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KAMEHAMEHA SCHOOLS

# An Overview of Complementary Learning Systems

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## Introduction

Complementary learning systems (CLS) are systems of education that benefit both learners and their communities through integrated and holistic programming. Research shows the positive educational impact of CLS in communities across the nation, which informs the work of Kamehameha Schools.

CLS approaches have been implemented in various ways, but the common approach they all share is the inclusion of families and community in supporting student learning and development. Two essential principles define CLS. First, CLS offers both school and nonschool supports to learners and their families; and second, these supports complement one another (Weiss et al. 2005, 2–3). Although these two principles are foundational to any complementary learning system, there is no prescription for which types of support should be included or how they should complement each other. However, research has shown most complementary learning programs that successfully prepare learners for higher education include similar types of support. These supports, identified by Bouffard, Goss, and Weiss (2008,4), include:

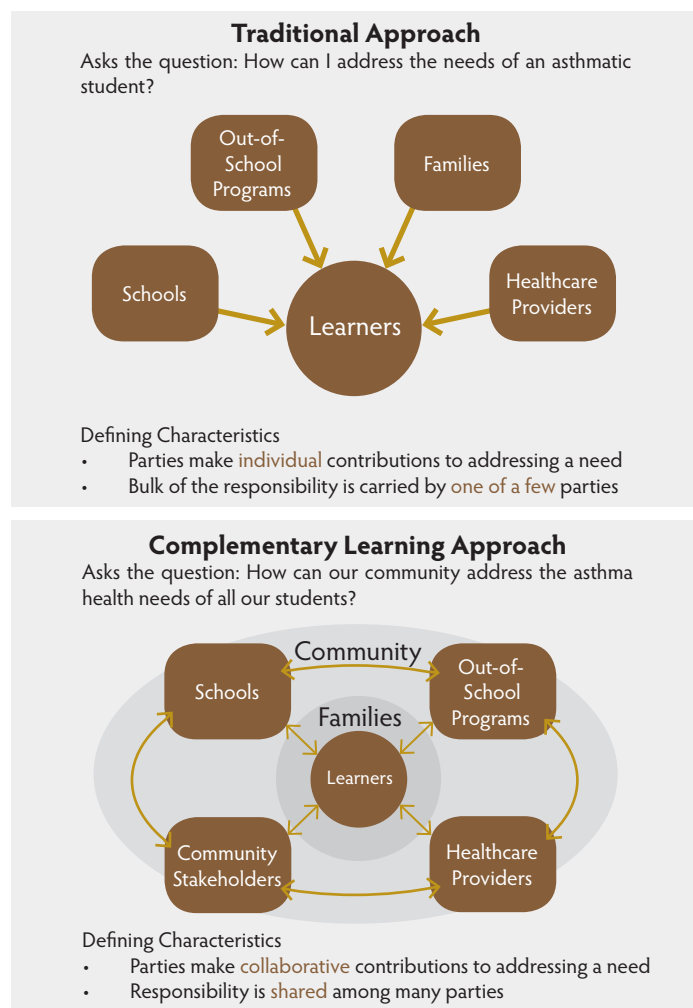
- Effective schools
- Supportive families and opportunities for family engagement
- Early childhood programs
- Out-of-school time activities (e.g., sports, arts, mentoring programs)
- Health and social services
- Community-based institutions (e.g., community centers, faith-based institutions, community and cultural institutions)
- Colleges and universities

Programs that serve as good models for implementing these supports include the Harlem Children's Zone, Sun Service System, and Alignment Nashville (Bouffard, Goss, and Weiss 2008, 2). These programs demonstrate that they must be responsive to the needs of the learners and communities they serve to be successful (Harlem Children's Zone n.d., 5). For example,

in the community of Harlem, asthma is an issue that affects the well-being of many local residents. In order to help these residents manage this disease, the Harlem Children's Zone (HCZ) established an asthma initiative (Barnes 2005). HCZ's Asthma Initiative clearly illustrates the “complementary” core principle of complementary learning. In order to improve educational outcomes for its learners, HCZ does not simply seek to address the health needs faced by individual students on a case by case basis. Rather, HCZ tackles asthma issues at a community level by collaborating with community stakeholders, such as government officials, healthcare workers, schools, and caretakers (see Figure 1 for a comparative illustration). It does this with the underlying understanding that:

