental education and environmental justice (e.g., Toman & Pitmann, 2001; Gruenewald & Smith, 2008), as well as science education (Hulleman & Harackiewicz, 2008) or science, technology, engineering and math

(STEM) programs, which promote experiential learning (Thiry, Laursen, & Hunter, 2011).

# Models of Participation

The process and authenticity of engagement has been critiqued in the planning profession, with Arnstein (1969) providing a ladder of citizen participation, in which the rungs of the ladder represent levels of engagement, from non-participation to consultation to high levels of control and power-sharing. This ladder was later adopted for children (Hart, 2001). Though the ladder has been heavily used and referenced in the children's participation literature, Hart himself suggests its time has passed (2008) and that there are multiple models of participation depending on the purpose and intent of a project. Other models and analyses of children's participation both simplify and give detail to types of participatory practice. For example, Lansdown (2010) examines approaches to measuring the extent, quality, and impacts of engagement. She classifies the extent of engagement into three levels: consultative participation, in which adults seek children's views on issues; collaborative participation, in which children and adults have a greater degree of partnership and where there is opportunity for engagement at any stage of decision-making, or project implementation; and child-led participation, in which children are given the opportunity to initiate activities and advocate for themselves. Chawla and Heft (2002) also describe characteristics of effective participation. Among these are conditions for competence, in which children are given real responsibilities, play a role in establishing goals and decision-making, and have opportunities to be heard and to influence the process. They describe this ability to exert control over valued aspects of one's life as a universal contributor to psychological well-being. Francis and Lorenzo (2002) describe seven realms of children's participation based on a review of 30 years of participatory practice (Table 1). Among these realms are the Learning Realm, in which projects focus on imparting knowledge and changing perceptions in educational contexts, the Needs Realm, in which children's participation is used to better understand their needs, and the Proactive Realm, in which projects strive for children's empowerment and substantial change through participation. In the Proactive Realm, conditions for competence balance children's empowerment with the need for tangible outcomes.

Table 1. Seven Realms of Participation (Francis, 1999; Francis & Lorenzo, 2002; Hester, 1999)

Realm	Definition	Limitations	Lasting Contribution
Romantic	"Ideological" period  Children are active designers and can "do better" than adults	Often ignored adult input, leading to marginalization of ideas	Continues to provide ideological focus of children's participation
Advocacy	"Planners for children"  Adult advocacy for children	Often avoided official decision-making processes; children not directly involved	Techniques to engage children in large and complex projects
Needs	"Social scientists for children"  Research to understand children's environmental needs	Children sometimes not participants in research studies	Foundational understanding of children's environmental needs
Learning	"Children as learners"  Environmental education as focus of participation	Does not always lead to changes in physical environments studied	Emphasis on learning and social change as outcomes of participatory process
Institutional	"Children as adults" Children expected to perform and have same knowledge as adults	Ignores the child-centered and spontaneous desires of children within a participatory process. Can result in limited change or authentic participation.	Provides greater awareness of importance of children's participation
Proactive	"Participation with vision" Empowering children & adults for genuine and shared participation	May not be possible in every situation; facilitators may need special training	Recognizes children as children and provides associated frameworks for participation; increases perceived control

Though there are notable exceptions, frequently service-learning courses with children and youth involve a transference of knowledge rather than with young people serving as co-producers of this knowledge, placing them in the Learning Realm rather than a participatory Proactive Realm (Francis & Lorenzo, 2002). Not only does this leave little room for engaged and critical thinking that can lead to competence of school children (Chawla & Heft, 2002; Westheimer, 2008), it also does not allow university students the opportunity to participate in the transformative educational process that community service learning was designed to provide.

