

Perceptions of Expanded Shared Use of Schools: A Mixed Method Examination of Pathways and Barriers to Community Well-Being

Craig A. Talmage, Holly L. Figueroa, and Wendy L. Wolfersteig

Abstract

Local schools can promote positive social change through expanding shared use of their facilities and campuses. This study investigates the merits of expanding shared use in an urban community in Phoenix, Arizona. Shared use—the use of schools during off-hours—can provide pathways to greater community well-being, specifically through supplying space and amenities for physical and social activity for children, adolescents, and adults. Schools must overcome barriers when expanding shared use, such as safety and supervision; liability, maintenance, and operating costs; as well as communication issues between districts, schools, and communities.

Key Words: school–community partnerships, recreation, physical activity, public services, shared use, districts, communities, facilities, communication

Introduction

Schools can serve as unique laboratories for social change, helping communities address issues concerning community health and well-being, while also enriching the lives and talents of principals, pupils, teachers, and local community members and organizations (Ogilvie, 2014; Pstross, Talmage, & Knopf, 2014; Talmage, 2015). The particular impact of schools on communities often extends beyond normal school hours. For example, an estimated

8.4 million children in the U.S. attend afterschool programs, but 18.5 million more children would attend if these programs were more accessible (Bassett et al., 2013). Answering this call, many schools share the use of their campuses and resources with their surrounding communities; however, this pursuit has developed slowly in recent years, especially in communities of lower socioeconomic status (Spengler, 2012). Some states such as Mississippi have provided toolkits for schools and communities seeking to engage in shared use (e.g., Sutton & Clements, 2012); however, further evaluation of these practices and strategies are still needed.

Local schools have a long history of opening their doors to community members for recreation and educational activities; the Teacher Corps projects of the 1970s and 1980s serve as one example (Mahan, Fortney, & Garcia, 1983). *Shared use*, also termed *joint use*, is a strategy implemented by schools and districts. It is defined as “opening school buildings and grounds during non-school hours for community use” (Young et al., 2014, p. 1586). School campuses and facilities can provide ample indoor and outdoor recreational and gathering spaces for adults and children to congregate, exercise, and learn together. Shared use applications may vary, but consistent benefits and concerns for local stakeholders have been identified (Young et al., 2014).

This article explores community members’ perceptions regarding an expanded shared use policy within a large, low socioeconomic status and high ethnic minority school district in Phoenix, Arizona. The concepts of pathways and barriers are used as frames for explaining how shared use might best contribute to improved community well-being. These concepts are borrowed from Pstross and colleagues’ (2014) research on a school district and community in Phoenix, Arizona, close to the community where the current study was conducted. Pstross and colleagues (2014) asked, “What can people do together to clear the pathways of the barriers and strengthen the pathways?” (p. 531). Barriers, benefits, and those involved in addressing both (i.e., barriers and benefits) must be considered if the shared use of schools in communities is to succeed and be sustained (Burbage et al., 2014).

The aims of the study were two-fold:

1. Identify the pathways created by shared use and how to strengthen them.
2. Identify the barriers to those pathways and how to clear them.

Two major pathways have been identified among the research (see citations in Table 1) on the shared use of schools in communities. These pathways include improvements in: (1) physical activity facilities and programs, and (2) before- and afterschool community programs. The three barriers include perceptions of: (1) safety and supervision issues during off-hours; (2) liability,

maintenance, and operating costs; and, (3) inadequate communication channels between districts, schools, and communities. All three barriers have been shown to hinder the success of shared use in empowering communities. The descriptions of the shared use pathways and the barriers are shown in Table 1, and citations for these pathways and barriers are provided for reference.

Table 1. Pathways and Barriers

Pathway and Barrier	Description of Pathway or Barrier	Citations
Pathway		
Physical Activity Facilities and Programs	Indoor gyms and outdoor fields can be used for physical activity and physical activity programs.	Lafleur et al., 2013; Totura et al., 2012
Before- and After-school Community Programs	Schools provide sufficient facilities for before- and afterschool programs (e.g., recreation, nutrition, education, community meetings, etc.).	Beighle & Moore, 2012; Blair, 2009; Vincent et al., 2010
Barriers		
Safety and Supervision Issues During Off-Hours	Parents and students may see their schools and neighborhoods as unsafe due to run-down equipment, poor lighting, vandalism, or lack of supervision. This may prevent them from walking to and from school or going to off-hours programs.	Burbage et al., 2014; Spengler et al., 2011; Kerr et al., 2006; Warren, 2005; Warren et al., 2009
Liability, Maintenance, and Operating Costs	Schools may avoid shared use because of the costs of insurance, maintenance, cleanup, repairs, sanitation, staff, security, and utilities (utilities are usually less costly than repairs or upgrades).	Burbage et al., 2014; Kanters, 2014; Spengler, 2012; Warren, 2005; Young et al., 2014
Inadequate Communication Channels Between Districts, Schools, and Communities	Regular and frequent communication, specifically in regard to decision-making, appears necessary between all parties for partnerships with local community organizations and members to succeed.	Anderson-Butcher, Stetler, & Middle, 2006; Lees et al., 2008; Spengler et al., 2007

Shared Use Pathways

Physical Activity Facilities and Programs

Physical activity is the most researched topic associated with shared use, especially shared use’s potential to increase the physical activity of youth in under-resourced communities (Spengler, 2012; Spengler, Connaughton, & Carroll, 2011; Young et al., 2014). Physical activity is essential to the prevention

of obesity, hypertension, heart disease, colon cancer, and diabetes (Spengler, Young, & Linton, 2007), and community spaces are the primary facilitator of physical activity in urban areas. Schools may work as worthy substitutes for communities that lack sufficient recreational spaces for physical activity (Cavill et al., 2015; Spengler, 2012; Spengler et al., 2011; Totura et al., 2012). Lafleur and colleagues (2013) noted, "Joint-use agreements are a promising strategy for increasing moderate to vigorous physical activity among adults and children in under-resourced communities" (p. 1); however, best practices for these agreements have not been discussed much in the literature (for an exception, see Bodick, 2011).

