

Work Force Development and Planning for HPSD Education

An Inter-Professional, Work Force Development Approach to Health, Personal, Social & Sustainable Development: A Scoping Paper

This summary discusses the preparation of different types of education and other sector personnel that need to be involved in the delivery and support of HPSD education and learning. The goal of this paper is to scope out the perimeters of a long-term, workforce development/planning approach. This document accompanies a similar [scoping document on HPSD education](#), which is focused on the rationale and delivery methods for teaching and learning.

We start with a global policy initiative that underlines the need for a long-term approach. We then briefly describe the rationale and elements of a workforce development/planning approach. Subsequent sections address the education and development of educators and other professionals from other sectors that work with and within schools.

Research and practice questions for the [FRESH Working Group on Health Literacy, Life Skills and Social Inclusion](#) and two parallel networks addressing research and professional development are included.

The Need for Change

The recent research review¹ undertaken for the Education Commission states:

“Providing universal access to quality education demands addressing these challenges with new holistic solutions. Radical changes and new thinking are needed if we are to guarantee every child and young person is adequately prepared for life and work in an increasingly uncertain, unequal and volatile world. Expanding current practices will not be enough;.... This has consequences for policy relating to the education workforce. It suggests, for example, that consideration should be given to thinking about the recruitment of teachers, how schools are organised, how staffing structures might be redesigned at school and district level, how education related professionals can be most effectively deployed and how education systems can articulate with other systems such as health to engender a cross-sectoral approach. The overarching aim of any proposed change must be to contribute to safe and healthy school environments, to improve student learning outcomes and support the social and physical development of students—the ‘whole child’.”

The EWI research review goes on to state:

An increasing focus on 21st century skills (including life skills) in the student curriculum has profound implications for teachers, as they need to develop capabilities to teach these skills to all students. Currently, these skills feature in few teacher education frameworks. Changes in desired student outcomes also have implications for the organisation and management of schools; here an organisational design approach may usefully support alignment of structures, staff roles and capabilities to maximise their benefit for improved student learning outcomes.

In addition to 21st century skills, related literature has outlined a need for building ‘life skills,’ particularly in relation to children from least advantaged backgrounds and low-income

countries. These life skills are typically defined around issues pertaining to health, gender equality, human rights, peace and development. An in-depth evaluation of various life skills education programmes is outlined by UNICEF (2012). Life skills perhaps more explicitly link with the skills and outcomes outlined by SDG4, which focuses on the development of basic literacy and numeracy skills, as well as skills relating to sustainable development, sustainable lifestyles, human rights, gender equality, peace and non-violence, global citizenship, and appreciation of cultural diversity.

The EWI Research Review calls for a workforce planning approach to design and strengthen the education work force to accomplish these student learning outputs:

Education workforce design entails stepping back from current arrangements to systematically review education workforce roles within (inside and outside classrooms) and across schools to see what roles are needed to achieve education system goals. Existing roles may require clarifying, differentiating and further professionalising and new roles may need to be conceptualised.

The central aims of education workforce design are to enable teachers to focus their professional capabilities more fully on facilitating student learning and to ensure all students have access to specialist staff to address their learning and related needs, for example mental health support.

Such roles include but are not limited to: lead and specialist teachers; learning support staff; pedagogic advisers and trainers; health practitioners; social work / student welfare practitioners; psychologists; technology and administrative staff and school and district leadership.

What is Workforce Development?

The World Bank provides an overview of workforce development as part of its program Systems Approach for Better education Results (SABER). Although the questionnaire and related resources on WfD² are aimed at the overall workforce and economic development which is one of the goals of education systems, the simple definition that the World Bank uses can be adapted quickly to illustrate the wide scope and long-term approach required:

World Bank WfD Framework (with HPSD related concepts inserted in red font)

The SABER-WfD tool places explicit focus on three functional dimensions of WfD policies and institutions: (a) strategy; (b) system oversight; and (c) service delivery.

