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Working Paper Before the Conference: Revisions Pending After the Conference

Crossing Borders and Changing Boundaries to Develop Innovations that Improve Outcomes*

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*When readers inspect the length of this paper, they will quickly conclude (correctly) that I did not read it as I lectured. I sampled key ideas from it as I explored the four phases, their relationships, and attendant implications. Heart-felt thanks to Bart Crum, Murray Mitchell, Sara Doolittle, Dawn Anderson-Butcher, Aidyn Iachini, Rebecca Wade-Mdivanian, and Katharine Briar-Lawson for their technical assistance and social support.

North meets South as East meets West. Our conference theme calls attention to border-crossing and boundary-changing exchanges; and for good reason. People, ideas, technologies, programs, products, and problems are crossing borders at an unprecedented rate. As borders are crossed, innovations develop, and boundaries may change.

These innovative border crossing dynamics and boundary changing exchanges are indicators of the multi-faceted process known as globalization (Lawson, 2001a & b). Globalization brings dramatic changes to our social life worlds. For example, hybrid institutions, schools, programs, research programs, lifestyles, and identities now are commonplace. Moreover, with each passing day we are reminded that people in diverse parts of the world depend on each other for solutions to complex problems.

The dramatic changes accompanying globalization compel us to evaluate our institutions, conceptual frameworks, programs and practices, and language systems. Our evaluations must proceed with due recognition that most were designed for industrial societies. The upshot is apparent: In a growing number of nations, we confront the necessity to design new institutions for global societies.

Our global era requires new design criteria and specifications. For example, global institutional designs require warranted, cultural protectionism to counteract the wholesale import of foreign institutions. Moreover, this new institutional design work is not merely "out with the old and in with the new," i.e., it should not proceed with the assumption that all tradition is "bad" and every innovation is "good" (Shils, 1981).

In diverse parts of the world we face essentially the same design challenge. We confront the enormous challenges of operating industrial age institutions and programs at the same time we strive to design and implement global counterparts. Our situation is

akin to the aviation engineer-as-pilot who must design a new airplane at the same time s/he flies the existing one. In brief, tensions, conflicts, and contradictions are endemic in this new design work, and complexity, novelty, and ambiguity are normative.

Research can be a significant ally because it provides some measure of certainty and direction. Research also prevents wasted resources in the relentless pursuit of wishful thinking. Notwithstanding research's importance, it will not suffice for all of today's design challenges and opportunities.

This new design work also requires *strategic searches*. Scholarly searches typically precede "re-search" when social change is dramatic, turbulent environments prevail, and new institutions are needed (Lawson, in press a & b). These searches, which map new conceptual territories and result in new "problem and opportunity sets" (Lawson, 1984), are the essence of the art and science of design. To design is to create and invent with clear purposes, rigorous methodologies, and strong ethical-moral principles. Design-oriented searches thus involve crossing borders and changing boundaries to gain the kinds of knowledge and understanding the profession needs for innovations that systematically achieve desirable outcomes.

Aim and Structure for My Lecture

These institutional design needs in response to global challenges, needs, and opportunities frame my Cagigal lecture. More concretely, my lecture focuses on new institutional designs for schools, physical education (PE) programs, and physical education teacher education (PETE) programs. I offer innovative design frameworks and criteria, along with design challenges-as-opportunities. I have derived these innovations

by deliberately crossing borders and changing boundaries in pursuit of better outcomes. My title thus reflects my still-unfinished scholarly journey.

Fortunately, my scholarly agenda is clearer now than it was when I began my career some 40 years ago. At that time I lacked the necessary preparation and scholarly discourses for the challenges and opportunities of institutional redesign. I have struggled ever since to compensate for shortcomings in my professional education and limitations of my own making.

My early career challenges, struggles, and needs have been instrumental in the development of this lecture. Aiming to help and support colleagues, especially early career faculty, doctoral students, and school leaders, I employ autobiographical analysis to identify, describe and explain relevant frameworks, questions, findings and lessons learned. My analysis is both retrospective and prospective. In other words, while I look back, I also look ahead and offer fresh frameworks and ideas.

Four Phases

I describe four interactive phases in my searches for innovations that improve outcomes. In phase 1 I searched for new school-community designs for physical education. In phase 2, I linked these new designs with the development of the academic discipline. In phase 3, I developed and employed a professional socialization framework to understand how and why school and university colleagues resisted change and reproduced existing institutional arrangements. In phase 4 I accelerated my community school work in neighborhoods and rural communities challenged by social exclusion, social isolation, poverty, and their correlates—communities where human suffering, manifested in both education and health disparities, are evident and commonplace.

Phase 1 receives the lion's share of attention in the ensuing analysis. When I turn my attention to the other three phases, I provide only a summary rationale, relevant frameworks, a few key priorities, and relevant examples-as-possibilities.

I am, of course, an American whose work has proceeded, for the most part, in the United States. My American orientation and discourse are evident throughout my analysis, and they signal an obvious bias and stand as an unavoidable limitation. I encourage international readers to detect this bias and guard against hasty generalizations. All of us need to guard against the "Americanization" of science and institutional design.

Phases Instead of Steps

I describe my career journey in "phases" for good reason. Phase-oriented work is another 21st century design criterion, and it is not to be confused with the idea of "steps."

Steps are indicative of linear thinking and industrial age logic. Steps signal certainty and even predictability. Two main assumptions are familiar. We need only "follow the numbers" to achieve what we want and need. And as we progress from one step (number) to another, we are able to leave the past behind.

Not so with phases. Phases involve non-linear thinking. Each phase interacts with, and spills over into, the others. Phase-related work thus is iterative and recursive, i.e., it feeds back at the same time that it feeds forward. Importantly, this phase-related, design work depends on the ability to cross borders and change boundaries, all the while searching for innovations that improve outcomes. Details follow.

Phase 1: Community School Designs

On a cold, cloudy, late November day in 1969, my life and career changed suddenly and dramatically. It was my next-to-last doctoral seminar. I attended out of a

sense of obligation because I was slated to receive my Ph.D. two weeks later--at the December commencement exercises. I remember my mindset: Just one more class, and my uneventful and, at times, boring and irrelevant doctoral program will be over.[1]

My professor, the public health-oriented exercise physiologist, Henry J. Montoye, began this pivotal class by announcing a change. We would not dissect the epidemiology research we had reviewed. Instead he introduced a top level official from a charitable foundation—the Mott Foundation housed in Flint Michigan.[2]

This official proceeded to share a vision for community school, i.e., schools with new school-family-community programs and partnerships. (Today these schools also are called "extended day schools" and "multi-service schools" in some locales.) She also shared powerful examples of actual achievements. She gave special attention to exercise and health programs for both young people and their families during out-of-school time. She also emphasized how joint school-community programs and services enabled schools to serve as hubs for engaging youngsters, supporting strong families and strengthening healthy communities. The community school was, in short, an innovation that resulted when school, family, and community borders were crossed and familiar boundaries were changed. A significant innovation, it also incubated others for improved outcomes.

The Community School Model

I immediately became riveted on the community school's guiding vision, new institutional designs, and accompanying opportunities. I felt energized and inspired. I

[1]I shared responsibility for this sub-optimal program. Like others of my generation, I viewed the degree program as a collection of required courses I needed to complete quickly, and so I rushed through my doctoral program much like a track star who jumps the designated hurdles as fast as possible.

[2] The Mott Foundation remains a leader in new forms of schooling and education. See, for example, *A New Day for Learning*. http://www.edutopia.org/pdfs/ANewDayforLearning.pdf

had found in two hours what I had looked for, but could not find, in other aspects of my doctoral program—namely, a compelling, unifying purpose and sense of direction.

Most of all, I began to see how the community school model provided opportunities to unify exercise and health programs with companion initiatives focused on youth development, family support, and community building. In a nutshell, I saw in the community school model the benefits of the broad, all-encompassing process of education, propelled in part by voluntary, educative communities focused on learning and healthy development during out-of-school time (e.g., Lawson, 1993a; 1994; 1995; 2005). I began to anticipate the possibilities and benefits of working outside the school day, free of curricular time limits and other school subject rules and regulations.

New Designs for Physical Education and Health Education

Opportunities for instruction, learning, and overall cognitive, behavioral, and attitudinal change were nearly limitless in community schools' out-of-school time initiatives and programs. Best of all, as I realized later, community school physical education (PE) and health education (HE) programs could be integrated, providing the unique opportunity to influence the orientations and lifestyles of entire family systems.

This opportunity to influence both young people and their families continues to be relevant today. For example, at least 19 of young people's health risk factors are nested in their family systems, indicating that health-related changes for young people depend in large part on health-related changes in their family systems.[3] Conventional school programs conducted during the school day and focused on individual students have little

[3] The import of family-focused and –centered policies and interventions to improve the well being of children and youth is not limited to the health and exercise sector (e.g., Briar-Lawson, Lawson, & Hennon with Jones, 2001).

or no hope of influencing families.[4] Granting the immediate benefits of school-sponsored physical activity for young people during the school day, conventional programs typically lack the intervention scope and "reach" needed to influence families and, and through family systems, to have a lasting impact on young people.

Beyond families, the community school model provided opportunities to deploy the school's resources (e.g., teachers, equipment, facilities) for PE, health education (HE), and recreation in service of entire communities. In other words, community school programs could be positioned for population-based interventions. At the same time, young people's learning and healthy development during out-of-school time could be connected with formal curricula and instruction during the regular school day. Classroom teachers, principals and other adult staff could benefit at the same time that young people, families, and communities benefited.

Here, then, was an opportunity to accomplish something rarely achievable in conventional schools. This special something can be summarized in the following, catchy phrase: "Getting the conditions right for quality physical education (PE)." Importantly, the community school model also promised to get the conditions right for PE's connections to HE and also to community recreation.

Contrasts with the Past: Identifying and Describing the Wrong Conditions

I discovered in the community school model a potentially powerful resolution to the contradictions, barriers, and constraints I perceived and experienced in 20th Century American Physical Education (PE), including its relationships with HE, Recreation, and

[4] Recent intervention research that frames young people in the contexts of their families and proceeds with family-related change strategies demonstrates considerable promise (e.g., Jammer, Spruijt-Metz, Bassin, & Cooper, 2004; Warren, Henry, Lightowler, Bradshaw, & Perwaiz, 2003). Unfortunately, it remains in short supply because school-centered health education and physical education, focused exclusively on individual young people, remains the norm.

schooling writ large.[5] Starting with my undergraduate studies, I was dismayed and even deeply troubled by deeply-rooted problems in the American literature, and I routinely observed and experienced these problems in the schools I visited and during my own teaching. The wrong conditions prevailed in program designs and in school contexts.

For example, it was easy to identify contradictions and limitations in the various American program prototypes—PE as directed play, PE as sports and games, PE as health-related physical fitness, PE as recreational recess, and PE as a hybrid of the preceding models (which I call "the cafeteria curriculum"). The most important limitation of these models, in my view, stemmed from their origins and development.

These traditional PE models were not founded on sound theoretical understanding and empirical knowledge about socialization into sport, exercise, physical activity and, in turn, socialization via them into active, healthy lifestyles. To the contrary, *many were promoted and implemented in spite of relevant evidence and solid theory.*

In other words, instead of starting with salient theory and research as a point of departure and viewing school programs as research-supported interventions, the field's leaders started with industrial age ideologies and promoted their preferred programs with a missionary zeal.[6] Alternatively, leaders might have started with the consistent inability of PE programs to produce systematically and somewhat uniquely demonstrable, desirable outcomes, using these outcomes gaps as a springboard for program redesign.

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[5] I was an "old school" undergraduate major certified to teach both health education and physical education and expected to emphasize their relationships.

[6] I am not suggesting here that the evidence is self-explanatory and, all in all, speaks for itself in program design, conduct, and evaluation. To the contrary, ethical-moral ideals and justifiable values in service of human well being and social welfare in just, sustainable societies must be center-stage in all planning dialogue. Competent design and planning thus depend on achieving an important, delicate balance between the warranted theories and the evidence (describing current social reality) and normative visions for a better, preferred future. Herbert Simon (1996) thus emphasized "the normative leap" from "is statements" to "ought statements", emphasizing that exclusive reliance on the evidence reinforced the status quo.