Before-School and Afterschool Community Programs

Shared use has often been a means to garner goodwill among residents through the offering of access to additional spaces for recreation, education, and gathering in the community (Young et al., 2014). Additional meeting spaces provided through shared use have been noted as attractive benefits to communities (e.g., Portland Development Commission, 1995). Shared use enhances schools' abilities to serve as community lifelong learning centers (Moseley, 2000; Young et al., 2014). These centers may provide learning opportunities for adults, children, and youth focused on nutrition, healthy cooking or eating, and gardening (Ogilvie, 2014). It must be noted that while this study did not particularly address summer programs, shared use can and does occur in the summer (Lauer et al., 2006).

Shared Use Barriers

Safety and Supervision Issues During Off-Hours

Lack of security and safety and the presence of crime, specifically vandalism, have been consistently cited as barriers to the success of shared use (Burbage et al., 2014; Spengler, 2012; Young et al., 2014). Perceived safety and security issues have been linked to lower property values and higher vacancy rates (Sampson, 1996), whereas the organized presence of community members on school property through shared use may decrease vandalism (Markowitz, Belair, Lisak, & Liu, 2014). Proper maintenance and school design can improve perceptions of safety (Spengler & Baber, 2014), as can staffing and supervision during off-hours (Warren, 2005).

Staffing and supervision may include an increased presence of community groups or policing (Spengler et al., 2011; Zieff, Guedes, & Eyler, 2012). Parents, community organization staff, or school staff may share these responsibilities, but many schools source individuals who are paid, which can be costly. While staffing can be an expensive barrier to shared use, recruiting volunteers

from the local community, the school staff, or parents of students can be arduous, complicated, or difficult to coordinate as well (Warren et al., 2009).

Liability, Maintenance, and Operating Costs

Schools and districts hold great responsibility for their properties and the activities on those properties which can raise concerns about liability, maintenance, and operating costs. These concerns may even be greater than those regarding safety or vandalism (Burbage et al., 2014; Spengler, 2012). These varying costs do not doom all shared use efforts, though, because incrementally, these costs do not have to be high (Warren, 2005). Schools have worked to address these costs by sharing them with community organizations and by recruiting volunteers to staff activities during non-school hours (Lees, Salvesen, & Shay, 2008; Spengler, Frost, Connaughton, & Prince, 2013; Warren, 2005; Warren et al., 2009). Moreover, some schools/districts reported seeing only minimal or insignificant increases in expenses after enacting shared use policies (Kanters, 2014).

Inadequate Communication Channels Between Districts, Schools, and Communities

Although not as widely researched, communication issues between districts, schools, and communities (i.e., organizations and individuals) can present additional challenges when implementing shared use (Spengler et al., 2011; Young et al., 2014). Schutz (2006) discussed the current disconnect in communication: To improve “school–community relations...[schools, districts, and policymakers] will need to become more deeply informed about community forces and structures and more directly involved” (p. 691). Common communication complaints regard timeliness, awareness of events or activities, channels and links to administrators, and communication form/technology (Baker, Wise, Kelley, & Skiba, 2016; Mutch, 2016; Obeidat & Al-Hassan, 2009). Congruently, trust and open communication are also needed to maximize use of facilities and campuses (McShane, 2006). In the end, clearing the barriers to the aforementioned pathways is not an easy task for any community, but the results and outcomes may be worth the efforts, as this study explored.

Methods

Research Design

This community case study heavily relies on qualitative data, which are complemented by quantitative data. The methods employed (discussed below) consisted primarily of qualitative questions; quantitative questions were used to corroborate qualitative findings. Because this study was primarily focused

on the perceptions of school and district staff and community members, a mixed methods design collecting both qualitative and quantitative data was deemed most appropriate to capture fully the nuances of the perceptions elucidated. The mixed methods approach developed was based on the researchers' beliefs that the findings of this study may provide lessons for others to use in their work with school–district–community partnerships.

Demographics

The school district encompasses a high ethnic minority and low-income neighborhood area (see Table 2). Around the time of the study, the total population of the district was 101,313 (U.S. Census Bureau, 2013). Median household income was \$40,806; mean household size was 3.38 persons. The median home value was \$112,900, and the median monthly rent was \$870; only 68% of district residents have a high school degree equivalent or higher, which was 18 percentage points lower than the state average (U.S. Census Bureau, 2013). There were 19 early education and elementary schools in the district, which collectively served over 10,000 students each year, 80%–96% of which qualified for free and reduced lunch in school year 2013–14 (state-wide average: 55%; Arizona Department of Education, 2014a). The majority of students in the district were not meeting the state's objectives for reading and mathematics proficiency. The two public high schools for the feeder elementary school district had graduation rates of 66% and 81%, respectively (Arizona Department of Education, 2014b). Additional summary characteristics are included in Table 2.

Table 2. Summary of School District Demographics (U.S. Census, 2013)

Category	Statistical Figure
Married persons	50%
Hispanic/Latino persons	63%
Black/African American persons	18%
White/Caucasian persons	15%
English-speaking only	50%
Spanish-speaking at home	45%
Persons between 3 and 17	26%
Children below 100% federal poverty level	38%
Children between 100 and 199% federal poverty level	29%

Sampling and Recruitment

Eligible participants for this study, termed *community members*, were defined as individuals who reside in the school district (“residents”) or work for nonprofit or government agencies that serve the community bounded within the school district. These individuals were solicited to participate in the study’s multiple methods (i.e., mapping sessions, focus groups, interviews, questionnaires) through flyers, email distribution lists, and referrals. The sampling strategy was purposive; it took advantage of snowball and convenience sampling methods to replicate closely the characteristics of the population. Arizona State University’s Institutional Review Board approved the study, and all participants provided written consent prior to data collection.