The ability for young people to actively engage with university students in service-learning course formats is significant for both partners. For example, service-learning that is integrated into the curriculum is more likely than co-curricular volunteer service to foster a desire to promote racial understanding and activism and to increase levels of critical thinking among university students (Vogelgesang & Astin, 2000). Service-learning can also increase understanding of content more than classroom study alone, in part through its experiential pedagogy and integrated reflective practice (Eyler, 2009). In addition, for service-learning to truly be transformative, it must challenge boundaries between academia and community and in-

clude reflective practice (Angotti, Doble & Horrigan, 2011; Eyler, 2009). When children's active participation is excluded from the process of engagement, not only are barriers maintained, but the process reinforces the discrepancy that young people feel and express when they say no one cares what they think. However, when young people are included as active agents in service-learning, the effect can be transformative for undergraduates and children alike.

# An Evolving Partnership

The Children, Youth and Environments Center for Community Engagement (CYE) is part of the University of Colorado (CU) Program in Environmental Design (ENVD). CYE supports research, teaching, and outreach projects that promote children's health, safety, and welfare through environmental design. At the forefront of these efforts has been promotion of the rights of children and youth to participate in the design of their own environments. Both ENVD and CYE have a long history of incorporating community service learning projects into undergraduate education. Often these projects arise when community members come to ENVD or CYE with an identified need for environmental design services (planning, architecture, or landscape architecture) and the undergraduate design students provide those services to fulfill course requirements or through independent studies. The campus-community relationship typically ends with completion of the design project. We describe here a campus-community relationship between CYE/ENVD and a local public middle school (Casey) that began similarly in 2007, and has since evolved into an ongoing partnership. An analysis of the first seven years of this partnership considers the different relationship structures and potential benefits of children's participation in campus-community partnerships and serves to bridge theoretical models from the two literatures. In the following sections we use the Seven Realms of Participation Framework (Francis & Lorenzo, 2002) (Table 1) to describe each stage in the evolution of the partnership as a cycle of application and analysis (Table 2). This participation model helps to organize and analyze the evolution of the partnership while also allowing analysis of the effectiveness of the campus-community partnership.

Evolution One: Youth Voice and the Advocacy Realm
When the local school board decided to replace the Casey Middle School building located

near the University of Colorado campus with a new energy-efficient facility, CYE welcomed the opportunity to engage the middle school students in the design of their school building. The CYE/Casey partnership began with a participatory planning activity that included students from the middle school, the project architects, and ENVD students and professors. The project also had strong support from the middle school principal. The goals of the activity were to collaborate on ideas for the design of the new middle school and to generate a mutual dialogue about sustainability in general. Upon completion of the participatory planning activity, a Casey teacher sponsored an after-school design club where CU graduate students worked with a small group of Casey students. The goal of the design club was to elicit greater participation from the Casey student community in the new school design. Guided by the CU students, members of the design club interviewed and surveyed their peers and school staff to identify features of the existing school they liked and disliked and brainstormed sustainable ideas for the new facility.

Evaluation of the first evolution of the campus-community partnership between CYE and Casey was conducted through interviews with Casey students and teachers, the project architects, and the CU graduate students who participated in the design club (Table 2). With respect to the primary goal of incorporating Casey student ideas into the new facility design, the impact of students' participation on school design outcomes was difficult to assess. The interviews suggest that youth participation may have had some influence on the decision to retain the historic façade of the original middle school in the design of the new sustainable building. Through the participatory design process it became evident that the façade was meaningful to school students and staff. However, during the same time period, a neighborhood organization was also involved in efforts to garner community support to save the historic façade and this group organized the fundraising that ultimately made it possible to incorporate the two architecturally significant walls from the original structure into the new school design. This phase of the project was also impacted by timing: the architectural firm was under a tight timeline and utilized a design advisory team whose meeting times did not always match the middle school schedule, thus limiting the ability of Casey students to participate. The secondary goal of fostering dialogue about sustainability was much easier to assess, and both participating Casey

Table 2. Partnership Evolution. Analyzed Through the "Seven Realms of Participation"