- to effectively tackle a community-wide problem, community-wide resources are *required*, not optional
- healthy communities and families support healthy learners, while healthy learners are more likely to achieve positive educational outcomes (Kana'iaupuni, Malone, and Ishibashi 2005, 220)

Figure 1. Traditional versus complementary learning approaches using the HCZ Asthma Initiative example



This example details how the application of CLS can meet specific community needs. In particular, once the community identifies the needs they want to address, they can “work toward a consistent range of outcomes” (Weiss et al. 2005, 3), with the specific end goal of providing better educational outcomes for learners.

Note: Asthma is an illness that also affects a disproportionate number of Native Hawaiian youth.

(Kana'iaupuni, Malone, and Ishibashi 2005, 221)

### Potential of Complementary Learning

The research on CLS clearly demonstrates that complementary programs are more effective in achieving positive learner outcomes than programs that operate independently of each other (see web. multco.us/sun, www.alignmentnashville.org, and www.hcz.org/our-results). Connected programs benefit learners through the acquisition of life and work skills, and communities in turn, may benefit from the services that these skilled learners provide (Popkin, Acs, and Smith 2009, 3).

Complementary learning plays an important role in achieving positive outcomes. Perhaps one of the most unique aspects of CLS is its focus on engaging community in collaborative efforts. For example, CLS addresses the needs of learners at the broadest level by supporting learner communities and families. Students bring to the classroom a variety of social, emotional, and economic backgrounds that often affect their ability to learn. Complementary learning responds comprehensively to these multiple needs through a cohesive, community-centered network of programs that are tailored to address the specific needs faced by learners in different communities.

Forming a comprehensive network of programs that encourages active participation and fosters the creation of educational opportunities by learners and communities is optimal because it allows learners to build on the synergistic benefits from multiple services in their network (see Appendix A). Take for example the HCZ response to asthma issues faced by children in Harlem. HCZ recognized that it could improve students' classroom outcomes by dealing with their asthma issues, thereby mitigating asthma-related learning barriers, such as student absenteeism (Milton et al. 2004, 711–728). This example illustrates the advantages of a network of connected programs in a complementary learning environment.

HCZ is a prime example of the tremendous impact that CLS can have. Based in central Harlem, a community historically gripped by socioeconomic challenges such as high rates of crime, unemployment, and mortality, HCZ successfully uses complementary learning to transform its community by ensuring that kids receive a quality education that extends beyond highschool graduation (Harlem Children's Zone 2009–2010).

The success of HCZ has been nationally recognized. In fact, it has

had such a powerful effect that programs across the nation have looked to the HCZ education model in order to make the same kinds of transformation in their own communities. President Obama said of HCZ, “we know this works, and if we know this works, there is no reason why this program should stop at the end of those blocks in Harlem” (Barack Obama on the HCZ model 2009). If successful outcomes can be achieved by communities such as Harlem, then it is possible for other communities to do the same, building on the success of the complementary learning framework to achieve these transformations. Geoffrey Canada, founder of HCZ, stresses the importance of transforming, not only individual learners, but also the communities where they live.

[I]t is necessary to work on a scale large enough to create a tipping point in a community’s cultural norms, a threshold beyond which a shift occurs away from destructive patterns and toward constructive goals. To achieve this tipping point, we believe the collective programs offered by a non-profit must reach about 65% of the total number of children in the area served. (Harlem Children’s Zone n.d., 4)

This approach to collective community learning has been transformational in areas where success is least expected, ensuring that hundreds, even thousands of children, receive a quality education that continues past high school graduation (Harlem Children’s Zone 2009–2010).