Qualitative Data Collection Methods

Community Mapping Sessions

Currently, no codex for community mapping has been developed yet for use in low-income and high ethnic minority communities, although some recent examples do exist that can be used for reference (e.g., Brann-Barrett, 2011). Thirty-nine community members (i.e., residents within the school district boundaries) participated in the community mapping component of the study, which involved sitting at tables with two to five other people where large-scale (4’ x 6’) maps of the school district had been printed and displayed. A single facilitator guided the sessions with assistance from three additional members of the research team. Participants answered a series of questions about their behaviors, their families’ behaviors, and their community using various shapes and colors of toy pieces to mark different locations found (or not found) on the map. Example questions included: *Where do you go to learn new things in this community? Where do kids in this community go to play? What areas in your community do you feel need the most improvement?* Answers were recorded by taking two digital photos of each table’s map. Figure 1 gives an example of a map where participants indicated which school their children attended and/or the school closest to where they lived. Participants were asked to explain further and contextualize their mapped responses on a corresponding questionnaire. Follow-up questions included: *What are the names of the places you marked? How often do you go there? How do you get there (e.g., walk, bike, drive, etc.)? Please list any particular reasons you feel these areas need improvement.*



Figure 1. Example community map

Focus Groups

Two focus groups with a total of 13 adult participants were conducted: one in English ($n = 7$) with an English-speaking only facilitator and a note-taker from outside the community; the other in Spanish ($n = 6$) with a bilingual facilitator and note-taker who were both well known to the Spanish-speaking community within the district. Each group lasted no more than 90 minutes and followed a protocol that was reviewed and approved by members of the study's insight committee. To capture community input on the broad range of components related to shared use, the focus group leader asked participants about: (1) healthy eating behaviors; (2) physical activity; (3) neighborhood characteristics and perceptions; (4) school–district–community collaboration; and (5) support for an expanded shared use policy. The researchers manually recorded participant responses.

Key Informant Interviews

Key informants ($n = 18$) included 11 individuals who completed an online questionnaire, five individuals who were interviewed face-to-face, and two who were interviewed via telephone. Seven of the key informants represented city

or county services related to community health and safety. Four of the key informants represented school district personnel (i.e., administrators, teachers). Seven of the informants worked or volunteered in the community for local nonprofits. The interview questions centered on three areas: (1) existing conditions and resources within the school district; (2) current relationships and collaborations with the district; and (3) expanding the use of district-owned properties for community activities.

Trustworthiness

To establish trustworthiness, the research team employed several strategies for rigor. Researchers utilized reflexivity during data analysis (Creswell, 2000; Horsburgh, 2003) and kept an audit trail that was reviewed by other members of the study team to ensure alignment in decision-making throughout the coding process (Lietz & Zayas, 2010). Peer debriefing with the research team occurred at least weekly during coding (Creswell, 2000; Padgett, 2008). To ensure that terms were relevant and interpretations were appropriate, researchers used member checking with the points of contact in the school district and surrounding community. Participants were also encouraged to give detailed, thick descriptions (Lietz & Zayas, 2010) in their responses. Additionally, the researchers used the strategy of data triangulation (using multiple methods to corroborate findings) to further increase trustworthiness and rigor (Lietz & Zayas, 2010).

Quantitative Data Collection Methods

Questionnaire

Questionnaires were developed in English and Spanish and were distributed to adult residents within the school district; 225 individuals from the community completed questionnaires. To capture data on the broad range of topics associated with shared use, questions concentrated on: (1) social and neighborhood issues; (2) empowerment; (3) informal and formal community participation; (4) nutritional knowledge and habits; (5) physical activity; (6) perceptions of shared use; and (7) demographics. The demographic characteristics of participating community members were aggregated across study methods to maintain confidentiality; notable sample characteristics of the individuals surveyed via questionnaire are summarized in Table 3.

Single items were used to assess general neighborhood issues and barriers to community empowerment and well-being. Respondents were asked to indicate the extent to which common community issues (e.g., obesity, graffiti, trash, noise, etc.) were a problem within their neighborhoods and to indicate whether any of their specific concerns would increase if shared use were to be

expanded. Respondents were also able to note any additional concerns that were unlisted. Respondents indicated whether they supported school properties in their neighborhood being open for public use before or after regular school hours by circling one of two options: “I support it” or “I do not support it.” Finally, they were asked how important shared use was to them (ranging from “not important” to “very important” on a four-point scale).

Table 3. Questionnaire Sample Characteristics ($n = 225$)

Characteristics of Community Members	Statistical Figures
Parents of Children Under 18	70%
Female	77%
Hispanic/Latina(o)	7%
Black/African American	15%
White/Caucasian	14%
Average (Mean) Age	42 years

Data Coding and Analysis Strategies

All qualitative data were in narrative form as responses had been written out by the participants themselves and/or by the researchers during the sessions. Responses recorded in Spanish were translated into English for analysis. The researchers utilized the template coding approach to analyze the textual data because the aforementioned pathways and barriers had already been ascertained from the literature (Padgett, 2008). Only manifest content—content that was written by the participants, not their underlying feelings, emotions, or nonverbal behavior—was coded. Descriptive statistics were used to complement the qualitative data analysis.

Results

Support for Shared Use

A majority of residents (84%) surveyed via questionnaire supported expanding shared use when asked in a yes/no format. In a separate question on the questionnaire, 40% of those surveyed indicated that shared use was *very important*, 33% indicated it was *important*, 18% indicated it was *somewhat important*, and 9% indicated that it was *not important*. Given this support for expanding shared use, it was deemed important to the researchers to further explore the pathways and barriers to success for such expansion.