The field's literature, as I experienced it, was not amenable to such an intervention-oriented logic. Instead it was dominated by mission-driven ideologies articulated and developed by powerful leaders who served as the field's gatekeepers and opinion-shapers. Little wonder that ideological conflicts and contests for control among leaders were normative, and the limited research often was a-theoretical, replete with design flaws, and, all in all, structured to justify and promote a particular program prototype (Lawson, 1988; in press a & b).

In the United States, this pattern, whereby leaders' preferences and ideology continue to serve as a primary driver for PE program models and, in turn, PETE programs, has become institutionalized (Lawson, in press a & b). Institutions are, in essence, formal systems of rules, rules, programs, and relationships with well-established histories. Buttressed by traditions, supported by personal preferences, and reinforced by self-serving research agendas with obvious limitations, industrial age PE and PETE prototypes are firmly entrenched. They persist because formal socialization structures and processes effectively reproduce them.

To be fair, PE's institutionalized and entrenched design limitations and contradictions have been just part of the problem. These models' limitations have become more apparent when they have been implemented in schools and offered as a legitimate school subject organized and conducted in the same manner as other subjects. Put differently, industrial age schools have not provided optimal settings and environments, despite the tireless, commendable efforts by leaders and teachers to optimize these settings and environments. *In fact, schools have changed PE programs*

and teachers more than teachers and other leaders have been able to favorably change schools in order to get the conditions right for quality PE.[7]

PE and HE programs share the logic of the industrial age school—and by necessity and explicit design. Arguably, our field's leaders had little choice when it came to industrial age logic and requirements in order to be accepted and supported in industrial age schools. On the other hand, when the industrial age school is inspected for its orientations, structures, operations, and functions, several dimensions of the American PE (and HE) predicament become more apparent.

The industrial age American school has been oriented toward workforce preparation for the factory and the assembly line, and the school's social organization has followed suit (e.g., Callahan, 1962; Tyack, 1974). Justified as a meritocratic system, schools and their constituent subjects have served as sorting machines (Spring, 1976), and too often these schools reproduced the existing class structure (e.g., Bowles & Gintis, 1976). To facilitate student sorting, both curricula and instruction have been organized in part to find out which students had aptitude for particular subjects. Like products moving along an assembly line, students have been required to move from one class to another to receive the same standardized treatment (the same instruction and the same teaching methods-as-training), complete performance exams, receive a grade indicative of aptitude, ability, and also to determine their work discipline, persistence, and effort.

Importantly, in the American industrial age school, the individual student in the context of a competitive-comparative group is the unit of analysis. *Individual students*

[7] Lipsky's (1980) analysis of front-line human service workers, including teachers, is instructive because it emphasizes the impacts of large, public sector bureaucracies. Faced with impossibly large work loads and demanding accountability requirements, Lipsky's bureaucratic workers ration services, i.e., they play favorites with "pet" clients-students-patients—at the same time that they engage in "people processing work" in lieu of the more difficult, demanding work of trying to change people's lives and identities.

achieve and succeed, having competed successfully with peer groups in the same classes. Most of all, individual achievements, limitations, and failures are identity-markers, career predictors, and lifestyle frames. For example, when a young person learns in school that "I'm not good at math and science, or I'm not an athlete", profound career and lifestyle implications follow. To reiterate, the industrial age, American school sorts and labels young people, and it does so with efficiency and effectiveness.

PE has been just another stop on the assembly line, subject to the same industrial logic, rules, ideology, and regulations as other subjects. Especially in sport-dominated programs, young people are sorted and labeled, developing identities as athletes and non-athletes. In industrial age, American PE the teacher is an expert trainer-coach and the student is a dependent client. Student learning and development, it follows, depend on teachers and the curriculum and instruction teachers choose. Conceptions of pedagogical content knowledge follow suit. In fact, the dominant conception of pedagogical content knowledge reinforces this role system and its power and authority relationships.

School PE, in this logic, rests on either or both of two main assumptions. School PE is assumed to be the first and only exposure to sport, exercise, games, and physical activity, or it is assumed to be the most important one, outweighing influences and experiences in extra-school environments.[8] In the first half of the 20th Century, both assumptions could be justified. Walled-in container PE fit nicely in container schools.

Today container models are problematic. For example, they rule out extra-school socialization experiences and socialization opportunities during an era when many young Americans are literally bombarded with opportunities and experiences. Many of these

[8] School improvement follows suit. It is a building-centered, walled-in affair that focuses almost exclusively on the school day. Global age "anytime, anywhere learning" breaks the mold.

opportunities and experiences have more socializing power than school PE because they operate under more optimal conditions, starting with the fact that young people elect them. Thanks to these youth sport and exercise experiences, it is not unusual for high school athletes to demonstrate more performance expertise than their teachers![9]

In the industrial age school, PE, like vocational subjects, has helped identify and reward "the motor minded" student (Tyack, 1974) because this subject's organization and conduct, in the minds of educators, had little to do with serious cognition and clearly was not academic. In brief, in the academic culture of the American school, PE is associated with a long standing mind-body dualism (e.g., Crum, 2007),[10] Subject and teacher marginality have been predictable outcomes. Resource shortfalls, large classes, and inappropriate time allocations have been logical derivatives, and they have provided weighty, enduring challenges for even the most committed teachers.

These unfortunate conditions have been breeding grounds for contradictions, conflicts, and sub-optimal outcomes. For example, PE justified as directed play became, in the culture of the American school, more like work because school subject rules and regulations, in combination with PE teachers' behaviors, violate many of play's essential requirements and conditions (Lawson, 1993b).[11] A second example: Impossibly large classes, limitations in facilities and equipment, sub-optimal scheduling, and PE teachers

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[9] Here are opportunities for innovative youth leadership and youth-led communities of practice, but they are lost in the power and authority (role) system of industrial age school.

[10] The name *Physical* Education has been instrumental in this long-standing dualism. An implicit task compensation framework follows suit. Just as community and industrial recreation programs inherently accepted alienating, demanding work as a given, requiring "re-creation" outside the job (e.g., Rodgers, 1978), so has American PE been surrounded by a task compensation premise whereby time in the gym and on the playing fields often is viewed as a way to "re-create" students, compensating for seat work and the disciplines associated with sitting still and paying attention in industrial age classrooms. Donnelly and Coakley (2002) characterize PE, Sport, and Recreational physical activity as social control-oriented for good reason, and their contrasts with empowerment- oriented youth development are instructive.

[11] Language is instructive. American teachers and students talk about "work outs", not "play outs". To work out is to demonstrate work discipline and valued asceticism for the mechanized assembly line work. The first part of Robert Halpern's (2003) book title says it all: *Making Play Work*.

oriented more toward elite athletic coaching than general teaching have conspired against the success of the cafeteria-like sports and games curriculum.

The point is, the industrial age school's logic, organization, and conduct have not been conducive to quality PE. In addition to design flaws inherent in industrial age PE programs, even the best programs have been changed significantly—and not for the better—as they have been implemented in schools.[12] Despite nearly 100 years of trying, it has not been possible to systematically "get the conditions right" for quality PE.

In the same vein, industrial age schools' implants on PE (and HE) have been problematic. PE subject matter, activities, identities, and lifestyles, which are, in theory, universally relevant to every human being, have fallen far short of this ideal thanks to the influences and determinations of industrial age schools. More specifically, every young person has a body and needs to be active in some form—if only in the basic activities of walking, running, biking, dancing, and swimming. Unfortunately, too many young people are not active, and some are not sufficiently active in their PE classes (e.g., McKenzie, 2007). Investigations into the lack of active, health-enhancing lifestyles inevitably include young people's sub-optimal and even bad experiences in school PE. These counter-productive negative experiences illuminate the import of ethical-moral norms for teaching and programs, the most basic of which is "do no harm" (Lawson, 1991b). In brief, the contributions of PE to physical inactivity merit more research because the findings have import to new design criteria for 21st Century PE prototypes.[13]

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[12] The emergent specialty called "implementation science" and its relationship to "evidence-based practice" are worthy of considerable discussion. See, for example, the analyses by Miller and Shinn (2005) and Mullen, Shlonsky, Bledsoe, and Bellamy (2004).

[13] Research that explores the adverse, unintended consequences of PE will benefit from a dual focus. How is it that young children who begin their lives with learning and exploration driven by active play involving their bodies are socialized out of this kind of meaningful, health-enhancing activity? And how is it that new, young teachers, fresh from their university programs, enthusiastic, and committed later become

Design Criteria for Community School PE

Community schools (by whatever name) and their programs and services are founded on one such design principle: *Tailor as much as possible each school's programs and services to fit the characteristics of local populations and also the particularities of local community settings and their environments*. Implicit in this principle is an appreciation of, and relevant theory for, the ecologies of schools, families, and communities. Social ecological theories, action planning, and discourses thus have special relevance in the community school model (e.g., Lawson, 1992; 2005; Sallis, Cervero, Ascher, Henderson, Kraft, & Kerr, 2006). Significantly, this model can be dovetailed with public health, population-based initiatives (e.g., McKenzie, 2007).[14]

The above-mentioned design principle and the theoretical frameworks on which it is founded are especially relevant to community school PE, including its relationships with HE, recreation, and other school programs and services. Granting the relevance and import of well-developed school and community PE models such as sport education (e.g., Siedentop, Hastie, & van der Mars, 2004), I approach new century design needs differently. I think it prudent to stop short of prescribing formal program models, assuming that they have universal relevance, application, and utility. After all, "one size fits all" schooling is an industrial age artifact, and so is the idea of standardized PE. Furthermore, standardized PE, in the global age, risks imperialist "Americanization."

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disengaged, cynical, and even somewhat demoralized? The point is, PE in the industrial school has adverse effects on both young people and their teachers, and the time has arrived to focus research on both kinds of undesirable outcomes and the relationship between teacher outcomes and student outcomes.

[14] In Minneapolis, Minnesota, for example, young people in a community school PE program swim and receive swimming instruction alongside elders and other adults in their community. Especially good for the elders because of the social supports and interactions this kind of PE provides, young people also gain opportunities to develop health-enhancing, educative relationships with older adults and to observe active lifestyles among older adults. Of course, both populations gain the direct benefits of the physical activity instruction and participation (Coalition for Community Schools, 2007).

I have opted instead for an approach that privileges design frameworks, principles, and criteria. I aim to strike a warranted, but delicate balance. Frameworks, principles, and criteria provide commonalties and help scaffold planning, implementation, and evaluation, but they also encourage local tailoring to fit the somewhat unique characteristics of school populations, settings, and environments. Three recent publications bear witness to this approach (Lawson, 2005; in press a & b). Figure 1 (attached) derives from one of them (Lawson, in press a).

Figure 1 contrasts industrial age PE designs (as described in the preceding analysis) with global age counterparts (Lawson, in press a). To begin with, global age PE (and HE) will be tailored to different models for schooling. Standardized, "one size fits all" PE will not remain in good currency and, by implication, PETE programs will become differentiated in the kinds of graduates and programs they produce and promote.

Significantly, global age PE will be child- and youth focused and less subject focused. It will emphasize social responsibility and social competence development (e.g., Doolittle, in press; Hellison, Cutforth, Kallusky, Martinek, Parker, & Stiehl, 2000), including self-regulated behavior change and maintenance technologies (e.g., Gortmaker, Peterson, et al 1999; McKenzie, 2007). It also will proceed with youth leadership and youth development principles, including an emergent theory called "co-production theory" (e.g., Marks & Lawson, 2006). And it will get better supports and achieve more outcomes because it is offered outside the regular school day (Ennis, 2006), capitalizing on family and community resources for healthy development and active lifestyles. This new century approach also stands to gain traction when it is fortified by community-

based partnerships for youth, especially partnerships structured for youth leadership (Lawson, Claiborne, Hardiman, Austin, & Surko, 2007).