Realm	Definition	Evaluation Tools	Analysis
Evolution 1: Advocacy	Students engaged in thinking about their school's design with professionals, faculty and graduate students serving as advocates in translating their ideas into designs.	Interviews with mid- dle school students, teachers, project ar- chitects, and graduate students	After school approach engaged a limited number of students; motivation for participation varied; impacts were limited by timing and entry into process; participation at this realm helped move the partnership to the learning realm
Evolution 2: Learning	A design club encouraged middle school learning about sustainable behaviors and "green" features of new school with undergraduates acting as teacher/mentors.	Written reflections by faculty and undergraduates	After school design club was popular, but actual learning and social change were difficult to assess in this informal setting
Evolution 3: Needs	Undergraduate course/middle school elective involved weekly participation in middle school curriculum. Students collaboratively immersed in a living laboratory to evaluate the school function based on student needs.	Pre- and post-course assessments and written reflections, project artifacts, middle school written reflections, direct observations	Intrinsic motivation of middle school students was linked to extent of experiential, "hands-on" learning methods.  Undergraduates held preconceived notions about design and participation that were challenged through the partnership.  More direct and structured experiences in a formal course format allowed for more transformative experiences among students.
Evolution 4: Proactive	Shift in the course structure emerged from feedback requesting greater desire for engagement in design-based and placebased activities. Focus was on empowering participants to address issues in their immediate lives through design and implementation	Course survey; focus groups; undergraduate pre- and post-assessments; written reflections; project artifacts; middle school written reflections; and direct observations	Some middle school students showed greater locus of control during experiential, "hands-on" activities. Provided format for dialogue around issues of desired campus aesthetics and school culture between students and authorities. Resulted in transformations of participants on both sides of partnership

staff and CU partners considered this a successful outcome of the campus-community partnership.

Evolution Two: Sustainability Ambassadors and the Learning Realm

Building on the successes of the first evolution, the structure of the campus-community partnership expanded to include environmental design undergraduates enrolled in an elective course titled Sustainable Planning and Design. With construction of the new school building underway, the focus of the partnership also shifted from the Advocacy Realm to the Learning Realm with the goal of preparing Casey students to be "sustainability ambassadors" for the new school facility. Casey students continued to participate through the after-school design club, but club activities were now led by CU undergraduates and focused on

helping Casey students understand some of the sustainable design features of their new building. The CU students helped create curriculum for the Sustainability Ambassadors program and led project-based learning activities during weekly club meetings. Although the club was open to all middle grades, the intention was that sixth grade participants would become the eighth grade sustainability ambassadors the year the new school opened. The goals of the partnership aligned with ENVD curricular goals to focus on sustainable design and also supported the Leadership in Energy & Environmental Design (LEED) certification process for the new middle school building. LEED is a rating system where buildings are assessed points for sustainable design strategies. The intention behind the sustainability ambassadors program is that it would help the school occupants understand how to optimally use the sustainable features of the building. LEED also awards points for education programs. However, the sustainability ambassadors program was not formally considered for Casey's LEED Platinum award (the most sustainable rating).

Evaluation of the second evolution of the campus-community partnership was concerned with assessing both transfer of knowledge between CU undergraduates and middle school students and the development of undergraduate participatory design competencies, such as leadership, flexibility, and reflection. These outcomes were primarily assessed through weekly written reflections in a blog forum and faculty observation (Table 2). The middle school project-based learning activities were generally found to be successful; however, participation in the design club varied from week to week and some older students were not motivated to work on projects geared toward implementation in the new school, since they would be in high school by the time they were implemented. Although the reflection prompts did not specifically address undergraduate learning outcomes, many CU undergraduates expressed in their writings a deeper understanding for the design process, the role of stakeholder participation, and how to engage with youth. The long-term goal of preparing middle school students to become "sustainability ambassadors" was not assessed because the program never formally developed after occupation of the new school building, although aspects of the program were incorporated into later evolutions of the campus-community partnership.