Pathways

Physical Activity Facilities and Programs

Community members expressed a strong need and desire for more opportunities and programs for physical activities to be available within the school district, including more activities for youth, adults, and families, as well as more sports/recreation opportunities, preferably structured. One focus group participant stated, “If there were sports, I would take my son every day.” Another stated a desire for more “classes, activities like personal defense, soccer, basketball.” Physical activity was noted as a considerable benefit of expanding shared use, especially for youth. Community members, overall, concurred that shared use might provide more places (in addition to local parks and recreation centers) for youth to play, especially for those who lived near the schools. One focus group participant exclaimed, “It would be beneficial if they opened the [school] gyms.” A teacher advocated for expanded shared use of school gyms, stating, “If they had a gym available, the kids would be there every day.” Key informant interviewees noted that expanding shared use would positively benefit children’s physical activity levels as the schools were perceived by some to be safer than the local parks and streets in the area. One informant commented that school playgrounds might serve well as places for children “to have somewhere to stretch their legs.” Additionally, some interviewees and focus group participants noted expanding shared use in the area might help cultivate more local sporting leagues and activities.

Community members surveyed via questionnaire appeared optimistic that expanding shared use would improve their own physical activity levels; however, they perceived fewer physical activity benefits for themselves as opposed to children. Most community members (67%) surveyed via questionnaire indicated that they were already active enough. Among the qualitative methods’ results, some community members stated that they would be unlikely to use the schools during before- or afterschool hours unless there were structured activities for themselves and/or for their kids. Community members also qualitatively noted that they would be more likely to engage in physical activity if the school gym or track was open to them for use. They stated that intergenerational physical activities—activities that adults and children engaged in together—might encourage more adult physical activity on the campus during non-school hours.

Before-School and Afterschool Community Programs

Community members reported in the mapping session and focus groups that there needed to be more spaces within the school district boundaries that could serve as places for sports and recreation activities, educational events, and

meetings. They desired more activities for youth, adults, and families; more sports/recreation opportunities; and more programs, classes, and services for children and adults. Engaging in lifelong learning was suggested to be a priority of the local community members in the mapping sessions. Additionally, it might be inferred across the study methods that local community groups and organizations are ready and willing to utilize the school spaces for their own programs if shared use were expanded.

Community members also highlighted in the mapping sessions and focus groups that for community activities and to learn new things in their community they frequently went to a particular local school, which hosted a myriad of before- and afterschool programs for children, adults, and families. Other local schools were mentioned, and a few individuals mentioned libraries. Additionally, local churches, colleges, homeowners' association centers, and human services centers were noted as places for learning. Finally, parks were also mentioned as places for community activities.

Expanding shared use was thought to benefit adults greatly by providing them with additional places to gather together. One focus group participant noted a benefit would be "meeting space for adult groups; it's more reasonably priced than other places." Schools also were noted to be safe places for meetings, especially at night.

Community groups and organizations desiring to work with children, adults, and families alike indicated that shared use would further increase their access to community members and leaders and allow them a broader spread of places to host their programs. The leaders of local community groups and other community members noted that the most salient advantages the local schools have are their location (specifically their proximity to community members' homes), familiarity, and available space. For these reasons, many participants posited that more community members would attend events offered at schools than at other locations.

For families (in the focus groups and mapping sessions), expanding shared use was viewed as a mechanism for increasing access to educational programs. Frequent topics of mention for possible programs, training sessions, or classes included: exercise; cooking and nutrition; general adult education; English as a second language (ESL) for parents; computers and technology; general youth and family programs; peer leadership; drug and alcohol abuse education; teen pregnancy education; arts activities, theater, and drama; psychological and spiritual growth; and professional networking and training. All in all, schools were seen as potentially prime locations for community health promotion and disease prevention programs. Participants suggested that health advisory councils could meet at the local schools and that health fairs could be hosted on school grounds as well.

Expanding shared use was *not* generally thought by community members (in the questionnaire and qualitative methods) to strongly promote better nutritional knowledge and healthy eating. Nonetheless, a few participants suggested the schools might do well as locations for gardens or farmers' markets. There was some general interest for community gardening, nutritional classes, and recipe demonstrations, particularly among parents of young children. These community members appeared especially motivated to be good models of healthy eating for their children, which may benefit gardening efforts at schools. Additional benefits qualitatively expressed were better-connected families, enhanced parent–child relationships, enriched school–community partnerships, and increased parent involvement in schools.

Barriers

Safety and Supervision Issues During Off-Hours

Community members qualitatively noted several community issues that made their neighborhoods seem less safe. The most frequently reported issues across the research methods included stealing and theft, litter or trash, graffiti, violence, and selling or using drugs. Concerns related to gangs were also mentioned but seemed to be limited to specific areas rather than across the district as a whole. Importantly, schools in general were noted as areas needing improvement in the community in order for community members to feel that they were safe to visit outside of regular school hours, especially after dark.

Participants expressed concerns regarding safety and supervision at schools and around the neighborhoods in which they reside, especially during off-hours. Over half (52%) of focus group participants were concerned about community safety (in general) if shared use were to be expanded. One focus group participant stated, “We don't let our children go to the schools by themselves, it's very important that they be safe.” Community members broadly and parents in particular noted across the methods that adequate lighting and surveillance were necessary for any expansions of shared use. They suggested that well-designed lighting would help to reduce misbehaviors like drug dealing, vandalism, and graffiti on school grounds.

Contrarily, some interviewees stated that expanding shared use might make the community safer and healthier because of resulting community programs and activities that promote healthy habits and decrease vandalism and drug and alcohol use. One focus group participant stated broadly, “There could be benefits [to expanding shared use] because there would be more places to go out to, but I wouldn't let my children go by themselves.”

Community members qualitatively suggested that schools as community hubs for physical activity among children would be especially advantageous in

areas within the school district boundaries that had limited access to safe and well-equipped parks. Community members desired an expressed commitment from the schools and district in alleviating any issues surrounding the safety of community members, especially children. Before expanding shared use, many community members noted a need for adequate maintenance, funding, lighting, and security for the schools during off-hours.