Strategy refers to the alignment between HPSD workforce development and a country's national HPSD and SH goals for economic and social development. (Includes entry into employment patterns, career pathways, structural incentives, job descriptions and pay scales, recognition of expertise in decision-making etc.)

System oversight (including employee surveys, basic employment data and trend analysis, tracking of qualifications, work experience, transfers, dropout from profession, employee wellness and stress, working conditions) refers to the governance (structural, financial, career rewards etc.) arrangements that shape the behaviors key stakeholders involved, including individuals (elementary teachers & secondary teacher subject specialists, guidance counsellors, school administrators, school nurses, school social workers, school psychologists, etc, employers

(health, education & other ministries, school districts, health authorities, donor organizations, humanitarian and development NGO's and other agencies) and training providers (faculties of education, health sciences, public health, global health, social work, nutrition/agriculture, law enforcement, youth justice, child protection etc.).

Service delivery refers to arrangements for managing the provision of services (plan for a “career-long” strategy including recruitment into pre-service training, coverage for all undergrads, HPSD specialists, induction programs, coaching, mentoring, post-grad specialized certificates, graduate programs, local agency/school district professional development programs, professional networks, communities of practice and professional learning communities, and on-line learning/courses and support) in order to achieve results on the ground.

The World Bank SABER program also examines the policies³ that affect the initial education, hiring, working conditions, supervision and on-going development of teachers with a long-term perspective. We have extracted some of the policy questions asked in this WB paper on teachers that are relevant to teacher education and development in HPSD education. These questions need to be answered by any long-term strategy to develop the portion of the education workforce (including other sectors and professionals) that will be engaged in HPSD education:

- What are the requirements for becoming a school teacher?
- Are there requirements that must be fulfilled on a continuing basis to remain in the teaching profession? (Or to take on specific assignments such as HPSD education?)
- Who regulates initial teacher education programs? (And other initial education for nurses, social workers, others?)
- What are the education routes available to those who wish to become teachers? How selective are these programs? (Are there specific programs to recruit indigenous students or those from the caring professions into initial teacher education?)
- To what extent does initial teacher preparation include practical experience? (Are there special efforts to include practicum assignments in HPSD education? Are such practicum experiences also offered to students in nursing, social work and other similar professions?)
- What incentives exist for teachers to work at hard-to-staff schools, teach critical shortage subjects, and take on leadership roles? (How do teachers perceive a teaching assignment in HPSD education?)
- What is the age profile of the teaching force? (How do teachers assigned to HPSD education compare with the overall teaching force in terms of teaching experience?)
- What tasks are teachers expected to carry out? (How many of these tasks are related to the health, safety and development of their students?)
- How do school conditions affect teacher workloads? (Do teachers believe that they have adequate access to HPSD teaching/learning materials? Are teachers concerned about the increasing tendency of young people to be alienated from their families and communities and schools? Is teacher stress increasing? Do teachers believe that they have sufficient professional autonomy to respond to the health, safety and social needs of their students?)
- Who provides and funds professional development? (Is the funding provided for HPSD education used for long-term workforce development purposes or is it provided mostly to

implement a pre-selected program on a specific health or social problem? Do ministries of education or ministries of health provide PD funding for long term HPSD education development? Do donor organizations provide long-term or topic-focused training? Is funding provided to other professionals in community and organizational development strategies etc.)

- What forms of support are specifically available to beginning teachers? (Are beginning teachers often assigned to HPSD education? Have teacher induction programs been adapted to support teachers newly assigned to HPSD education?)

Another source that is useful in thinking about workforce development is provided by a summary⁴ posted on Wikipedia. Once again, the perspective is more on workforce development in the larger sense; seeking to address both demand and supply factors, but the concepts are directly relevant here.

“Place-based approaches, which consider the supply side of the workplace (workers), are primarily focused on the characteristics of people in the region or community where the training program will be located.