Evolution Three: School Design and the Needs Realm

The third evolution of the campus-community partnership arose from another structural change in the nature of the relationship as well as a response to undergraduate observation and feedback. In this evolution the partnership comprised of Casey students enrolled in an applied science elective class and CU undergraduates enrolled in an elective course titled Design For and With Schools. The course became part of the middle school curriculum, thus addressing the irregular attendance experienced through after-school participation. However, although the Casey course was an elective, not all students enrolled were enthusiastic about the class content or the incorporation of design activities, which were required in order for them to pass the class. The CU course change reflected a shift in goals toward the Needs Realm of participation. In the Needs Realm, rather than focusing solely on the sustainable features and design of the school (Learning Realm), undergraduate students also began to ask questions, through mapping and discussions, about how the school impacted students' learning, experiences, and attachments. The curriculum shifted to understanding children's needs in the design of a learning space and viewed the middle school as a "living laboratory," in which students and undergraduates jointly explored how the school did or did not meet middle school students' needs.

Evaluation of the third campus-community evolution came from undergraduate pre- and postcourse assessments and written reflections, project artifacts, middle school written reflections, and direct observations (Table 2). Outcomes suggest that the middle school applied science students were overall less intrinsically motivated to participate than design club participants, but they generally became highly engaged when class activities involved "building" something and/or addressed concrete issues they perceived as personally important. Reflections and assessments from the CU students revealed that the "living laboratory" approach helped design students understand the complex relationships between design processes, pedagogy, administrative policy, the physical manifestation of design in the school building, and school culture.

Once the new school facility opened, undergraduates anticipated that the architectural features of the new "green" school would improve understanding of sustainable design and increase sustainable behaviors. They were surprised to find

that although middle school students were proud of their new school building, they were unhappy about some aspects of their environment and had misperceptions concerning the sustainable school features. That the green school building was intended to serve as a "teaching tool" was not, by itself, sufficient to support increased understanding or behavioral change. For example, although the building was designed to promote energy conservation by making energy-efficient building systems (such as photovoltaic panels) highly visible, students misinterpreted this information by assuming these systems provided all the energy required to operate the school and felt less need to engage in energy-conserving behaviors. Additionally, the high level of environmental control necessary to fulfill school goals for a sustainable and zero waste campus appeared to cause some middle school students to feel disenfranchised in their community. Undergraduates frequently described how their experiences often did not align with preconceived notions about how middle school students would use, care for, and feel about aspects of their school environment.

Evolution Four: Praxis and the Proactive Realm

In the Proactive Realm, children and adults are empowered through genuine and shared participation (Table 1). This stage in the partnership is characterized as proactive because it empowered both Casey and CU students to envision and create their own projects. This evolution was informed by feedback suggesting middle school engagement increased during design-based and place-based activities and a desire to incorporate a more significant "Praxis" experience for undergraduates during their junior year in the CU program. Praxis is a term used to describe significant, community service learning opportunities in environmental design that incorporate both practice and reflection. In this way it builds upon Paulo Freire's ideology that praxis is "reflection and action upon the world in order to transform it" (Freire, 1986, p. 33).

The Learning Spaces Praxis experience for CU students consisted of two required and integrated courses: a service-learning seminar and an environmental design studio. In the seminar course, undergraduate students continued to work with the Casey applied science students. However, the focus of the course shifted to a problem-identification approach with the goal of co-discovering issues in the school that could be addressed through participatory design processes and

implemented by the undergraduate and middle school students. Together Casey and CU students worked to identify an issue of importance to the middle school students, developed a design intervention using participatory processes, and collaboratively constructed/implemented their design in the school campus.

To date, two design-build projects have been completed by the partnership: a "sustainability garden" and an outdoor informal learning space. In the studio course, undergraduates transferred knowledge they gained during the immersive campus-community partnership activities about the relationship between pedagogy, process, and place to inform the design of other schools and/or learning spaces. In both studio projects the undergraduates applied their understanding of participatory design processes to engage stakeholder input on design strategies.