Half (50%) of community members surveyed via questionnaire indicated concerns about supervision when seeking to expand shared use. Community residents, especially parents, expressed they would not want or allow local youth to use the schools during non-school hours without adequate supervision. They claimed that more crime would occur on school properties and teens would act out more if responsible adults were not on site at all times of use. As one focus group participant stated, “Kids would be up to no good without supervision.” Some examples of probable misbehaviors mentioned included starting fires in trashcans, drug dealing and use, and vandalism and/or tagging. Finally, community members also wondered whether supervisory responsibility would fall to parents, school staff, community organization staff, or volunteers and who would pay the costs for the supervision were it not provided in-kind.

Liability, Maintenance, and Operating Costs

Resource competition and scarcity were common in comments by community members who were involved with or worked for the schools, the district, and local community organizations. Community members noted that while the district and individual schools were in fact open to community use of their properties, the schools and the district always got first priority over local community groups or organizations. Community members stated that collaboration between community organizations and the local schools was important, but they did not seem to possess much optimism about the sustainability of such collaborative efforts. Drawing on experience collaborating with local parks, one community organization representative noted, “Collaboration works fine until there are budget cuts, and then [people] stop reaching out. Right now the budget is really tight.”

At the time of the study, the prices of meeting spaces on school grounds appeared to be reasonably balanced, as previously noted above regarding gathering places. Civic meetings for community betterment and polling places for elections are currently exempted from use charges. Additionally, classes related to the district’s mission could be held for no charge, despite some classes not being currently offered at locations already. Examples include school-sponsored activities, teacher organizations, school clubs, parent–teacher associations or organizations, Boy or Girl Scouts of America meetings, booster clubs, local

soccer organizations, or little leagues (i.e., baseball, softball). Local community groups or associations and nonprofit organizations were charged between \$5 and \$25 per hour depending on their facility needs, while commercial or for-profit organizations were charged between \$6 and \$30 per hour.

As might be expected, costs associated with expanded shared use were also a substantial concern among school administrators. In addition to being important to community members, reimbursement of expenses to schools for shared use is state-mandated (Section 15-1105, Arizona Revised Statutes). Thus, those involved in or working for local community organizations expressed concern that, depending on how such expenses were calculated, the schools/district might charge fees for using school properties during off-hours that were prohibitively high and would hinder usage for community organizations and residents. Key informants emphasized a need for free or low-cost programs for adults and children during off-hours, specifically suggesting that opening up school fields at a low or no cost might encourage more local sporting leagues.

Inadequate Communication Channels Between Districts, Schools, and Communities

Community members who did not work for the schools demonstrated a lack of confidence in the local schools' and school district's abilities to communicate adequately with local community members and organizations. Specifically, community members were concerned that without additional or alternative staffing dedicated to communication and community involvement activities, shared use would remain a policy rather than a common practice.

Community members questioned the district's capacity to handle expanding shared use, especially in regards to the aforementioned barriers. Again, a lack of confidence was apparent regarding the district's ability to work with local community organizations to address these barriers. Some key informants noted great interest in using school facilities more if they were made more readily available but strongly desired that coordination be simplified and improved. Community members wanted the school district to conduct thorough planning and establish adequate infrastructure prior to expanding shared use, while community organization and school personnel desired that any costs of expanding shared use be clearly estimated and communicated.

School and district personnel stated that any expansion of shared use needed to move forward with caution. One interviewee stated, "The overall condition, image, and reputation of the district and its schools both academically and administratively needs to be addressed first before successful expansion of community access can be done." A school administrator commented, "We are easy to collaborate with, but groups do not absorb the costs associated with hosting [events]." School personnel desired clear statements from community

organizations identifying the purposes of school use during non-school hours, which persons in the community would be served, and how the organizations planned to cover any associated security and maintenance (e.g., cleanup) costs to avoid creating additional work for school personnel.

Discussion and Future Directions

The extent of support for shared use among community members in this study was not unexpected. In previous reports (e.g., Duffett et al., 2004), parents and children clearly indicated a desire for meaningful out-of-school-time programs and activities. The variation in the perceived importance of shared use among this study's questionnaire respondents, however, may indicate that improvements in other areas of the community supersede shared use as a priority and may also be indicative of community members' concerns regarding safety and crime within the district. For example, in the community mapping sessions in particular, participants were able to easily pick out areas needing improvement to increase traffic safety and decrease criminal activity. Other participants across the methods noted needed improvements regarding parks and recreation facilities and community services in general. While this study did not ask participants to prioritize shared use among other community needs, the researchers unearthed insights and ideas regarding expanding shared use and the pathways and barriers anticipated from expansion.

Pathways

Physical Activity Facilities and Programs

Several factors help explain how physical activity facilities and programs might serve as important pathways to community well-being through expanded shared use. Schools within the district offered varying levels of physical activity programming outside of school hours. Often, this programming was available through collaboration with an outside entity that assumed at least partial responsibility for monitoring activities and safety. While almost all participants agreed that shared use opportunities offered the potential for expanded physical activity that would benefit the entire community, they expected youth to benefit the most, especially those without a neighborhood park nearby. They expressed a clear desire for both indoor and outdoor recreational facilities to be made available as well as for planned physical activities that were structured and supported. Thus, consistent with previous research (Cavill et al., 2015; Laffleur et al., 2013; Spengler, 2012; Spengler et al., 2011; Totura et al., 2012), schools were perceived as alternative venues for physical activity for both children and adults.

Before- and Afterschool Community Programs

The findings supported the idea that shared use provides access in a variety of forms that can be useful for recreational, educational, and other meeting opportunities, which is also consistent with past research (e.g., Young et al., 2014). Apart from physical activities, recreational access might take a variety of forms, including fun opportunities such as movie nights or family/community picnics. Shared use might also increase access to schools as locations for community meetings and gatherings.