Additionally, Figure 1 contrasts a training-as-social control system tailored for a by-gone era with a personalized, empowerment-oriented, learning and development system. Significantly, it implicates three kinds of relationships: (1) Relationships with physical activity, sport, and play experiences in family and community contexts; (2) Relationships with core academic subjects and school improvement; and (3) Different relationships between teachers and students; and between students and students.

Far from the last word on the subject, this Figure is intended to frame and focus planning dialogue among colleagues. For example, Sara Doolittle of Adelphi University and her colleagues have demonstrated its import as a planning and organizing framework for their PE and HE reform work with their urban school partners. Figure 2 (attached) derives from Doolittle's (in press) recent analysis, and it indicates how talented colleagues can employ these criteria to enrich the possibilities through locally-generated innovations. Such is the import of design frameworks, principles, and criteria: Typically they have generative effects, i.e., they encourage talented people to cross borders, change boundaries, and develop innovations that improve outcomes.

Significantly, the new design criteria, principles, and activities identified and invited by Figures 1 and 2 usher in three important implications. First, these new program prototypes have profound implications for what counts as "pedagogical content knowledge. " For example, youth leadership, youth development, social competence development, and self-directed and regulated learning and behavior change technologies fundamentally change both curriculum and instruction. To borrow social work language,

teachers in global age PE programs will employ combinations of direct and indirect practice. Their direct practices will be carriers of the best practices and traditions from the past as teachers and coaches work directly with individuals and communities of practice. Teachers' indirect practices will involve performance and instructional brokering and monitoring as young people pursue approved instruction and performance development opportunities in community contexts, sometimes relying on auto-tutorial learning technologies.[15]

Second, changes in PETE programs are needed to in support of new conceptions of pedagogical content knowledge. The shift from a teacher as expert-driven training system for large, heterogeneous groups of students to a more personalized youth development-oriented and youth-led learning system will be especially profound. Social service technologies and practice strategies now "owned" by social work, clinical and community psychology, counseling, and community nursing will become essential in global age pedagogical content knowledge (Lawson, 2005).

The third implication follows: The development of new Century PE programs and teacher education programs will be optimized when firm, equitable school-university partnerships for simultaneous renewal are developed (Lawson, in press a & b). Why develop partnerships for simultaneous improvement and renewal? The answer is that experienced teacher educators and teachers alike confront profound learning and development challenges, much like the aviation engineer who flies the new plane as it is being designed (as described earlier). Partnerships for mutual learning, innovation design

[15] To be clear: Industrial age PE programs ruled out extra-school instruction and performance. Global age PE programs will build on them, using them as pedagogical resources and enabling better conditions for instruction in school-based programs for young people without community instruction and participation.

and implementation, and continuous improvement through embedded evaluations are a practical necessity.

A final note: Other educators, policy makers, health professionals, young people, and parents will be "at the table" as new century program prototypes are designed, implemented, evaluated, and improved.[16] Importantly, these same policy and program actors already are involved in the redesign of schools, at least in the United States. These people with a mission have been instrumental in the development variety of school types—charter schools, magnet schools, career academies, alternative schools, and P-16 (preschool through the undergraduate degree) whole systems educational change. Curriculum and instruction in these different kinds of schools vary. Standardized PE will not thrive in this new century environment and long-standing PE ideologies in support of a one best system will not gain universal traction.

Partnerships with state, provincial and national policy leaders follow suit. Emergent designs for 21st Century American schools, some already being implemented, have been instrumental in my thinking because, as in the past, to gain policy support and resources PE (and HE) must be configured to promote and advance the fundamental missions, goals, structures, and functions of the schools that house and sponsor them.[17] For example, the ability to learn, develop good social competence, invent, and innovate in teams is a key feature of nearly every reform proposal. Nearly every reform proposal

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[16] PE programs are surrounded by multiple constituencies (e.g., elite sport developers, health officials, recreation advocates, and community organizers) with diverse goals. Pleasing one constituency risks offending one or more of the others, a situation that can be described by the sociologist Robert Merton's *structural ambiguity*. Structural ambiguity indicates that "double-binds" are endemic in design work. And this is why it is prudent and appropriate to provide criteria that help illuminate "the right questions" for planning dialogue(in democratic forums) in lieu of offering fully-developed prototypes as "the right answers." I have learned this lesson the hard way, and I offer it to others to facilitate their work.

[17] See, for example, Lawson and Anderson-Butcher (2007), the National Commission on Education and the Economy (2007), and a new website called Route 21—designating the road to the 21st Century and its schools (http://www.21stcenturyskills.org/route21/index.php).

also emphasizes literacy in math and science as well as the opportunity for teams and individuals to pursue excellence outside the school's walls.

These several features of new century schools offer nearly unprecedented opportunities for PE to connect with other school subjects and contribute to school improvement. (I provide examples in subsequent sections of this analysis.) My design criteria have been developed accordingly—as I have indicated in a companion analysis focused on policy needs (Lawson, in press b).

Two final notes are in order regarding PE and HE in community school (extended school, multi-service school) configurations. Especially as after school and summer programs continue to expand in U.S. schools, the knowledge base about best practices is growing. Significantly, voluntary sports and games activities continue to be the most popular offerings for young people (e.g., Larson, Hansen, & Monetta, 2006; Shernoff & Vandell, 2007). When after school programs are harnessed for their educative power, and when they enjoy quality staffing and leadership, they contribute to both positive youth development and overall school improvement.[18]

Additionally, connections between school-based after school programs and community youth sport programs are being mapped (e.g., Coatsworth & Conroy, 2007). At the same time, other kinds of connections are being mapped for community-based and school-linked health and exercise promotion and education programs (e.g., Sallis, et al., 2006). I view these developments as harbingers of the future—with one additional caveat. Presently, the vast majority of these out-of-school time programs, including sport, exercise and physical activity offerings, are NOT being organized and conducted by credentialed physical education teachers and sport coaches.

[18] Figure 5, presented later, identifies several school improvement benefits

In the USA many teachers and PETE professors apparently are proceeding with "business-as-usual" during the school day.[19] This business-as-usual approach is very risky. As schools and districts continue to seek cost-cutting measures, opportunities to out-source program and service responsibilities, and find more time for academic instruction during the regular school day, they will look to exercise, sport, and physical activity programs in after-school contexts and perceive both redundancy and cost-saving opportunity. My work in Phase 2, like that in Phase 1, has been structured accordingly.

Phase 2: Advancing Kinesiology and Connecting it to School PE and HE

Phase 2 began in 1974—four years after my first academic appointment in the Department of Physical Education for Women at the University of Washington[20]. I was hired to help implement a guiding vision for an arts and sciences discipline of Human Movement Studies. Faculty recruitment accelerated with the appointment of W. Robert Morford as department chair. With breathtaking speed, we added sociologists, psychologists, biomechanists, physiologists, and movement learning-control specialists to the faculty at the same time that we engineered a revolutionary transformation of the curriculum. Seemingly overnight, we established the discipline of Kinesiology.

<u>Cross-disciplinary Innovations Via Crossing Borders and Changing Boundaries</u>

I worked with, and learned from, Morford as we developed the intellectual foundations and a curriculum model for the new discipline (e.g., Lawson & Morford, 1979; Lawson, 2007; Morford & Lawson, 1981). Our design criteria began with

[19] I'd like to be viewed as a realist and not an alarmist when I make the following claims. If PETE professors and school leaders are unwilling and unable to make the changes needed for global age PE, other professions can and will. Kinesiology's sub-disciplinary specialists head the list (e.g., sport management, exercise and sport psychology, and applied exercise science). At the same time, competition from other professions (e.g., nursing, psychology, social work), already underway, will accelerate.

[20] Then separate departments for men and women were slated to be united. My appointment was structured to launch the new department and, at the same time, help to redirect it toward research productivity. It all proved to be too much for a beginning, untenured assistant professor.

uniqueness, comprehensiveness, rigor, coherence, and utility. Above all, we were designing a performance-based field, one in which personal, direct performance experiences and performance analysis were connected and inseparable. Mirroring other performance-based disciplines such as art, music, and dance, Kinesiology was to be action-oriented and integrative (Lawson, 2007). Performance analysis via the discipline enhanced performance, and performance facilitated performance analysis.[21]

Such an integrated, action-oriented vision for Kinesiology depended on a cross-disciplinary framework. In our writing and also in our curriculum development, we deliberately crossed conventional borders and changed subject matter boundaries as we developed innovative courses. Our courses carried thematic titles to announce our unique cross-disciplinary subject matter. Thus, our courses were entitled "Sport and Society" instead of "The Sociology of Sport"; and Physiological Aspects of Exercise and Sport" in lieu of "The Physiology of Exercise." We insisted on thematic, cross-disciplinary titles to describe our unique subject matter for several reasons, the most important of which was the loss of uniqueness when the names of mainstream disciplines appeared in our course titles. In the culture of the research university, duplication of this kind invited conflicts and threatened a department's (and a field's) survival.

Relevance to School PE and Alternative Careers

In our joint vision, Kinesiology would prepare helping professionals for the range of alternative careers needed to reach people of all ages across the lifespan (Lawson, 1981). Today I am inclined to call this vision "lifespan sport, exercise, and health promotion and education." This vision encompasses the preservice preparation, continuing professional development, and research-supported practices of specialists able

[21] In retrospect, ours was an invitation to Deweyian pedagogy with its strong pragmatism.

to respond to individual and family needs, problems, and aspirations throughout the life course. Later I began to appreciate how our core curriculum could prepare these Kinesiology specialists to work together in teams, also reinforcing our hope that they would view themselves as members of the same field and pursue common and complementary purposes (Lawson, 2007).

In my view, PE (and HE) teachers and programs would be central components in such a lifespan, comprehensive delivery system for sport, dance, exercise, and generic physical activity (Lawson, 1979). Significantly, such a lifespan or life course developmental framework provided a better outcome orientation for school programs. Grounded in comprehensive theory and research about socialization into active, health enhancing lifestyles, it had the potential to prevent wishful thinking and over-promising tendencies by zealous advocates.

For example, some advocates for container PE in container schools promised grand outcomes such as lifetime sports education as well as lifetime exercise and fitness participation. Notwithstanding the importance of these outcomes, the fact remained that the research findings and theoretical frameworks I reviewed in several areas—e.g., adult development, leisure behavior, and sport/physical activity socialization—were at odds with advocates' grand claims about all of the grand outcomes school programs could systematically produce. Relevant theory and research also raised penetrating questions about whether young people's school PE would produce outcomes that would persist into adulthood, especially late life adulthood. Then, as now, I worried about fundamental questions of school PE's mission, goals, and purposes because I was mindful that one key

to outcomes-accountability lies in establishing outcomes that school programs can predictably, somewhat uniquely, and systematically produce (Lawson, in press b).

One of PE's unique contributions, it followed, involved getting young people ready for lifespan activity patterns and especially preparing them to make good choices as changing circumstances warranted. Good choices, in my view, included ones involving activity preferences developed from direct performance experiences and instruction. But more than performance experience, good choices required two important additions to conventional PE programs: (1) scientific knowledge and understanding provided by Kinesiology (Lawson & Placek, 1981); (2) self-regulatory, empowerment-oriented exercise and health-related behavior change technologies (McKenzie, 2007).

My rationale can be outlined as follows. No other programs, no other professionals, were better positioned than PE teachers to prepare and empower young people against the perils of predatory capitalism. Better yet, in community school configurations, teachers also could help parents and entire families learn the difference between fact and fancy, between genuine benefit and risk-danger. By blending enjoyable, meaningful performance experience with scientific knowledge, entire neighborhood communities could be headed toward active, health-enhancing lifestyles.

With this guiding vision in mind, I advocated for Kinesiology's centrality in PE, PETE, and their relations, albeit in an action-oriented, cross disciplinary curriculum (Lawson, 2007). I viewed Kinesiology as central to the preparation of teachers and also foundational in the design and conduct of school programs.