The focus of the fourth evolution of the campus-community partnership was to empower participants to address issues in their environments that they could improve through design. In this phase, partners used a "problem-finding" approach where the Casey students and undergraduates jointly identified issues and opportunities in their school, including its physical design and curricular strategies. These issues are co-designed through design recommendations, design-build projects, and school planning initiatives. Undergraduate students were provided opportunities to transfer knowledge from Casey to other situations, and were empowered to manage a real construction project including writing a project budget and construction schedule, purchasing supplies, and organizing build sessions. Outcomes were assessed through course survey and focus groups, undergraduate pre- and post-course assessments and written reflections, project artifacts, middle school written reflections, and direct observations (Table 2).

A key theme that emerged from the program evaluation was that both middle school students and undergraduates felt they were transformed by the experience. Undergraduate students noted that some middle school students who exhibited low control over their environment were empowered during the "build" phase of the project. At the outset, these students had claimed that they did not believe their ideas would make a difference. Yet as the project progressed, and their ideas started to become real, CU students noted a marked difference in the attitude and engagement of these students over the course of the semester.

CU students communicated a significant increase in their perceived level of competence toward becoming professional designers both as a result of their participatory design-build experiences through the campus-community partnership and the transference of lessons learned to new school design contexts. In their reflection papers, CU students also expressed a greater awareness for and appreciation of the value of young people's participation in the design process.

# Analysis of the Partnership Evolution

Advocacy Realm

Analysis of the campus-community partnership evolution reveals that the cycle of application and evaluation improved program goals and outcomes as well as depth of participant engagement and learning (Figure 1). The first evolution of the campus-community partnership highlights some of the challenges that may be faced when working in the Advocacy Realm of community participation. In this realm, participants are often not directly involved in decision-making processes. Instead, specialists advocate for inclusion of issues into a final product. While the intent of the partnership was to include children as active participants in the design process, the timing and timeline of activities did not consistently allow this to occur. For example, in the first design club, only a small number of Casey students were significantly engaged in the partnership and motivation to participate was influenced by the fact that the students who were asked to give input on the school design would not reap the benefits of their efforts. By the time construction on the new building was completed, they would be attending high school on another campus. Similarly, the tight timeframe of the architectural firm limited the ability of students to consistently participate in dialogue and decision-making, thus reinforcing the concept that adults can advocate for children's ideas without their direct participation (Table 1). The greatest benefit of the first campus-community partnership evolution appears to be increased understanding by the participating middle school students about design processes and factors of sustainable design. Middle school students also talked with peers about their experience, thus fostering greater interest in the elective course. This helped to facilitate a culture of participatory, collaborative work. It was these successes that informed the goals and structure of the second evolution of the campus-community partnership.

# Learning Realm

The Learning Realm of participation was emphasized in the second evolution of the campus-community partnership, which intended to encourage sustainable behaviors of the Casey

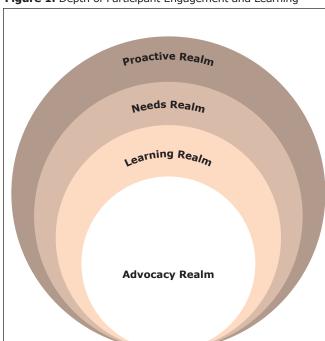


Figure 1. Depth of Participant Engagement and Learning

#### **Proactive Realm**

Greatest potential for transformative community service learning; includes aspects of all other stages and realms. Resulted in tangible outcome and increased competencies.

#### **Needs Realm**

Building on the Learning Realm, this stage of the project allowed for greater attention to students needs and desires for their school.

## **Learning Realm**

Provided an important foundation in initial sustainable education goals and a ready entry-point to the school.