Interest in community gardens was low among the community members. At least four community gardens already existed within the district boundaries (not including gardens hosted on school grounds), and while youth expressed interest in becoming involved, few adults were interested in working in or receiving food from the gardens. Cooking and healthy eating classes were also available, as were places within the area to purchase healthy foods. The low interest in nutrition-related courses is worthy of further investigation. Additionally, the higher cost of healthy foods and the wide availability of unhealthy foods would not necessarily be overcome through expanding shared use unless these were specifically targeted by programming, events, community actions, or other strategies that do not currently exist in the area.

Barriers

Safety and Supervision Issues During Off-Hours

The findings of this study suggested that shared use should not be expanded without addressing safety, security, and crime issues. Policies and procedures related to these topics need to be established prior to opening facilities for shared use, incorporating input from parents, community members, and public safety personnel. Likewise, shared use should not be expanded without supervision and coordination plans for off-hour use. While ultimately the responsibility of the district and school, strategies for sharing responsibility among parents, volunteers, community organization staff, and/or school staff must be arranged prior to holding activities. Developing such policies and procedures in a cooperative manner between the district/school and community members enhances communication, trust, buy-in, and follow-through (Ferreira, Grueber, & Yarema, 2012; Hands, 2005), all of which are essential to ensuring the safety, security, and utilization of school grounds and facilities during off-hours.

Liability, Maintenance, and Operating Costs

Shared use should strive to strike the right balance in addressing liability, maintenance, and operating costs (Lees et al., 2008; Spengler et al., 2013; Warren, 2005; Warren et al., 2009). Moreover, there are local policy issues that

may need to be addressed in order to allow for off-hours use and to manage the costs associated with such use (e.g., recuperation of usage costs). A larger investigation into the insurance and risk intricacies of off-hours use falls outside the purview of this study but would be a helpful addition for others seeking to expand shared use in their communities.

As previously mentioned, the cost of equipment and space could be recovered through rental fees; however, this strategy does not appear to align with the spirit of shared use (e.g., Spengler, 2012). Additionally, nonprofit and community groups that use the spaces during off-hours may be tasked with bringing their own equipment and resources. Volunteers, rather than paid staff, can also monitor off-hours activities; however, as some study participants indicated, schools may still require a paid staff person to be on-site during programming. Beyond liability issues, utilities remain the primary cost-related barrier, with electricity likely costing the most, depending on the amounts and types of lighting, heating, and cooling required. Water use from bathrooms and outdoor water hose use would have costs as well, but were not noted as often as electricity. The high concern regarding the cost of electricity is likely due to the high temperatures experienced in Phoenix, Arizona, leading to high central air conditioning costs. The question remains, “how significant are such increases?” Further investigation into the actual levels of increased costs is warranted in future evaluations of shared use.

Inadequate Communication Channels Between Districts, Schools, and Communities

Establishing successful school–district–community partnerships requires creating adequate and clear, two-way communication channels between school/district personnel and the community (Hands, 2005). Community leaders in this study showed much interest in collaborating to host classes and events in partnership with schools during or after school hours. Such efforts were perceived as potential openings for improved communication among local schools/administrators and community members and organizations. Collaboration and partnership between community leaders and schools were highly desired by study participants and could help inspire a sense of shared purpose and ownership over the school spaces (Ferreira et al., 2012), particularly if both school and community members are included in the decision-making process (Hands, 2005). School-based collaborations between families and school staff may also translate into higher student academic achievement via improved family–teacher relationships and increased parent involvement in their children’s education as families become more comfortable with the school environment, school staff, and the education system (O’Donnell & Kirkner, 2014).

Using standard school-to-home communication channels (e.g., newsletters, emails, flyers sent home, etc.) is helpful, but expanding that reach via additional electronic media (e.g., Facebook, text messages, etc.), personal outreach strategies, and word-of-mouth is particularly important for successfully involving parents and community members in low-income, urban areas (O'Donnell, Kirkner, & Meyer-Adams, 2008). Hands (2005) suggested that, while initial contacts between schools and community members in the partnership development process were often not made in person, face-to-face communication was key as stakeholders worked to further define and negotiate the terms of their partnerships. Meaningfully involving community members and other stakeholders in planning and decision-making requires significant effort and often lengthens the process, which can be a challenge for time- and resource-constrained schools/districts. However, as Bosma et al. (2010) found in their examination of the core elements that contributed to a successful school–community–university partnership in Minneapolis, Minnesota, the additional buy-in and trust gained by the collaborative work can greatly enhance implementation and may serve as worthwhile outcomes of their own, over and above the specified policy or program goals.

Conclusion

If local schools are to be schools of, for, and with the community, they must be more open to the community members. Budgets and planning must also address the barriers so that the pathways of shared use may be accessed. Such efforts will of course need political support and engagement on the behalf of both community members and school administrators.

This study's collaborative research efforts have stimulated progress within this district and within other districts, city and county governments, and non-profit organizations. Local entities have begun to examine how they too might begin the process of seeking opportunities for shared use, which is now more readily seen as a viable means of promoting improvements in physical and community health at the local level. Indeed, small local grants have been distributed to other districts and organizations to establish shared use projects and partnerships. The hope is that this study helps other schools and communities in their efforts to understand and expand shared use, specifically its pathways and barriers to community improvement and empowerment.

Endnotes

¹This study is derived from the overall Shared Use Roosevelt (SHUR) Health Impact Assessment (HIA) completed and published by Maricopa County Department of Public Health in April 2016.

²Data collection instruments are available from the authors upon request.