For example, I immediately perceived the import of exercise and health behavioral change interventions from the then fledgling sub-discipline of sport and

exercise psychology (e.g., Kimiecik & Lawson, 1996; McKenzie, 2007). Applied sport psychology's growing knowledge base for coaching behavior and preparation had obvious import to sport education-oriented PE teachers. Moreover, since social-cultural constraints and barriers often are responsible for sedentary lifestyles and unhealthy behavior, I also began to see the curriculum design relevance of sociological perspectives on socialization into sport and physical activity. After all, what were PE programs designed to accomplish if not to socialize young people and their families into sport and physical activity? And how could teachers and students alike address barriers to active lifestyles if they lacked sociological knowledge about the social construction of these barriers and how best to address and prevent them (e.g., McElroy, 2002)?

Furthermore, I could see the immediate applicability of applied exercise physiology, biomechanics, and integrated exercise and health science to definitions of "the physically educated student." In my view, school-age students needed to acquire and use this knowledge to differentiate between fact and fancy, i.e., they needed this knowledge as a kind of consumer protection against the lures of predatory capitalism. Additionally, I was convinced that school programs needed to prepare young people for self-directed learning and performance enhancement, in essence weaning them off dependence on the top-down training provided by expert coaches and teachers. Some of Kinesiology's subject matter provided the prerequisite foundation.

My evolving empowerment- and consumer protection-oriented framework thus emphasized students' cognitive development via Kinesiology's subject matter, including potentially exciting links to other school subjects, especially mathematics and science education. Better yet, this cognitive understanding was propelled by active learning via

performance experiences students enjoyed.[22] In this framework, "teaching games for understanding" immediately gained new meaning for me with attendant implications for teachers' pedagogical content knowledge and all that pertained to it.

Exercise and Health Literacy Linked to Embedded, Connected Learning

Thanks to a timely reminder by Professor Dr. Robert Bush, Director of the Centre for Community Health Studies at the University of Queensland, today I am able to offer a companion framework for Kinesiology-driven, school PE and HE programs. I call this framework "Exercise and Health Literacy." Founded on the need to develop and promote scientific literacy and understanding, exercise and health literacy entails the ability to read, learn, and behave in health-enhancing ways, protecting the self and others from threats and harms. More concretely, this special literacy is evident when people are able to read labels on food products and on exercise and sport products, learn, and act according, taking advantages of their opportunities, but also heeding their warnings and preventing risks, injury and harms. To return to a catchy phrase, people prepared with this literacy are able to distinguish between fact and fancy, between hoax and genuine opportunity, and act prudently and wisely. For example, with this special literacy, they know how and why to avoid performance enhancing drugs and other dangerous substances—and they behave accordingly. With this special literacy, they are prepared to make good decisions and act autonomously as educated citizens.

The need for this kind of exercise and health literacy is apparent in the USA. According to the U.S. Surgeon General Office (2007), at least 90 million Americans lack this fundamental literacy (see also Ayers, 2004). How can we expect them to become

[22] John Heron's (1996) construct, *knowledgeable skill*, is especially useful in crossing the borders and changing the boundaries between academically-oriented cognition and skill performance in action.

architects of health-enhancing, active lifestyles? How can we expect them to follow through with professional prescriptions from physicians and interventions provided by exercise and health behavior change specialists? And where else would they acquire this literacy if not in school programs? Rhetorical questions like these merit more attention. As they are addressed, the import of Kinesiology's subject matter for school programs will be illuminated, especially this subject matter's relations with health education.

Figure 3 (attached), which I adapted from a slide developed by officials at the Organization for Economic Cooperation and Development in Europe, depicts an instructional cycle for the development of exercise and health literacy. Significantly, this figure indicates how instructional cycles in service of exercise and health literacy double as ways for young people to acquire, reinforce, and strengthen overall scientific literacy.

Already after-school programs, like experience-based science and math curricula, are using exercise, sports, and games for literacy development. Called embedded learning—because science, math, and language learning is embedded in the performance activities young people enjoy—this approach also helps to forge solid connections with classrooms and their teachers. The same possibilities exist for social responsibility-related competence and its transfer to classrooms (Martinek, Schilling, & Johnson, 2001). All such planned, innovative connections cross borders and change boundaries, reducing and preventing subject matter marginality in conventional schools. Exciting possibilities involving embedded, connecting learning and social responsibility development stand as design opportunities in new century PE for global age schools.

Phase 3: Professional Socialization Theory and Research

Predictably, my community school models and my Kinesiology-related work for school PE, PETE, and HE were not welcomed by teacher education and school colleagues (Rink, 2007). The same fate accompanied proposals for cross-disciplinary Kinesiology. In both cases, colleagues' professional socialization and subsequent career commitments, identities and aspirations impeded acceptance and implementation. In both cases, I realized later, I and others were asking colleagues to accept, endorse and implement innovations for which they were wholly unprepared.

For example, Kinesiology professors received doctoral training in specialized arts and sciences academic disciplines, identified themselves as sociologists, psychologists, physiologists, etc., and formed specialized scholarly societies in support of their sub-disciplinary preferences and affiliations. Importantly, their doctoral programs and subsequent career organizations fell short of providing a collective identity, common purposes, and shared missions. Owing in part to their doctoral preparation, these professors were not interested in an action-orientation for the discipline, did not accept performance as the center for the field, and had minimal, if any, commitments to school PE programs (Lawson, 2007). In retrospect, our proposals for cross-disciplinary, performance-based, action-oriented, integrative, and lifespan development-oriented Kinesiology didn't stand much of a chance.

The same fate befell proposals for PE and PETE and for many of the same reasons. Owing to their socialization and also to their lived experiences in University Kinesiology and PE departments, PETE professors were unprepared to accept and disseminate to future and practicing teachers Kinesiology's content and applications. And no wonder. Many had not received preparation for this kind of orientation, and their

Kinesiology colleagues did little to develop the kinds of curricular, research, and program development relationships Morford and I envisioned. And then there was the root problem with some of my powerful PETE colleagues. While I was focused on the need for new institutional designs, they perceived threats to their ideologically-driven prototypes and their power and authority as gatekeepers.

A Focus on Professional Socialization and Institutionalization

As I confronted criticism, resistance, and even hostility, I discovered what turned out to be a cluster of important research questions. For example, why do the leaders in our field manifest such intolerance and continue to frame scholarly differences as "win-lose competitions? How do PE and PETE Programs become institutionalized and sustained? Why and how do prospective PE and PETE teachers develop custodial career and work orientations?

In subsequent years, questions like these have compelled and propelled a sometimes passionate search for new knowledge and understanding via professional socialization theory and research. I sought knowledge and understanding about how the field reproduced itself, produced and coped with endemic conflicts, and yet retained the potential for responsive and proactive change. My scholarly probes included the socialization of teachers (e.g., Lawson, 1983a & b; Lawson & Stroot, 1993), the socialization and social-cultural organization of teacher educators (e.g., Lawson, 1991a; in press a & b; Mitchell & Lawson, 1986); teachers' and teacher educators' epistemologies (e.g., Lawson, 1985; 1990), the need for new ethical-moral norms and principles for practice (e.g., Lawson, 1991b; 1999), and new frameworks for knowledge generation via innovative program designs (e.g., Lawson, 1998a; 2007; in press c).

An Ironic Turn

As my work on professional socialization and related topics proceeded, my career and status in the PE and PETE improved. As other researchers developed interests in professional socialization theory and research, hope replaced doubt.

Reality soon intervened as I witnessed first hand what, in shorthand, can be called "the power of paradigms" (Lawson, in press a & b). In a nutshell, the professional socialization framework I helped to pioneer, promote, and disseminate in order to develop new institutions and change the status quo was co-opted. More specifically, my friends and colleagues who adopted, expanded, and promoted the socialization framework were employing it in service of the very same programs, practices, and policies I had intended to reform and transform. The net result, of course, was that existing PETE and PE paradigms were strengthened and fortified anew while I and others with reformist and transformative agendas remained on the margins.

Looking Ahead: Persistent Needs and Challenges for Institutional Change

Considerable theoretical and empirical work remains to be completed in connection with the professional socialization research agenda. Relational theorizing and empiricism will be especially important because categorical theory and research, which separates and isolates key socialization phases (e.g., anticipatory socialization, recruitment, selection, preservice education, continuing professional development, career contingencies, career identities and commitments), yields impartial and potentially misleading information. One priority remains important to the field at large.

As we confront the need to create global age institutions and programs, we will need more theoretical and empirical knowledge about the dynamics and mechanisms for

institutional reproduction, reformation, and transformation. Three modes or pathways are implicated in this claim—reproduction, reformation, and transformation. Each merits more theoretical and empirical attention than it has received to date. More to the point, the relationships among the three are especially important because these relationships will be instrumental in yielding action-oriented knowledge needed for this design work.

Institutional reproduction entails custodial orientations, structures, and operational processes in support of the status quo. Arguably, we know more about institutional production than about the other two modes or pathways. My work provided some of this knowledge, and Bart Crum's (1990) framework for the self-reinforcing cycles of institutional reproduction is especially important.

Institutional reforms entail changes in roles, rules, and relationships within the existing PE and school systems. Reformist changes are ones of degree, not ones of kind. That the existing institutional structures and their connections to the political economy remain in place is not automatically an advantage, a limitation, or a flaw because place, context, characteristics and timing all matter in such determinations. In fact, today's institutional reforms may later prove to be stepping stones to tomorrow's institutional transformations. On the other hand, today's reforms also can vanish quickly, trumped by the forces and mechanisms of institutional reproduction. How and why do some reforms gain traction and move ahead? How and why do some lose their supports, even when their initial outcomes are promising, and then disappear? As the need for new institutional and program designs increases, so does our need for action-oriented answers.

Institutional transformations entail wholesale changes in nearly every aspect of existing institutions. Alternatively, they result from separate attempts to create entirely

new ones, in essence "starting from scratch." Transformations are revolutionary in nearly every respect. Revolutionary changes are marked by new visions, missions, goals, roles, rules and regulations, policies, and programs.

Importantly, transformative changes are required when social change is rapid, dramatic, and revolutionary, when special vexing needs and problems arise, and when existing institutions are woefully out-of-step with contemporary and fast-arriving future realities—as demonstrated in their inability to obtain desired outcomes. Where PE is concerned, we appear to know very little about sustainable institutional transformation at a time when we need this knowledge the most.

Phase 4: Responding to the Needs and Aspirations of Vulnerable Young People Challenged by Social Exclusion, Poverty, and Social Isolation

In every phase of my work and career, I have held an unwavering commitment to vulnerable children and youth because I was once such a vulnerable young person. I have been especially concerned with the opportunity structures for vulnerable young people, starting with the roles, functions, and responsibilities of schools for social and economic mobility in democratic societies. I have known something about the challenges associated with social mobility because I have experienced it, studied it, and recognized how fortunate I have been.

Like many readers, I suspect, competitive, elite sport was my "ticket" and provided a pathway. In technical terms, my socialization into sport provided opportunities for socialization via sport. Furthermore, when I was an undergraduate student I elected the health and physical education major because I wanted to "give back", i.e., share with young people the same the kinds of generous "gifts" civic-minded

coaches had given me. I envisioned sport as a powerful social intervention, just as it was for me, and with special salience to young people challenged by poverty. I also offered recommendations for the reconstitution of PE programs (Lawson, 1998b)

Wrestling with Social Exclusion, Poverty, and Social Isolation

Over the course of my career social exclusion discourses have replaced poverty discourses. Typically social exclusion implicates social isolation, and both are contrasted with social inclusion and integration. According to Kahn and Kammerman (2002) "Social exclusion is a multidimensional concept, involving economic, social, political, cultural and other aspects of disadvantage and deprivation" (p. 13). Moreover, social exclusion "is increasingly distinguished from financial poverty and focused instead on the idea of restricted access to civil, political, and social rights and opportunities. (Kahn & Kamerman, 2002, p. 13).

In the dominant version, social exclusion is something that *happens to* an individual; it is not something he or she chooses (Kahn & Kamerman, 2002, p. 15).[23] Social exclusion thus implicates strong structural forces and factors that create, i.e., socially construct and constitute, both vulnerability and hardship. Important questions follow from this exclusion-inclusion duality. For example: "Exclusion from *what* and *why* and inclusion *into what* and *how*?" (Kahn & Kamerman, 2002, p. 23). Moreover, *who* is excluded, and what are the consequences for individuals, families, communities, organizations, and entire societies? And what does this mean for schools and PE?