# **Advocacy Realm**

Provided an entry-point to the school at initial stages of the partnership. While engagement was limited on this stage, it did provide some tangible outcomes. Timing of this realm earlier in the design phase might have facilitated more tangible outcomes.

students through educational experiences related to the "green" features of their new school building. CU undergraduates primarily assumed roles of teachers or facilitators of learning. Although the design club appeared to be popular with the Casey students, it was difficult to assess whether participation impacted sustainable behaviors and social responsibility. One tension in campus-community partnerships has been between the goals of students for learning and community partners for efficiency (Mills, 2012). A potential benefit of partnerships that engage university students with K-12 students in the Learning Realm is that the learning goal is shared fairly equally. Operating within the Learning Realm, however, can be limiting for both groups of students if there are no specific and tangible outcomes. In this phase of the partnership, for example, while emphasis was given to sustainable behaviors, there were few tangible outcomes that represented true change, either in the physical environment or the social supports needed for behavioral changes to occur. Research in the environmental education literature suggests that increased knowledge about a subject is not enough to effect changes in behavior. People must also have a sense of efficacy, or belief in their ability to act, as well as opportunities to act before they will change their behaviors (Bandura, 1997; Chawla & Derr, 2012). Partnerships that operate solely in the Learning Realm tend not to increase competencies or opportunities to take action, and thus are limited in their overall impact.

## Needs Realm

The Needs Realm of participation revealed that undergraduates have preconceived notions about school design that are challenged during immersion in the school environment when experiences do not align with expectations. As "social scientists" they can have difficulty interpreting observed behaviors and sometimes make assumptions about motivations behind observed behaviors that may be unfounded or untrue. These shortcomings, however, are largely overshadowed by the transformations in knowledge and understanding about the complexity of factors experienced by the undergraduate participants through immersive teaching, research, and design activities with middle school students.

Here again, the tension between undergraduates' readiness to engage with a community partner can conflict with the community's desire for ready engagement (Mills, 2012). In order to be effective,

undergraduate students require training in a suite of skills that go beyond their typical professional competencies, to include those of social researcher, community facilitator, or educator. Design students at this level can be disadvantaged in performing as desirable community partners in cases where project delivery is the expectation because they have not fully developed the skill sets expected for professional practice. While their expertise in product delivery (design and construction) is limited, they are able to share experience in creative problem solving and environmental ethics.

However, it was within the Needs Realm that students began to work toward a co-construction of knowledge, wherein undergraduates considered social and cultural experiences of the school and its students (Carroll, LaPoint & Tyler, 2001). They learned to understand students' values and interests. In the context of school design, undergraduates gained a deeper understanding of the connections between middle school student interests, pedagogical activities, educational needs, and the physical function of the school building. In the Proactive Realm, K-12 school teachers may also take on the responsibilities of educating college students about these issues. Sandy and Holland (2006) discuss that "one of the most compelling findings [in campus-community partnerships]... is the community partner's profound dedication to educating college students" (p. 34). Through these interactions, undergraduate students began to see young people as peers in a process. This shift is important in understanding what comprises a transformative experience in a campus-community partnership. By asking questions about how a community perceives and uses a space, they begin to understand the "other," and in so doing may be transformed (cf, Hou, 2012). These social connections to community partners can be the most educationally significant aspects of a service-learning experience (Cushing, Bates, & Van Vliet, 2013).

## Proactive Realm

Participation in the Proactive Realm provides even greater opportunity for transformation on both sides of the campus-community partnership. This realm can also produce the most challenges. The opportunity for middle school students to ideate and implement environmental designs in their school in itself is transformative. Students are rarely asked about the design or function of their schools and are even less frequently asked about school policy. Proactive engagement helps

students see that they can have an impact in their school community and thus provides the sense of efficacy and opportunities to act that are critical components in behavioral change (Bandura, 1997; Chawla & Derr, 2012). If an engaged citizenry is an important goal of campus-community partnerships, facilitating proactive experiences would seem to be a key indicator for how to empower people to actively engage in their communities.

For the undergraduate design students, participation in the Proactive Realm may ultimately better prepare them to become "citizen designers" who practice socially and environmentally responsible design. Undergraduates in this realm expressed a sophisticated understanding of students and their cultures, teachers and their needs, and the internal functions of the school environment. In future iterations, it will be important to better align expectations of community partnership outcomes with the level of expertise which undergraduate students can provide. In the same way that undergraduates studying in a pre-medicine curriculum would not be expected to execute medical procedures, it may not be appropriate to expect third year design undergraduates to have the competencies to manage a design-build project. Two approaches to address these issues are possible: i) to simplify projects and revise expectations for tangible outcomes; or ii) to adjust the undergraduate curriculum so that it can better support such partnerships.