### Ensuring Success

Research has shown that there are certain factors which contribute to the success of CLS. Supports such as early childhood education, family support and involvement at home and in school, and after-school programs are fundamental to CLS (Weiss et al. 2005, 2). In addition, Bouffard, Goss, and Weiss (2008, 4) state that specific practices ensure that multiple complementary programs operate in synchrony. These practices are:

- Establishing strong leadership
- Leveraging existing efforts, resources, and partnerships
- Engaging families
- Building communication within initiatives and in the field at large
- Learning from and building on research and evaluation

Hence, complementary learning is found to be effective when the programs and initiatives created work in integrated fashion. Success comes with the recognition that “considering these supports in the same old ways—piecemeal, in silos, disconnected from each other and from schools—will not achieve the goal of making sure children are successful” (Weiss et al. 2005, 2). Programs

complement each other by coordinating and creating linkages among multiple supports, thereby creating a comprehensive continuum of support for participants. Bouffard, Goss, and Weiss (2008) state:

An effective education today therefore must include strong families and opportunities for family engagement; access to early childhood learning experiences; quality after school, weekend, and summer learning opportunities; community and cultural resources; and adequate physical and mental health services. Moreover, an effective education links all of these elements together in a way that promotes a comprehensive and holistic approach to learning. (5–6)

Once multiple programs and initiatives have been successfully linked together, complementary learning then becomes most effective in “promoting children’s learning and contributing to their school success” (Weiss et al. 2005, 2).

### Complementary Learning and Kamehameha Schools

Kamehameha Schools’ Ka Pua Initiative is an example of a CLS approach in formation. More broadly, Kamehameha Schools offers a wide range of campus and community programs that serve both Hawaiian learners and their families. These programs include prenatal and preschool services, K–12 campus-based programs, after-school and summer programs, scholarships, counseling, and cultural learning opportunities. Based on research about Native Hawaiian well-being, Kamehameha Schools realizes the need to collaborate more effectively with communities and the public schools that serve them. As a part of this effort, Kamehameha Schools has begun to work with a community strengthening initiative known as Ka Pua, to serve West O’ahu residents and to further develop an education model of complementary learning.

The Ka Pua Initiative is aimed at collectively promoting a healthy and vibrant Native Hawaiian community through education (see [www.ksbe.edu/kapua/about](http://www.ksbe.edu/kapua/about)). The initiative provides a framework for realizing this goal using a CLS approach. In the case of Ka Pua, this means comprehensively linking partnerships and collaborations such as social, health, and education services together within a P–20 continuum stretching from cradle to career (Kamehameha Schools 2010). “We believe that by building the strength of community schools and other educational providers, we not only serve Hawaiian families, but we also help lift the entire level of education and well-being for the community. That’s what our Ka Pua Initiative is all about” (Dee Jay Mailer as quoted in Kamehameha Schools 2010).

## References

- Barack Obama on the Harlem Children's Zone model.* Harlem Children's Zone Top Viewed Videos, <http://www.hcz.org/media/hcz-tv?task=videodirectlink&id=10> (accessed February 1, 2011).
- Barnes, K. 2005. The Harlem Children's Zone Asthma Initiative. *Harlem Children's Zone: A Look Inside*, Spring 2005.
- Bouffard, S., C. B. Goss, and H. Weiss. 2008. Complementary learning: Emerging strategies, evolving ideas. Cambridge, MA: Harvard Graduate School of Education–Harvard Family Research Project.
- Harlem Children's Zone. n.d. Whatever it takes: A white paper on the Harlem Children's Zone New York, NY: Harlem Children's Zone.
- . 2009–2010. <http://www.hcz.org/our-results>.
- Kamehameha Schools. 2010. About Ka Pua. <http://www.ksbe.edu/kapua/about>.
- Kana'iaupuni, S. M., N. Malone, and K. Ishibashi. 2005. Ka huaka'i: 2005 Native Hawaiian educational assessment. Honolulu, HI: Kamehameha Schools–Pauahi Publications.
- Milton, B., M. Whitehead, P. Holland, and V. Hamilton. 2004. The social and economic consequences of childhood asthma across the life course: A systematic review. *Child: Care, Health and Development* 30 (6):711–728.
- Popkin, S. J., G. Acs, and R. E. Smith. 2009. *The Urban Institute's Program on Neighborhoods and Youth Development: Understanding how place matters for kids*. Washington, DC: Urban Institute. [http://urban.org/uploadedpdf/411974\\_place\\_matters.pdf](http://urban.org/uploadedpdf/411974_place_matters.pdf) (accessed June 24, 2011).
- Weiss, H. B., J. Coffman, M. Post, S. Bouffard, and P. Little. 2005. Beyond the classroom: Complementary learning to improve achievement outcomes. *The Evaluation Exchange* XI (1).