[23] The emergent version, fueled by massive movements of the world's people, focuses on social exclusion and isolation as matters of personal preference and choice. Some ethnic-minority immigrant populations, for example, engage in long-distance nationalism and absentee patriotism, maintaining allegiance and ties to their home (sender) nation and minimizing commitments to their host nation (Lawson, 2001a & b). This side of the social exclusion and isolation story" is still unfolding and is immensely challenging when opportunity structures are limited and blocked; and when populations prefer exclusion and isolation to social inclusion, integration, and some form of assimilation.

Social exclusion, isolation, and inclusion discourses showcase social-cultural forces and factors. All are, in principle, amenable to improvement. This singular advantage of social inclusion discourses is offset in part by a disadvantage—namely, the focus on social forces and factors deflects attention from economic hardship and deprivation. This is a significant problem because economic hardship and deprivation are instrumental in child and family vulnerability, and economic opportunity structures, i.e., especially educational pathways out of poverty, are instrumental in fostering social inclusion and integration. Thus, a complete, accurate descriptor for the problem at hand requires more than social exclusion discourses. I prefer the three-component descriptor of social exclusion, poverty, and social isolation. This is a cumbersome, clumsy label to wrestle with, but recent theories support it.

Concentrated Disadvantage and Concentration Effects

The new social geography, particularly the social-geographic landscape characteristic of most American and many world cities,[24] supports a multi-dimensional focus on social exclusion, poverty, and social isolation. Arguably, the most popular theoretical account in the USA has been provided by William Julius Wilson (1987; 1997). Wilson developed and popularized two inseparable concepts, *concentrated disadvantage and concentration effects,* to identify, describe, and explain this new social geography, especially the social geography of need, deprivation, and hardship.

In a nutshell, de-industrialization and the loss of manufacturing jobs, especially in urban core areas, is the driver for multiple challenges and negative consequences. Employable persons leave these urban core areas, leaving behind the unemployed and the

[24] Social exclusion, poverty, and social isolation are not restricted to cities. Rural areas are especially hard-it and so are Native American or Indigenous communities with their respective social geographies.

difficult-to-employ[25]. At the same time, migrants to these urban core areas tend to be poor, ethnic-minority individuals and families. Newly constituted neighborhoods lack strong social capital networks and social cohesion, and both individuals and families suffer the effects of social isolation. Human services and consumer services decline, and some disappear. Over time, disadvantage is concentrated in these urban core areas, marking a major change in the social geography of neighborhoods and cities.

Concentration effects stem from concentrated disadvantage. Appropriately labeled as "rotten outcomes" (Schorr, 1989), concentration effects include child abuse and neglect, school failure and drop out, substance abuse, crime and delinquency, domestic violence, mental health problems, health problems, housing stress, food insecurities, and employability challenges. Importantly, concentration effects tend to co-occur and some interlock. Find one and you're likely to find others. Addressing one entails addressing the others. In other words, because the problems are interdependent, so are the people who must act to address them.

Problem-setting: Wicked Problems Replace Tame Ones

Neighborhood communities and core urban areas challenged by concentrated disadvantage and concentration effects reveal the insidious, combined power of social exclusion, poverty, and social isolation.[26] These twin constructs also implicate structural forces and factors in the mass production of hardship and vulnerability. Importantly, for purposes of this analysis, when poverty, social exclusion, and social isolation are

[25] School compositions and school size change in the process, especially as parents choose the "exit option." Concentrated poverty among the student population, challenging enough, is exacerbated by resource shortfalls because tax revenues, which support schools, have declined with the loss of jobs and industry. Such is the growing plight of many American urban schools and school systems.

[26] Nearly every action-oriented analysis of this new social geography includes an emphasis on the strengths and resilience of individuals and families and the developmental assets of neighborhood communities. I work with the same strengths-based, solution-focused, and empowerment-oriented framework.

concentrated, and when concentration effects are evident, the selectivity and limitations of industrial age institutions, organizations, and professions must be confronted.

Concentration effects comprise a new genus of problems called “wicked problems,” which stand in marked contrast to “tame ones” (Lawson, in press d). Tame problems are easily isolated, analyzed for their causes and effects, labeled and categorized, and then assigned to a relevant human service profession (e.g., physical educators) and their sponsoring organization (e.g., a school). Tame problems are, in brief, amenable to industrial age, linear thinking and problem solving wherein a limited number of discrete variables can be manipulated and controlled and a “canned intervention” can be pulled off the shelf to produce the desired outcome.

Not so with wicked problems. They are surrounded by and promote complexity, novelty, uncertainty, in part because problems nest in each other and also because there are no known and proven solutions. In fact, there are competing theories of the problem and competing intervention plans for addressing it. Even more to the point, these theories cross long-standing borders, and they change familiar boundaries.

These wicked problems compel the development of innovations that improve outcomes. Above all, no one profession or organization can accomplish the needed searches, “researches”, and program-service design and development. Genuine collaboration among professionals is a practical necessity, and so are organizational partnerships in support of new working arrangements, fresh intervention designs, and responsive policy change (Lawson, in press d). Integrative, child and family policy is especially needed (Aber, 2007; Gardner, 2005) because industrial age categorical policy

(e.g., separate, specialized health policy, social policy, educational policy) often impedes the complex systems changes afforded by collaboration and partnerships.

Back to Community Schools and School-Family-Community-University Partnerships

My phase 4 work has been structured to address the wicked problems stemming from social exclusion, concentrated poverty, and social isolation. This work has required that I cross the borders separating education, social work, and the health professions and reconfigure their boundaries and relationships. It also has positioned me to prepare education, health, and social work leaders to join in this work. In fact, this new research, development, and education agenda accounts for my joint appointments in Educational Administration and Policy Studies and Social Work.

I began this work in the 1970's when I searched for literature in support of the community school. My search was fruitless until I found the social work literature and the then-fledgling community psychology literature. I have continued to rely on both literatures, adding literature from nursing and medicine, over the past 35 years.

My work advanced at a snail's pace during the 1980's as I returned to the community school model I first encountered in 1969. With others I have developed new models for schooling in the search for answers to a school drop out problem that had reached epidemic proportions—40 to 60% of all high school students in some cities fail to graduate. At the same time, we were concerned with the need to develop educational and career pathways to success for vulnerable young people. Using popular policy language from the USA and the United Kingdom, our question was: What new institutions are needed to leave no child behind and to demonstrate that every child matters? Moreover, how do we reform and transform container schools that sort young

people into service-oriented institutions that meet universal needs? What can schools, colleges, and departments of education do differently and better in service of this agenda? And what do changes in education and schooling portend for PE, PETE, and HE?

My work with schools took a new turn during the 1990s thanks to special leadership development programs, grant-funded innovations aimed at school-linked health and social services, and a companion focus on public child welfare systems. The child welfare work included social work and other professions serving at-risk children and families, especially children who have been abused and neglected. As this work proceeded, I discovered that schools and child welfare systems fundamentally depended on each other (Lawson, 1995), and both needed integrated social and health services aimed at strong, stable families and supportive neighborhood communities (Lawson & Sailor, 2000). Additionally I learned that both school systems and child welfare systems also depended on the health system, the mental health system, and, for kids in trouble and in special education, the juvenile justice system.

Unfortunately, the professions responsible for each system and for forging collaborative relationships and organizational partnerships were not proceeding in a manner that reflected and cemented their de facto interdependence. In fact, their professional socialization mechanisms, accountability systems, funding streams, and policy systems mass produced separate, even competing, systems of care. Here, in short, was a wicked problem for the ages.

Striving to cross professional and organizational borders, change their boundaries, and build solid bridges needed for collaborative working relationships, I accepted the challenges of complex systems change because there was no other choice. As the saying

goes, business-as-usual today—continuing to support industrial age institutions ill-matched for wicked problems—produced results-as-usual tomorrow. And results-as-usual—sub-optimal outcomes for vulnerable populations, was not an option.

In pursuit of interprofessional bridges and successful working arrangements and relationships, I thus joined others in pioneering new policy and practice frameworks for interprofessional collaboration (e.g., Lawson & Sailor, 2000) and also for companion professional education programs initiatives called "interprofessional education" (e.g., Lawson, 1996). Interprofessional education programs, both in preservice education and in continuing professional development programs, are structured to prepare diverse, specialized professionals to collaborate and also to help their organizations form partnerships.

My work expanded to include higher education reforms with a special emphasis on the import of postsecondary education for the new jobs and industries of the global economy. With others, I have worked on educational pathway development into higher education (Lawson & Anderson-Butcher, 2007). This work has the theoretical rationale and partnerships needed in outreach- and engagement-oriented universities (Lawson, 2002). The special model of the university-connected community school (also called "university-assisted, community schools) has been an enduring interest and a modest success story for those of us advancing it (Lawson, in press c).

New Frameworks for Physical Education and Health Education

What roles, responsibilities, functions, and opportunities await new designs for PE and HE in socially excluded, high poverty communities? How can PE and HE be integrated in innovative ways and yield better outcomes? More specifically, what new

designs are needed to address health disparities? After all, many health disparities are wicked problems evident in areas challenged by concentrated disadvantage. For example, many disparities are inseparable from, and caused by, sedentary lifestyles, inappropriate and inadequate nutrition, family stress and violence, housing insecurities, and unhealthy school environments, and both unsafe and unhealthy community environments. The challenges of health disparities, seemingly overwhelming, were compounded when a new dimension was added. Health disparities and educational disparities often nested in each other (e.g., Berliner, 2006). Addressing one entailed addressing the other with innovative, complex initiatives and interventions.

Here was another portal into the world of wicked problems. For example, where health disparities are concerned, physical educators, health educators, and other school leaders cannot solve them alone. Framed by social-ecological frameworks and accompanying policy designs, the solutions to health disparities depend on interprofessional collaboration with psychologists, nurses, physicians, and community planners as well as broad-based community collaboration with residents and other relevant stakeholders. For, in addition to focusing on young people, adults, and entire families, the elimination of health disparities requires new environmental designs, i.e., this work requires changes in the built environment that reflects and promotes concentrated disadvantage and concentration effects (e.g., Flournoy, 2002; Joint Center for Political and Economic Studies & PolicyLink, 2004a & b; Sallis et al., 2006).

For example, active, healthy lifestyles hinge on safe, secure, health-enhancing facilities and performance environments. Appropriate nutrition depends on access to healthy foods, and access to healthy foods depends on affordable, accessible grocery

stores in neighborhoods currently without them. The chain of interlocking design priorities does not stop here, and it is lengthy and complex. For example, multiple policy changes are needed. The list includes changes in school food vending contracts, changes in the built environment in support of "walkable" neighborhoods, changes in public transport to enable access to sport and exercise facilities, fee waivers to enable access to sport and recreation facilities, improved police surveillance in support of children's play, and environmental clean-ups to address lead poisoning, asbestos-related lung hazards, and urban brown fields that cause cancer. Funding policies in support of new exercise, sport, and health initiatives and facilities are additional priorities.

Wicked problems are humbling and transcend the ability and understanding of any one person. They require teams of talented people who are able to cross borders, change boundaries, and develop innovations that improve outcomes. No wonder that my contributions to this critically important work are limited to the work I have described thus far and three other possibilities. Because these three are under-developed in every respect, I can do little more than identify them and leave the relevant details for future work with interested colleagues. I begin with the easiest ones.

Sports and Games for Intercultural Understanding and Social Integration. Teaching sports and games for understanding, a catchy and attractive descriptor, can gain new meaning when sport and PE are framed as social interventions (Hartmann, 2003) Simply put, the research literature indicates that one of the best ways to promote social inclusion and integration and, at the same time, to prevent and alleviate prejudice and inter-group hostilities, is by developing supportive settings for friendship-oriented, interpersonal interactions (e.g., Hewstone, Rubin, & Lewis, 2002; Pettigrew, 1998). PE

has long had this potential, and in many cases, thanks to talented teachers, it has achieved some of it. The time has arrived to capitalize on it.