References

- Anderson-Butcher, D., Stetler, E. G., & Midle, T. (2006). A case for expanded school–community partnerships in support of positive youth development. *Children & Schools, 28*(3), 155–163.
- Arizona Department of Education. (2014a). *Free/reduce price percentage*. Retrieved from <http://www.azed.gov/hns/frp/>
- Arizona Department of Education. (2014b). *School report card search and review*. Retrieved from http://www.ade.az.gov/srcs/find_school.asp
- Baker, T. L., Wise, J., Kelley, G., & Skiba, R. J. (2016). Identifying barriers: Creating solutions to improve family engagement. *School Community Journal, 26*(2), 161–184. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Bassett, D., Fitzhugh, E., Heath, G., Erwin, P., Frederick, G., Wolff, D.,...Stout, A. (2013). Estimated energy expenditures for school-based policies and active living. *American Journal of Preventive Medicine, 44*(2), 108–113.
- Beighle, A., & Moore, M. (2012). Physical activity before and after school. *Journal of Physical Education, Recreation & Dance, 83*(6), 25–28.
- Blair, D. (2009). The child in the garden: An evaluative review of the benefits of school gardening. *Journal of Environmental Education, 40*(2), 15–38.
- Bodick, D. (2011). Joint use of school recreational facilities. *CASH Register, 32*(9), 10–13.
- Bosma, L. M., Sieving, R. E., Ericson, A., Russ, P., Cavender, L., & Bonine, M. (2010). Elements for successful collaboration between K–8 school, community agency, and university partners: The Lead Peace partnership. *Journal of School Health, 80*, 501–507.
- Brann-Barrett, M. T. (2011). Same landscape, different lens: Variations in young people’s socioeconomic experiences and perceptions in their disadvantaged working-class community. *Journal of Youth Studies, 14*(3), 261–278.
- Burbage, L., Gonzalez, E., Dunning, L., Simon, P., & Kuo, T. (2014). Building mutually beneficial partnerships to improve physical activity opportunities through shared-use efforts in under-resourced communities in Los Angeles County. *Preventive Medicine, 67*(1), S4–S9.
- Cavill, N., Engelberg, J., Gebel, K., Lou, D., Parker, M., Thornton, C. M.,...Sallis, J. F. (2015). *Making the case for designing active cities* (Technical Report). University of California, San Diego.
- Creswell, J. W. (2000). Determining validity in qualitative inquiry. *Theory Into Practice, 39*(3), 124–130.
- Duffett, A., Johnson, J., Farkas, S., Kung, S., & Ott, A. (2004). *All work and no play? Listening to what kids and parents really want from out-of-school time*. New York, NY: Public Agenda, The Wallace Foundation.
- Ferreira, M. M., Grueber, D., & Yarema, S. (2012). A community partnership to facilitate urban elementary students’ access to the outdoors. *School Community Journal, 22*(1), 49–64. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Hands, C. (2005). It’s who you know and what you know: The process of creating partnerships between schools and communities. *School Community Journal, 15*(2), 63–84. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Horsburgh, D. (2003). Evaluation of qualitative research. *Journal of Clinical Nursing, 12*(2), 307–312.
- Kanters, M. A. (2014). Shared use of school facilities with community organizations and after-school physical activity program participation: A cost–benefit assessment. *Journal of School Health, 84*(5), 302–309.

- Kerr, J., Rosenberg, D., Sallis, J. F., Saelens, B. E., Frank, L. D., & Conway, T. L. (2006). Active commuting to school: Associations with environment and parental concerns. *Medicine and Science in Sports and Exercise*, 38(4), 787.
- Lafleur, M., Gonzalez, E., Schwarte, L., Banthia, R., Kuo, T., Verderber, J., & Simon, P. (2013). Increasing physical activity in under-resourced communities through school-based, joint-use agreements, Los Angeles County, 2010–2012. *Preventing Chronic Disease*, 10. Retrieved from http://www.cdc.gov/pcd/issues/2013/pdf/12_0270.pdf
- Lauer, P. A., Akiba, M., Wilkerson, S. B., Apthorp, H. S., Snow, D., & Martin-Glenn, M. L. (2006). Out-of-school-time programs: A meta-analysis of effects for at-risk students. *Review of Educational Research*, 76(2), 275–313.
- Lees, E., Salvesen, D., & Shay, E. (2008). Collaborative school planning and active schools: A case study of Lee County, Florida. *Journal of Health Politics, Policy, and Law*, 33(3), 595–615.
- Lietz, C., & Zayas, L. E. (2010). Evaluating qualitative research for social work practitioners. *Advances in Social Work*, 11(2), 188–202.
- Mahan, J. M., Fortney, M., & Garcia, J. (1983). Linking the community to teacher education: Toward a more analytical approach. *Action in Teacher Education*, 5(1–2), 1–10.
- Markowitz, F. E., Bellair, P. E., Lisak, A. E., & Liu, J. (2014). Extending social disorganization theory: Modeling the relationships between cohesion, disorder, and fear. *Criminology*, 39(2), 293–320.
- McShane, I. (2006). Community facilities, community building, and local government: An Australian perspective. *Facilities*, 24(7/8), 269–279.
- Moseley, M. J. (2000). England's village services in the late 1990s: Entrepreneurialism, community involvement, and the state. *Town Planning Review*, 71(4), 415–433.
- Mutch, C. (2016). Schools as communities and for communities: Learning from the 2010–2011 New Zealand earthquakes. *School Community Journal*, 26(1), 115–138. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Obeidat, O. M., & Al-Hassan, S. M. (2009). School–parent–community partnerships: The experience of teachers who received the Queen Rania award for excellence in education in the Hashemite Kingdom of Jordan. *School Community Journal*, 19(1), 119–136. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- O'Donnell, J., Kirkner, S. L., & Meyer-Adams, N. (2008). Low-income, urban consumers' perceptions of community school outreach practices, desired services, and outcomes. *School Community Journal*, 18(2), 147–164. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- O'Donnell, J., & Kirkner, S. (2014). The impact of a collaborative family involvement program on Latino families and children's educational performance. *School Community Journal*, 24(1), 211–234. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Ogilvie, R. (2014). The laboratories of place-based change. *National Civic Review*, 103(1), 48–52.
- Padgett, D. K. (2008). *Qualitative methods in social work research* (2nd ed.). Thousand Oaks, CA: Sage.
- Portland Development Commission. (1995). *Portland: Kennedy School master plan*. Portland, OR: Bureau of Housing and Community Development.
- Pstross, M., Talmage, C. A., & Knopf, R. C. (2014). A story about storytelling: Enhancement of community participation through catalytic storytelling. *Community Development*, 45(5), 525–538.