## Appendix A

Table 1. Comparative guide to complementary, supplementary, and traditional learning approaches.

Area of Focus	Complementary Learning System Approach	Supplementary Approach	Traditional (Stand-Alone) Approach
Early Childhood Education	<p>The local K–12 school system, in collaboration with community partners, develops and publishes a curriculum for children ages 3–5 which is built on a holistic perspective on child development. This curriculum, sample activities, and learning materials are made readily available for parents to use at home.</p> <p>Early childhood education providers including preschools, libraries, and public broadcasters use this same curriculum in their interaction with young learners.</p> <p>When children enter kindergarten, the schools use this same curriculum as a building block to teach new kindergarten students and continue to engage parents as active partners in their children's education. Transition programs are provided.</p> <p>Members of this system meet regularly to review information about progress toward shared goals related to school readiness and kindergarten transition from the perspective of children and families.</p>	<p>Various community organizations offer pre-kindergarten support.</p> <p>Libraries host weekly reading sessions, TV broadcasters provide educational programming.</p> <p>Schools work with local early childhood education providers, libraries, and public broadcasters to enroll children for kindergarten.</p>	<p>K–12 schools have no involvement with children until age 5.</p> <p>Early childhood educational opportunities in the community may or may not align with local K–12 schools and community priorities.</p>
Health and Fitness	<p>With common goals around health and fitness, the school and its community partners develop a health and fitness campaign tailored to local needs. Families are provided information about health concerns, and community services providers work closely with schools to meet learners' needs. Public ads share information about routine screenings, community colleges work with K–12 schools to augment health education, and the YMCA provides water safety classes to all students in collaboration with the schools and schedules swim lessons in conjunction with school calendars. Transportation is provided for students in after-school programs who wish to participate in the lessons.</p>	<p>Various community organizations offer health and fitness programs.</p> <p>Public service ads call attention to "healthy living," health screenings are available through community colleges, and the YMCA provides swimming lessons on weekends and during school breaks.</p>	<p>A school nurse manages emergent illness and health classes are offered at targeted grade levels.</p> <p>Public service ads call attention to "healthy living."</p> <p>The YMCA provides swimming lessons.</p>

## Appendix A (continued)

Area of Focus	Complementary Learning System Approach	Supplementary Approach	Traditional (Stand-Alone) Approach
Civic Engagement	When civic engagement is a shared goal, students are encouraged to become active participants in the community. Students are responsible for the cleaning of their neighborhoods and schools. This may include cleaning beaches and streams, cleaning classroom windows, or painting over graffiti. Students also serve as mentors for younger kids in Big Brothers Big Sisters and frequently participate in related community building projects. Projects and activities operate in coordination with community organizations and may occur during or afterschool hours (e.g., churches, boy scouts, etc.).	Students have options to participate in various community organizations and activities.  A student may participate in boy/girl scouts, Big Brothers Big Sisters, or church functions. All activities operate in silos.	Civic engagement opportunities may or may not be offered at K–12 schools.  Opportunities to serve the community are mostly offered after school hours to primarily middle and high school students.
Cultural Learning	In a complementary learning system, culture is infused across school and community programs. For example, the K–12 school may be near a Native Hawaiian fishpond. After forging a partnership with community members, local students would have the option of participating in a school-sponsored science program that maintains, cleans, and harvests fish from the fishpond. The students would be educated by cultural practitioners and marine biologists on the characteristics and function of the fishpond ecosystem. Their learning would be tailored to grade specific curriculum and standards. Ideally, students would use their knowledge and experience to spread awareness to the local community in order to promote cultural values and stewardship.	Community service providers offer after-school or summer programs that focus on cultural learning.  These programs may or may not align with K–12 curriculum and standards.	The students' school may or may not offer any cultural learning programs.  The capacity of teachers to utilize cultural approaches to learning may vary widely.