In socially excluded, high poverty school communities riddled by inter-cultural and gang-related conflicts, social inclusion and integration work are needed as never before. I have developed Figure 4 (attached) to illustrate the features of programs and supportive settings that facilitate social inclusion and integration, (e.g., Halpern, 2003; Marks & Lawson, 2005; Stanton-Salazar, 2001; Wright, Stockton, & Hays, in press;). It is important to note that these features do "double duty" as design criteria for global age PE programs, enriching the criteria presented earlier in Figure 1. To accomplish social inclusion and integration, physical educators will need a different kind of pedagogical content knowledge derived from social work, counseling, cultural anthropology, and psychology. Presently, no one profession has this competence. It is a timely opportunity, and it is the kind of work that must proceed in teams, including youth leaders as team members.

Obesity and Its Educational and Life Course Developmental Implications for Adolescent Girls. Young people's obesity is a wicked problem, especially when it is evident among populations challenged by social exclusion, poverty, and social isolation. Cutting edge research completed recently in the USA adds more complexity and import to this wicked problem.

Crosnoe's (2007) research (see also Gortmaker, Must, Perrin, Sobol, & Dietz, 1993) utilizes longitudinal data from the national study of adolescent health. His research demonstrates that obese, adolescent girls suffer educational consequences and, in turn, career and life course developmental consequences. In brief, the social stigmas and

negative social identities provided in selected school environments are instrumental in the progressive disengagement of adolescent girls. An identifiable pattern follows, including attendance problems and lower academic achievement. Significantly, obese adolescent girls' educational aspirations and career opportunities are affected; they are less likely to aspire to and attend postsecondary education. Here, then, is a powerful connection between health and education, and it is indicative of social exclusion and social isolation.

Companion research led by McKenzie (2007) and his colleagues (McKenzie, et al, 2006) indicates that PE programs for girls, a potential intervention for obesity, often fall short because girls do not get sufficient physical activity. However, conventional, industrial age PE may not be the best intervention. Pioneering interventions piloted by insightful researchers hold promise, and their implications for the design and conduct of school PE and HE programs are profound.

For example, Wright, Stockton, and Hays (in press) have developed a special kind of social responsibility model for adolescent girls. Other specially-designed, gender-specific programs in which the girls serve as co-designers also hold considerable promise. In contrast to conventional PE, the girls choose the activities and, all in all, create favorable conditions for the behavior and lifestyle change interventions adult leaders provide them. Furthermore, some such interventions address the ecologies for obesity, especially the changes needed in family systems (Jammer, et al., 2004; Warren, et al., 2003). The implications for PE and HE are profound, and they illuminate anew the design criteria presented in Figures 1 and 2.

A Complex, Theory of Change Logic Model for Integrated PE and HE. Figure 4 presents my best attempt to identify the relevant aspects of a comprehensive, integrated

approach that responds to the needs of young people and their schools in socially excluded, high poverty, and isolated communities.[27] Not by accident, the several components (family supports and services, youth development programs) are the same ones offered, connected, and integrated in community schools. In short, the model presented in Figure 4 derives from and reinforces the community school model. Together they provide one way to begin systematically and more comprehensively address the interlocking concentration effects implicated in the production of health disparities and educational disparities.

The discussion has come full circle (starting in Phase 1) with the reminder that community schools are structured to serve as hubs for youth development, family support, and neighborhood revitalization. My work in Phase 4 has provided reminders of this model's potential for addressing the adverse effects of social exclusion, poverty, and social isolation through innovations involving PE's sports, games, exercise programs, and play. On a good day, visions like these persuade me that the golden age for PE is still ahead of us, but only if we are prepared and able to seize the accompanying opportunities for institutional reform and transformation.

Summary and Conclusions

The rotten outcomes evident in too many school communities challenged by social exclusion, poverty, and social isolation have led me to a fresh conclusion. *The opportunities, assistance, supports, and resources needed for young people to develop, maintain, and promote active, healthy lifestyles belong on the list of universal, human rights*. PE, HE, and community recreation programs are instrumental in the provision of

[27] I am indebted to Jerry Bean and Dawn Anderson-Butcher for this logic model template design.

these opportunities, assistance, supports, and resources. Here, in short, is a common purpose for colleagues in diverse parts of the world.

Such a universalist, human rights perspective draws on firm ethical-moral principles and also promotes them. For example, it emphasizes profound questions of social responsibility, and it illuminates needs for professional accountability. Additionally, this human rights perspective invites grand visions for individual and family well being and just sustainable societies in a peaceful world. What a magnificent framework for renewing and re-designing PE, new century schools, HE, and recreation!

The practical questions remain. Who will lead this work? Who is prepared to follow and co-lead? And what are the design imperatives for this universal right to be achieved?

In striking contrast with industrial age designs grounded in leader-advocates' preferences and ideologies, global age designs simply must begin with the available research evidence and proceed with intervention logic. Two kinds of research findings are especially salient. While the evidence continues to mount regarding the multiple benefits of appropriate physical activity experiences and programs, the evidence also casts doubt on whether industrial age, school PE programs systematically and somewhat uniquely produce these outcomes-as-benefits. Second, there is reason to believe that ill-designed, industrial age PE programs actually discourage active, healthy lifestyles because they cause harm. Although both findings are cause for alarm, if PE programs cause harm in the name of helping young people and supporting their active, healthy lifestyles,[28] then the field is in trouble, and its public supports and resources are at risk.

[28] Illich (1975) employed the concept of "iatrongenesis" to describe situations like this. Institutions and programs-services become iatrogenic when they inflict harms in the name of service.

I have claimed in the preceding analysis that the search for causes and potential solutions begins with the problems in industrial age schools and PE and the need for new, global age designs. Although industrial age PE promises to be sustained in some ways for a yet- undetermined period of time, the future of school PE depends in part on new institutional designs that systematically and somewhat uniquely achieve desirable outcomes. Hybrid designs that combine industrial and global age institutions will be normative. In view of the fast-changing youth sub-cultures worldwide and new circumstances surrounding their peer groups, families and communities, fresh designs that "break the mold" and provide a clear departure from today's industrial age PE are an urgent priority and a practical necessity. Container PE in container schools won't do.

For example, some PE will be offered during out of school time, and it will be connected to family and community needs and resources. Some PE will be school-based, while other programs will be jointly offered in community settings and agencies (with firm connections to schools). Some PE will be restricted to sport, exercise, and movement performance, while other kinds will be integrated with health education, emphasizing exercise, sport, and health literacy. Some will be organized and conducted by certified teachers nearly identical to today's, while others will enjoy new leadership provided by specialists from Kinesiology and human services professionals from other fields (e.g., nursing, social work, health psychology, and even pediatric medicine). Some will proceed with interprofessional collaboration, while others will be expanded to include joint leadership by youth, parents and local leaders. All such global age variety stands in stark contrast to industrial age institutions and programs with their steady march toward uniformity and standardization. All implicate design changes in PETE programs.

In the preceding analysis, I have offered candidates for new designs. Far from the last word on the subject, my contributions invite others from colleagues worldwide because clearly, the best institutional designs will outstrip the ability of any individual. They will be collective achievements. Unique in their tailoring to cultural and national contexts, these new designs will be optimized when they have three interdependent components. They will be guided by *strong ethical-moral principles,* directed toward *the pursuit of common purposes* (e.g., active, healthy lifestyles for everyone), and framed by *grand visions suitable for global, interdependent societies and nations* (e.g., individual and family well being in just, sustainable societies in a peaceful world).

In view of the challenges posed by industrial age, often self-reproducing institutional structures and operations, we need to proceed with haste, conviction, and rigor. We especially need new structures and opportunities to organize and mobilize for collective action. Institutional design, knowledge generation, and the development and implementation and evaluation of "policy-pilots"[29] need to be joined and integrated.

Toward these ends, we can employ and benefit from specially-designed, action research conferences, which are called appropriately "search conferences" (Greenwood & Levin, 2007). Search conferences start with the need for new agendas and problem-setting activities (Lawson, 1984), and they generate knowledge and understanding at the same time that implementation plans are finalized. In contrast to conventional scholarly and scientific conferences characterized by descriptive-explanatory-analytic knowledge (propositional knowledge, "spectator-outsider knowledge"), action-oriented search conferences are pragmatic, participatory, and directed toward actionable outcomes.

[29]Pilot projects for new institutional designs, important in their own right, also need to be framed, developed, evaluated and disseminated as policy mechanisms. I owe this construct to Katharine Briar-Lawson who used it in her work with state government.

Search conferences thus set the stage for national, regional, and international communities of practice that function as high performing learning systems.

Four design priorities identified in the preceding analysis may be worthy of consideration in the development of search conferences, other scholarly forums, and innovative policy pilots. First, innovative designs must solidly connect PE to the growing variety of global age schools, demonstrating that school PE systematically and somewhat uniquely offers contributions to young people's learning, healthy development, and success in school. At the same time, innovative PE designs must respond to urgent national priorities for improvements in the health status of every citizen, but especially its young ones. Third, PE's special contributions to the prevention and alleviation of health disparities, school disparities, and these disparities' relationships comprise a special design priority. And fourth, university-school partnerships focused on policy pilots and facilitating the simultaneous renewal and improvement of PE, PETE, and Kinesiology need to be advanced, sustained, and rigorously evaluated for their multiple innovations and beneficial outcomes.

All such work entails crossing borders, changing boundaries, and developing innovations that improve outcomes. My four-phase scholarly and career journey, sketched in the preceding analysis, has mirrored this work. If my journey enables colleagues to cope with the attendant challenges, capitalize on the accompanying opportunities, and, most of all, improve outcomes for young people, families, and communities, my search has been worthwhile.

References

Aber, J.L. (2007). *Child development and social policy*. Washington DC: American Psychological Association.

Ayers, S.F. (2004). High school students' physical education conceptual knowledge. *Research Quarterly for Exercise and Sport*, **75**, 272-287.

Berliner, D. (2006). Our impoverished view of educational reform. *Teachers College Record*, *108*(6), 949-995.

Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America: Educational reform and the contradictions of economic life*. New York: Basic Books.

Briar-Lawson, K., Lawson, H., & Hennon, C. with Jones, A. (2001). *Family-supportive policy practice: International perspectives.* New York: Columbia University Press.

Callahan, R. (1962). *Education and the cult of efficiency*. Chicago: University of Chicago Press.

Coalition for Community Schools (2007). Patricia Harvey discusses successes and challenges in St. Paul's public schools. *Community Schools Online*, **1**, 1.

Crosnoe, R. (2007). Gender, obesity, and education. *Sociology of Education*, **80** (July), 241-260.

Coatsworth, J.D., & Conroy, D.E. (2007). Youth sport as a component of organized afterschool programs. *New Directions for Youth Development*, **115**, 57-74.

Crum, B.J. (1990). The self reproducing failing of physical education. In: R. Telama et al. (Eds.), *Physical education and life-long physical activity* (pp. 294-303). Jyväskylä, Finland: Foundation for Promotion of Physical Culture and Health.

Crum, B. (2007, September). How to pave the road for a better future for physical education. Invited paper for symposium "Physical Education: Past, Present and Future" Ghent University, Ghent, Belgium.

Donnelly, P., & Coakley, J. (2002). *The role of recreation in promoting social inclusion.* Toronto: The Laidlaw Foundation.

Doolittle, S. (in press). Integrated health and physical education, physical activity and youth development: A second generation program for low-income school districts. In L. Housner, T. Templin, & P. Schempp (Eds.), *Historic traditions and future directions in research on teaching and teacher education in physical education.* Blacksburg, VA: Fitness Information Technology.

Ennis, C. D. (2006). Curriculum: Forming and reshaping the vision of physical education in a high need, low demand world of schools. *Quest*, **58**, 41-59.