Under the first scenario, simplifying projects may be able to produce tangible outcomes for some projects. However, since the projects that are both designed and built through the partnership can also be correlated with the strongest outcomes for both partners under the seven realms model, reverting to earlier iterations with simpler project scopes may undermine the gains achieved in these later partnership evolutions. New undergraduate curricular developments are testing the feasibility for this course to occur as an elective studio during the final year. It is anticipated that such a structural change will enhance the quality of engagement because undergraduates will be self-selecting this experience, and will have a year's worth of additional skills and competencies.

Additional challenges to the Proactive Realm may include tensions that can form between students and campus administration, parents or other partners in the decision-making phase of a project. At times, youth needs, desires and creative expressions may be different from those of

administration and adults. As an example, an area near the front entrance of Casey had been designated for students to re-design. Students elicited input from peers, teachers, administrators, and parents to create a "sustainability ecosystem" concept for the space that included murals, painted flower planters made from hard-to-recycle materials including metal barrels, plastic pipes and rubber tires, and fruit and vegetable gardens. This space was designed and installed through the partnership. Once installed, some parents and administrators did not agree with the aesthetic choices made for the space. The installation was pulled up and over time, replaced with more standardized planters. Reflecting on this, partners may have thought they were working well within the Proactive Realm, where children and adults share in the participation process (Table 1). However, once the installation was completed, it became clear that partners had been at least partially operating in the Romantic Realm, where children's ideas were idealized and did not align with the formal landscape design some adults expected at the front entrance to the school building. This was addressed in future semesters in two ways: (i) by carefully coordinating with administration future locations for permanent installations that would influence the campus environs, and (ii) by experimenting with smaller scale design challenges that improved the classroom environment of the partnering teacher. This latter approach also helped address the disparity between undergraduate design competencies and project demands. These smaller scale projects allowed the partnership to operate in the Proactive Realm while also working with appropriate skill sets. Results were positive for both middle school and undergraduate students, but perhaps not as profound as those projects where students were able to permanently transform their school.

These challenges exemplify the barriers and tensions often found between campus-community partnerships. If ignored, these tensions can lead to negative consequences or a dissolution of a partnership (Dumlao & Janke, 2012). Yet active dialogue, and an evolution in the understanding and values that each person brings to problem solving, have helped to reduce these barriers.

## Conclusion

Campus-community partnerships are typically undertaken to promote meaningful engagement and to enrich traditional pedagogies

through experiential learning. There are many factors that consistently describe a successful partnership. These include cooperative goal setting and shared power and decision-making. These factors are consistent with the Proactive Realm of children's participation. Both allow for genuine sharing in a participatory dialogue and process. Successful partnerships also create opportunities for reflection and transformation. This tends to happen in longer term partnerships that address real issues of concern and produce tangible outcomes. These relationships also present opportunities for dialectic, reflective, and transformative experiences that break traditional barriers to authentic participation. Effective partnerships seek to produce individuals who are competent and empowered and produce tangible outcomes.

The Casey-CU case illustrates a process for growth through iterative changes to the campus community partnership and curriculum. The growth model we present provides a framework for increasing awareness about where partnerships fall in realms of participation. This can allow critical analysis of the partnership but also can help frame goal setting and desired processes for evolving to a new realm as well. The case example also illustrates how sometimes partner goals are disrupted. The seven realms framework provides a tool for analyzing and communicating where a project lies and what might be needed to help it grow. Despite some challenges, this long term relationship has helped illustrate the importance of critically evaluating where a partnership falls in its degree and type of participation at any given time. Ultimately, greater awareness of the realms of participation helps partners see how they can better meet the goals of service-learning for transformation and reflection.

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