- Sampson, R. J. (1996). The community. In J. Q. Wilson & J. Petersilia (Eds.), *Crime and public policy* (pp. 210–237). San Francisco, CA: Institute for Contemporary Studies.
- Schutz, A. (2006). Home is a prison in the global city: The tragic failure of school-based community engagement strategies. *Review of Educational Research*, 76(4), 691–743.
- Spengler, J. O. (2012). *Promoting physical activity through the shared use of school and community recreational resources*. Princeton, NJ: Robert Wood Johnson Foundation.
- Spengler, J. O., & Baber, O. (2014). *Places to play: A summary of key characteristics of the built environments that support “Sport for All, Play for Life” communities*. Gainesville, FL: University of Florida’s Sport Policy and Research Collaborative.
- Spengler, J., Connaughton, D., & Carroll, D. (2011). Addressing challenges to the shared use of school recreational facilities. *Journal of Physical Education, Recreation, & Dance*, 82(9), 28–33.
- Spengler, J. O., Frost, N., Connaughton, J. O., & Prince, J. D. (2013). Clarifying liability for after-hours community use of school recreational facilities. *Annals Health Law*, 22, 342–354.
- Spengler, J. O., Young, S. J., & Linton, L. S. (2007). Schools as a community resource for physical activity: Legal considerations for decision makers. *American Journal of Health Promotion*, 21(4s), 390–396.
- Sutton, V., & Clements, S. (2012). *Best practices tool kit for shared use agreements in Mississippi*. Jackson, MS: Mississippi Department of Education’s Office of Healthy Schools. Retrieved from <https://www.saferoutespartnership.org/resources/toolkit/best-practices-tool-kit-shared-use-agreements>
- Talmage, C. A. (2015). Making the ordinary extraordinary: A fresh look at satisfaction in communities. In F. Maggino (Ed.), *A new research agenda for improvements in quality of life* (Social Indicators Research Series; pp. 61–86). Dordrecht, Netherlands: Springer.
- Totura, C. M. W., Lewis, H., Robbins, D., Yuan, Q., Dustman, P., Marsiglia, F. F., & Wolferteig, W. (2012). *Assessment of school-based childhood obesity prevention policies and environmental efforts in Maricopa County: Review of existing efforts, implementation and economic considerations, and future policy directions*. Phoenix, AZ: Southwest Interdisciplinary Research Center.
- U.S. Census Bureau. (2013). Elementary School District [Data]. *2013 American Community Survey 5-Year Estimates*. Retrieved from <http://factfinder2.census.gov/>
- Vincent, J. M., Filardo, M., Klein, J., & McKoy, D. L. (2010). *San Francisco’s public school facilities as public assets: A shared understanding and policy recommendations for the community use of schools*. Center for Cities and Schools, University of California, Berkeley.
- Warren, M. (2005). Communities and schools: A new view of urban education reform. *Harvard Educational Review*, 75(2), 133–173.
- Warren, M., Hong, S., Rubin, C., & Uy, P. (2009). Beyond the bake sale: A community-based relational approach to parent engagement in schools. *Teachers College Record*, 111(9), 2209–2254.
- Young, D. R., Spengler, J. O., Frost, N., Evenson, K. R., Vincent, J. M., & Whitsel, L. (2014). Promoting physical activity through the shared use of school recreational spaces: A policy statement from the American Heart Association. *American Journal of Public Health*, 104(9), 1583–1588.
- Zieff, S. G., Guedes, C. M., & Eyler, A. (2012). Policymakers’ responses to neighborhood focus group outcomes on physical activity. *Journal of Physical Activity and Health*, 9(8), 1056–1064.

Authors' Note: The authors would like to thank Kenneth Steele for his collaboration on this project.

Craig A. Talmage teaches at Hobart and William Smith Colleges (HWS) in Geneva as an assistant professor of Entrepreneurial Studies, a new fast-growing minor that officially started in the spring of 2016. He teaches courses on economics principles, quantitative tools, social innovation, the history of entrepreneurship theory, and the senior capstone experience. His research focuses on improving community well-being. Correspondence concerning this article may be addressed to Dr. Talmage at 300 Pulteney Street, Stern Hall, Geneva, NY 14456, or email Talmage@hws.edu

Holly L. Figueroa is a social science research analyst with the United States Department of Agriculture (USDA) Food and Nutrition Service. Prior to joining the USDA, she designed and managed public health policy and program evaluations for the Office of Evaluation and Partner Contracts at the Southwest Interdisciplinary Research Center at Arizona State University (ASU). Holly has taught graduate and undergraduate courses in organizational theory, public sector communication, urban studies, policy analysis, and research methods.

Wendy L. Wolfersteig serves as Director of Evaluation and Partner Contracts at the Southwest Interdisciplinary Research Center at Arizona State University. For over 20 years, her work in prevention and evaluation in Arizona have focused on the use of effective evidence-based strategies and data-driven decision-making. She leads the Office of Evaluation in working collaboratively with state, county, city, and local partners to design and perform assessments and evaluations, provide trainings, and disseminate findings. Dr. Wolfersteig serves as a member (former chair) of the Arizona Substance Abuse Epidemiology Work Group.