Flournoy, R. (2002). Regional development and physical activity: Issues and strategies for promoting health equity. Oakland, CA: PolicyLink. Downloaded from http://www.policylink.org/Research/PhysicalActivity/

Gardner, S. (2005). *Cities, counties, kids, and families: The essential role of local government.* Boulder, CO: Rowman & Littlefield Publishers.

Gortmaker, S.L., Must, A., Perrin, J., Sobol, A., & Dietz, W. (1993). Social and economic consequences of overweight in adolescence and young adulthood. *The New England Journal of Medicine,* **329**, 1108-1012.

Gortmaker, S.L., Peterson, K., Wiecha, J., Sobol, A.M., Dixit, S., Fox, M.K., & Laird, N. (1999). Reducing obesity via a school-based interdisciplinary intervention among youth: Planet health. *Archives of Pediatric Adolescent Medicine*, **153**(4), 409-418.

Greenwood, D., & Levin, M. (2007). *An introduction to action research*. Thousand Oaks, CA: Sage Publishers.

Halpern, R. (2003). *Making play work: The promise of after-school programs for low-income children.* New York: Teachers College Press.

Hartmann, D. (2003). Theorizing sport as social intervention: A view from the grassroots. *Quest*, **25**(2), 118-140.

Hellison, D., Cutforth, N., Kallusky, J., Martinek, T., Parker, M., & Stiehl, J. (2000). *Youth Development and Physical Activity: Linking universities and communities*. Champaign, IL: Human Kinetics.

Heron, J. (1996). *Cooperative inquiry: Research into the human condition*. London: Sage Publications Ltd.

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Reviews of Psychology, 53*,575-604.

Illich, Ivan (1975) *Medical Nemesis: The expropriation of health*, London: Marian Boyars.

Jammer, M. S., Spruijt-Metz, D., Bassin, S., & Cooper, D.M. (2004). A controlled evaluation of a school-based intervention to promote physical activity among sedentary adolescent females: Project FAB. *Journal of Adolescent Health*, **34**(4), 278-289.

Joint Center for Political and Economic Studies & PolicyLink (2004a). *A place for healthier living: Improving access to physical activity and healthy foods*.

Washington, DC: Authors.

Joint Center for Economic and Political Studies & PolicyLink (2004b). *Building stronger communities for better health.* Washington, DC: Author & PolicyLink.

Kahn, A., & Kamerman, S. (2002). Social exclusion: A better way to think about childhood deprivation? In A. Kahn & S. Kamerman (Eds.), *Beyond child poverty: The social exclusion of children* (pp. 11-36). New York: The Institute for Child and Family Poverty at Columbia University.

Kimiecik, J., & Lawson, H. (1996). Toward new approaches to exercise behavior change and health promotion. *Quest,* **48**(1), 102-125.

Larson, R.W., Hansen, D., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology*, 42, 849-863.

Lawson, H. (1979). The role of school physical education programs in a delivery system for sport and physical activity. *Manitoba Journal of Education,* **13**(2), 5-11.

Lawson, H. (Ed.) (1981). *Undergraduate education: Issues and approaches*. Washington, D.C.: National Association for Sport and Physical Education.

Lawson, H. (1983a). Toward a model of teacher socialization in physical education: Entry into schools, teachers' role orientations, and longevity in teaching. *Journal of Teaching in Physical Education*, **3**(1), 3-15.

Lawson, H. (1983b). Toward a model of teacher socialization in physical education: The subjective warrant, recruitment, and teacher education. *Journal of Teaching in Physical Education*, **2**(3), 3-16.

Lawson, H. (1984). Problem-setting for physical education and sport. *Quest,* **36**(1), 46-60.

Lawson, H. (1985). Knowledge for work in the physical education profession. *Sociology of Sport Journal*, **2**(1), 9-24.

Lawson, H. (1986). Occupational socialization and the design of teacher education programs. *Journal of Teaching in Physical Education,* **5**(2), 107-116.

Lawson, H. (1988). Occupational socialization, cultural studies and the physical education curriculum. *Journal of Teaching in Physical Education,* **7**(4), 265-288.

Lawson, H. (1990). Beyond positivism: Research, practice, and undergraduate professional education. *Quest*, **42**(2), 161-183.

Lawson, H. (1990). Sport pedagogy research: From information gathering to useful

knowledge. *Journal of Teaching in Physical Education, 10*(1), 1-20.

Lawson, H. (1991a). Future research on physical education teacher education professors. *Journal of Teaching in Physical Education*, **10**(3), 229-248.

Lawson, H. (1991b). Three perspectives on induction and a normative order for physical education. *Quest*, **43**(1), 20-36.

Lawson, H. (1992). Toward a socio-ecological conception of health. *Quest, 44*, 105-121.

Lawson, H. (1993a). School reform, families and health in the emergent national agenda for economic and social improvement: Implications. *Quest*, **45**, 289-307.

Lawson, H. (1993b). After the regulated life. *Quest*, **45**, 523-543.

Lawson, H. (1994). Toward healthy learners, schools and communities. *Journal of Teacher Education*, **45**(1), 62-70.

Lawson, H. (1995). Schools and educational communities in a new vision for child welfare. *Journal for a Just and Caring Education,* **1**(1), 5-26.

Lawson, H. (1996). Expanding the Goodlad/NNER agenda: Interprofessional education and community collaboration in service of vulnerable children, youth and families. *Holistic Education Review*, **9** (1), 20-34.

Lawson, H. (1997). Children in crisis, the helping professions and the social responsibilities of the university. *Quest*, **49**(1), 8-33.

Lawson, H. (1998a). Academically-based community scholarship, consultation as collaborative problem-solving, and a collective responsibility model for the helping fields. *Journal of Educational and Psychological Consultation*, **9**, 195-232.

Lawson, H. (1998b). Rejuvenating, reconstituting and transforming school and community physical education to meet the needs of vulnerable children, youth and families. *Journal of Teaching in Physical Education*, **18**, 2-25.

Lawson, H. (1999). Education for social responsibility: Preconditions in retrospect and prospect. *Quest*, **51**, 116-149.

Lawson, H. (2001a). Introducing globalization's challenges and opportunities and Analyzing economic globalization and liberalization. In K. Briar-Lawson, H. Lawson, & C. Hennon with Jones, A., *Family-centered policies and practices: International implications* (pp. 293-337). New York: Columbia University Press.

Lawson, H. (2001b). Globalization, flows of culture and people, and new century

frameworks for family-centered policies, practices, and development. In K. Briar-Lawson, H. Lawson, & C. Hennon with A. Jones. *Family-centered policies and practices: International implications* (pp. 338-376). New York: Columbia University Press.

Lawson, H. (2002). Beyond community involvement and service learning to engaged universities. *Universities and Community Schools*. **7**(1-2), 79-94.

Lawson, H. (2004). The logic of collaboration in education and the human services. *The Journal of Interprofessional Care.* **18**, 225-237.

Lawson, H. (2005). Empowering people, facilitating community development, and contributing to sustainable development: The social work of sport, exercise, and physical education programs. *Sport, Education, and Society,* **10**(1), 135-160.

Lawson, H. (2007). Renewing the core curriculum. *Quest,* **59**, 219-243.

Lawson, H. (in press a). Paradigms, exemplars, and social change. *Sport, Education and Society.*

Lawson, H. (in press b). Paradigms, exemplars, and social change: Research needs for new program designs and supportive policy. In L. Housner, T. Templin, & P. Schempp (Eds.), *Historic traditions and future directions in research on teaching and teacher education in physical education.* Blacksburg, VA: Fitness Information Technology.

Lawson, H. (in press c). An appreciation of the developing model for university-assisted community schools. *Universities and Community Schools*.

Lawson, H. (in press d). Collaborative practice. In T. Mizrahi, et al. (Eds), *The encyclopedia of social work.* New York: Oxford University Press.

Lawson, H., & Anderson-Butcher, D. (2007). *Lessons learned from P-16 local councils in Ohio*. Cincinnati, OH: KnowledgeWorks Foundation. Available at: http://www.kwfdn.org/p16/p16_councils/work/index.asp

Lawson, H., Claiborne, N., Hardiman, E., Austin, S., & Surko, M. (2007). Deriving theories of change from successful community development partnerships for youths: Implications for school improvement. *American Journal of Education*, **114** (November), 1-40.

Lawson, H., & Morford, W.R. (1979). The crossdisciplinary nature of kinesiology and sport studies: Distinctions, implications, and advantages. *Quest,* **31**(2), 222-231.

Lawson, H., & Placek, J. (1981). *Physical education in the secondary schools: Curricular alternatives.* Boston: Allyn & Bacon.

Lawson, H., & Sailor, W. (2000). Integrating services, collaborating, and developing connections with schools. *Focus on Exceptional Children*, **33**(2), 1-22.

Lawson, H., & Stroot, S. (1993). Footprints and signposts: Perspectives on occupational socialization research. *Journal of Teaching in Physical Education*, **12**, 437-446.

Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services.* New York: Russell Sage Foundation.

Marks, M.B., & Lawson, H.(2005). The import of co-production dynamics and time dollar programs in complex, community-based child welfare initiatives for "hard to serve" youth and their families. *Child Welfare*, **LXXXIV**, 209-232,

Martinek, T., Schilling, T., & Johnson, D. (2001). Transferring personal and social responsibility of underserved youth to the classroom. *The Urban Review*, *33*, 29-45.

McElroy, M. (2002). *Resistance to exercise: A social analysis of inactivity*. Champaign, IL: Human Kinetics Publishers.

McKenzie, T. (2007). The preparation of physical educators: A public health perspective. *Quest*, **59**(4), 346-357.

McKenzie, T. L., Catellier, D. J., Conway, T., Lytle, L. A., Grieser, M., Webber, L. A., Pratt, C. A, & Elder, J. P. (2006). Girls' activity levels and lesson contexts during middle school PE: TAAG baseline. *Medicine & Science in Sports & Exercise*, **38**(7), 1229-1235.

Miller, R., & Shinn, M. (2005). Learning from communities: Overcoming difficulties in dissemination of prevention and promotion efforts. *American Journal of Community Psychology*, **35**(3/4), 169-183.

Mitchell, M.F., & Lawson, H. (1986). Career paths and role orientations of professors of teacher education, in: M. Pieron and G. Graham (Eds) *Sport pedagogy: The 1984 Olympic scientific congress proceedings Vol. 6*, (Champaign: Human Kinetics), 41-46.

Morford, W.R., & Lawson, H. (1981). Body and Mind in the 90's: The role of departments of physical education in the universities. In F. Hayden (Ed.), *Body and mind in the 90's*, (pp. 41-48). Ottawa: Canadian Council of University Administrators of Physical Education.

Mullen, E., Shlonsky, A., Bledsoe, S., & Bellamy, J. (2004). From concept to implementation: challenges facing evidence-based social work. *Evidence & Policy*, **1**(1), 61-84.

National Center for Education and the Economy. (2007). *Tough choices or tough times:*

The report of the new commission on the skills of the American workforce. San Francisco: Jossey-Bass Wiley imprint.

Pettigrew, T. (1998). Intergroup contact theory. *Annual Reviews of Psychology*, **49**, 65-85.

Rink, J. (2007). What knowledge is of most worth? Perspectives on kinesiology from pedagogy. *Quest*, **59**(1), 100-110.

Rodgers, D.T. (1978). *The work ethic in industrial America, 1850-1920*. Chicago: University of Chicago Press.

Sallis, J. F., Cervero, R. B., Ascher, W., Henderson, K. A., Kraft M. K., & Kerr, J. (2006). An ecological approach to creating active living communities. *Annual Review of Public Health*, **27**, 297-322.

Schorr, L., (1989). *Within our reach: Breaking the cycle of disadvantage*. New York: Anchor Books.

Shernoff, D.J., & Vandell, D.L. (2007). Engagement in after-school program activities: quality of experience from the perspective of participants. *Journal of Youth Adolescence*, **36,** 981-903.

Shils, E. (1981). Tradition. Chicago: University of Chicago Press.

Siedentop, D., Hastie, P.A., & van der Mars, H. (2004). *Complete guide to sport education*. Champaign, IL: Human Kinetics.

Simon, H. (1996). *The sciences of the artificial*. Third Edition. (Cambridge, MA: MIT Press).

Spring, J. (1974). *The sorting machine: National educational policy since 1945.* Reading, MA: Addison-Wesley-Longman Ltd.

Stanton-Salazar, R. D. (2001). *Manufacturing Hope and Despair*. *The school and kin support networks of U.S.-Mexican youth*. New York: Teachers College Press.

Tyack, D. (1974). *The one best system: A history of urban education*. Cambridge, MA: Harvard University Press.

U.S. Surgeon General's Office. Improving health literacy. Retrieved November 11, 2007 from http://www.surgeongeneral.gov/publichealthpriorities.html

Warren, J.M., Henry, C.J., Lightowler, H.J., Bradshaw, S.M., & Perwaiz, S. (2003). Evaluation of a pilot school programme aimed at the prevention of obesity in children. *Health Promotion International*, **18**(4), 287-296.

Wilson, W.J. (1987). *The truly disadvantaged: the inner city, the under class, and public policy.* Chicago: University of Chicago Press.

Wilson, W. J. (1997). *When work disappears: The world of the new urban poor.* New York: First Vintage Books.

Wright, P. M., Stockton, M., & Hays, N. (in press). The personal-social responsibility model: Exploring a novel approach to promoting gender equity and increasing relevance for adolescent females in physical education. In J.P. Coulter (Ed.), *Progress in exercise and women's health research*. Hauppauge, NY: Nova Science Publishers.

Figure 1. Examples of New Design Criteria and Their Tensions with Existing Criteria

20th Century Criteria	21st Century Criteria
Social control-oriented, teaching-as-training systems	Empowerment-oriented, learning and development systems
Reproduce stratification systems: Sort, classify, and grade students by ability	Promote social integration and positive identities by embracing diversity
Culturally-blind, assimilation orientation	Culturally-responsive, accommodation
A focus on whole-class instruction and "herding"	Personalized, technology-assisted learning with communities of practice
Pedagogical content knowledge organized as teaching technologies and monopolized by the teacher	Positive youth development knowledge implemented as caring-oriented, service strategies; and jointly employed by young people who serve as co-leaders
Elitism in sport, exercise, and fitness	Preparation to pursue excellence, achieve personal goals, and access resources
PE during the school day	PE in after-school and community contexts
PE is separate from health education/promotion and recreation	Integrated health, PE, and recreation linked to life course developmental needs
Performance skills comprise the content knowledge	Performance analysis is wedded to skillful performance and framed to address the risks and dangers of predatory capitalism
Multiple, competing, and difficult-to-substantiate claims about PE outcomes	Research-supported, evidence-based outcomes, structures, and operations
Limited, contributions to overall school improvement	Newly-conceptualized and documented school improvement outcomes (sense of connection, engagement, attendance)
Limited curricular connections with other school subjects	Firm connections involving embedded learning, extended learning, project learning, and service learning
Sport, exercise, dance, and fitness activities in the community do not count as PE	New curricular frameworks are dovetailed with other programs and services

Figure 2. Doolittle and Her Colleagues' Use of Lawson's Design Criteria

Lawson's 20th Century Criteria	**Lawson's 21st Century Criteria**	**Adelphi Research/Practice Projects in Two High Needs School Districts**
Social control-oriented, teaching-as-training	Empowerment-oriented, learning and development systems	Conducted conventional staff/curriculum development days for health and physical education teachers Provided workshop for classroom teachers for alternatives to junk food at class parties Began an interview & journal study on internship experiences views of successful teaching in health and PE
Reproduce stratification systems: Sort, classify, and grade students by ability	Promote social integration and positive identities by embracing diversity	Provided field day and health fair events for students and their teachers conducted by PETE and HETE students in methods courses Arranged for on-site service project experiences for PETE and HETE students
Culturally-blind, assimilation orientation	Culturally-responsive, accommodation	Conducted two PETE courses on-site in a middle school: secondary methods, and a graduate TPSR course Surveyed physical activity preferences and one-week recall of physical activities outside of school
A focus on whole-class instruction and "herding"	Personalized, technology-assisted learning with communities of practice	Arranged for data management and analysis for Fitnessgram and survey data for teachers' use in grant writing and internal program proposals Designed and conducted on-line sexual behavior survey for students in health education classrooms with computer access
Pedagogical content knowledge organized as teaching technologies and monopolized by the teacher	Positive youth development knowledge implemented as caring oriented, service strategies; and jointly employed by young people who serve as co-leaders	Recruited and assisted students for work in two after-school physical activity programs at a community agency involved with anti-gang programs Interviewed teachers to identify high impact teaching strategies and activities for elementary and middle school students in after-school programs
Elitism in sport, exercise and fitness	Preparation to pursue excellence, achieve personal goals, and access resources	Assisted with planning physical activity programs in schools and community agency for students not interested in competitive sport: Dance Dance Revolution, walking club, swimming & lifeguard training, elementary games, dance and exercise

PE during the school day	PE in after-school and community contexts	Initiatives focus on developing after-school and summer program opportunities, administration and teacher/leader preparation; decreased emphasis on "fixing" standard PE programs
PE is separate from health education/promotion and recreation	Integrated health, PE and recreation linked to life course developmental needs	Integration of data on obesity, physical activity recall, and physical activity preferences from high school questionnaire for teachers' use in program planning Supported students' walking programs sponsored by asthma coalition Established relationship with high school administrators to integrate Red Cross aquatics and other programs Collaborated with asthma specialists, local community hospital, in-school clinic professionals, physical education teachers, school nurses, administrators
Performance skills comprise the content knowledge	Performance analysis is wedded to skillful performance and framed to address the risks and dangers of predatory capitalism	Introduced high school physical activity assessments related to teachers' goals for their students
Multiple, competing, and difficult-to-substantiate claims about PE outcomes	Research-supported, evidence-based outcomes, structures, and operations	Conducted baseline fitness, physical activity recall, and physical activity preference survey at high school and middle school Initiated study of experienced teacher interviews to identify specific positive strategies and activities for PETE students
Limited contributions to overall school improvement	Newly conceptualized and documented school improvement outcomes (sense of connection, engagement, attendance)	Physical education and health education teacher and programs included as part of state- mandated high school restructuring effort. Reports and pictures of special health and physical activity events were published in district newsletter
Limited curricular connections with other school subjects	Firm connections involving embedded learning, extended learning, project learning, and service learning	Began investigating ways to build on programs integrating HS athletics with family and consumer science; exercise physiology for students interested in weight training; dance and walking for asthma management, goal-setting for weight control.
Sport, exercise, dance and fitness activities in the community do not count as PE	New curricular frameworks are dovetailed with other programs and services	Began discussions to identify alternatives to contract bound teaching schedules for physical education programs to allow teacher participation in extended day activities

Figure 3. Exercise/S

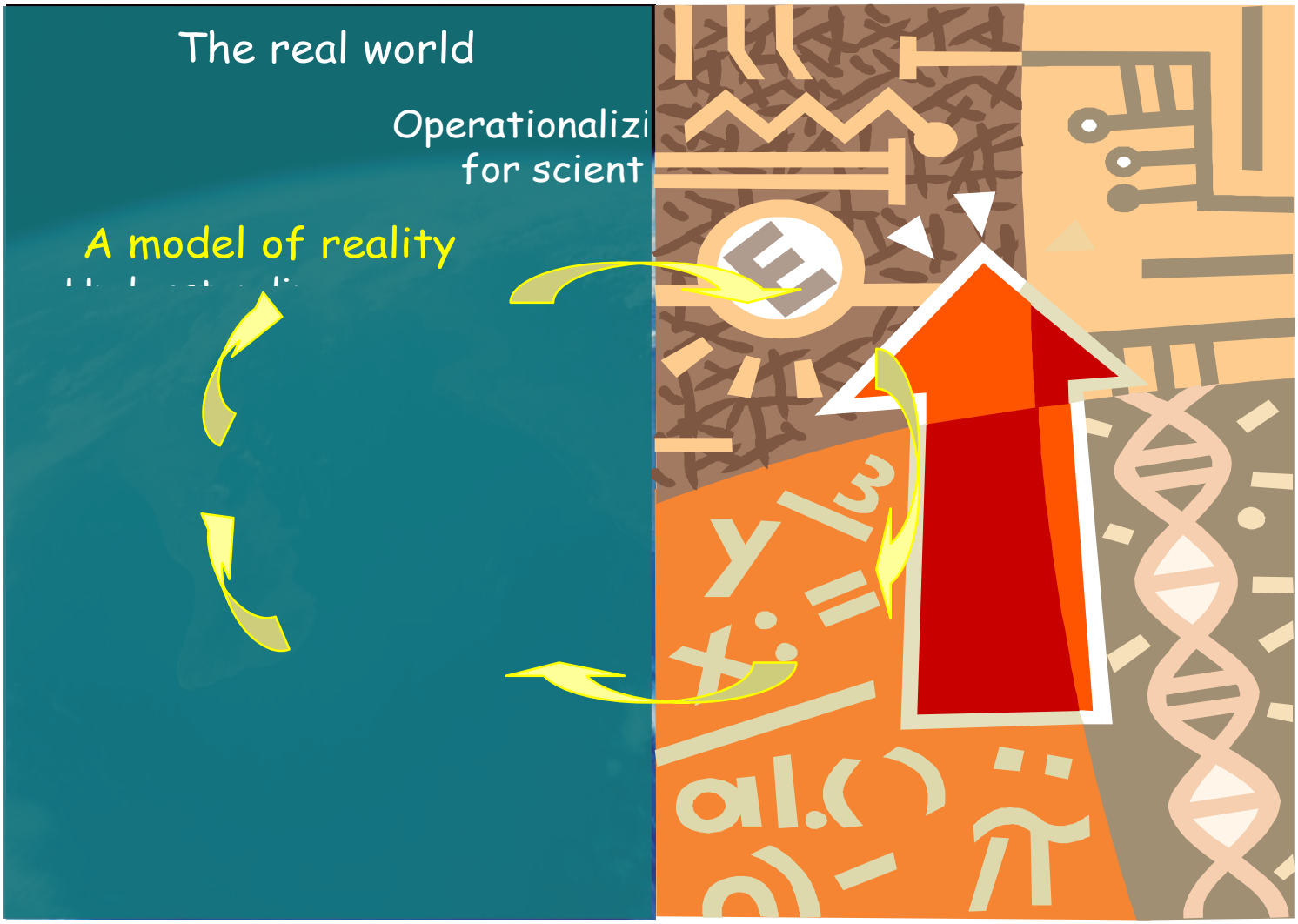

Figure 4. Examples of Key Leadership and Program Features that Foster Social Inclusion and Integration

- Welcoming, democratic relations are evident. Specifically, shared norms and values of inclusion are present; racial and ethnic diversity are assets; and, discrimination, repression, exclusion, and oppression dynamics are absent
- Trust, confidence, affective attachment, and loyalty are instilled; and it is possible to trust the peer and adult networks
- Specific and necessary psychological dispositions (e.g., aspirations, initiative, sense of community, shared responsibility and accountability) are engendered
- Specific goals are set and high expectations for excellence are established
- Individual and collective efficacy supports and resources are readily available
- Intrinsic and extrinsic motivational supports and rewards are present and effective
- Individuals and groups learn, accept, and internalize norms of reciprocity and mutual obligation
- Individuals and groups are genuinely empowered and enfranchised, and they enjoy autonomy supports, autonomy-supportive environments, and progressive opportunities for self-determination.
- Young people assume genuine leadership roles: They co-produce the settings, attitudes, and behaviors they want and need, assuming shared responsibility and mutual accountability.
- Families are supported and strengthened through informal social supports, strong civic networks and associations, and strategic health and social services
- Parents' capacities to educate, support, reward, and steward their children are strengthened and rewarded
- Children, youth, and parents experience **multiplex relations** i.e., they find multiple levels and sources of support--emotional, personal, informational (decisions, plans).
- Adults (e.g., teachers) assume **multi-stranded relations** (multiple roles and functions such as teacher, coach, mentor, and counselor)