WF Concepts from Wikipedia Summary	Application to Education & Other Systems
Place-based approaches, which consider the supply side of the workplace (workers), are primarily focused on the characteristics of people in the region or community where the training program will be located. Place-based strategies often help participants gain initial access to the labor market while addressing other essential concerns to the region, such as housing development or English skills. In general, place-based approaches aim at training the unemployed workers and enhancing their skills for entering the labor market.	This summary is discussing a sector, or systems-based approach to workforce development (and is not necessarily addressing employment concerns outside of the education and public systems) but the concepts in this table are relevant. However, in a country or region, the recruitment and development of the local population to fill jobs in education, health and other sectors will be a strong motivator.
Place-based approaches have provided an ideal framework for state and local government to address the issue of unemployment and poverty problems in local communities or regions. A strong place-based effort will focus on the most pressing needs of local residents, such as physical or substance abuse or financial difficulties, along with providing employment training. The program may want to provide mentors who can connect participants to resources, rather undertaking the large financial burden of providing these services	Many secondary schools offer vocational programs to students that have the teachers or local companies helping their students to make connections to the workforce through job shadowing and apprenticeship programs. Health careers, food services, farming, forestry and other exploratory or initial programs are examples of this. Some jurisdictions have established teacher education programs to recruit indigenous or minority communities into teaching. This strategy has not been widely used in HPSD education or school health, education support services & development but it could be.
<u>Skills, networks, careers, and collaboration</u> play a key part in the concept and implementation of workforce development programs.	

<p><u>Skills</u>: The acquisition and development of skills is one of the crucial aspects of workforce development training. Two types of skills are commonly defined: general skills and job-specific skills. Described by their name, general skills (language, writing, basic computer skills) can be used in various careers and job-specific skills (like a particular computer application) are more directed towards the demands of the occupation. The more specialized skills get, the more thought programs have to put in when deciding whether or not the benefits of training is worth the costs, considering job-specific skills only apply to a limited set of jobs. The general guide for evaluating the effectiveness of a skill-building system is measuring the increase in skills, the increase in "productivity and earnings in the labor market" from this added skill, and the rate of return in terms of cost.</p>	<p>The challenges in developing the workforce needed to deliver HPSD education and to do school-based and school-linked health promotion and social development are two-fold.</p> <p>Teaching and learning related to these issues often requires more complex and time-consuming activities and teaching methods. Role plays, small group discussions, student journaling and reflection, use of flipped and project-based learning and other inter-active strategies all require more time than fact-based, medically driven techniques that focus on students learning functional or more elaborate knowledge (which also cannot be ignored). These inter-active teaching/learning strategies also require more preparation time for teachers as well as a significant shift in the role of teacher/educator as a purveyor of facts to one of guide and coach. This is often attempted in the absence of a HPSD education curriculum that is structured around health/social topics rather than generic student skills, attitudes and functional literacy.</p> <p>Similarly, other educators in the school such as nurses, youth workers, pastoral counselors, development workers will need higher order skills to facilitate teams within the school and collaboration with the community. These skills are often not addressed in traditional university programs for nursing and other professions.</p>
<p><u>Networks</u>: Workforce development tackles systemic inequalities in the labor market by operating on both sides, efficiently connecting workers with jobs and employers with workers. Theories on networks have emphasized the importance of who you know, rather than what you know which is an attributing factor for some labor market inequalities regarding gender, racial minorities, and the poor.</p>	<p>One salient, yet ignored, issue in HPSD education is the absence or relative weakness of HPSD teacher networks.</p> <p>This is important from a career development perspective as noted here but there are other important reasons related to a teacher's professional identity. In most secondary school teaching assignments, the teacher relates strongly to their subject matter. Math teachers consider themselves a partly mathematicians, history teachers as historians, PE teachers as coaches and athletes and so on. However, the teaching assignments related to HPSD education are often seen as the lowest status assignment.</p>

	<p>In almost every other subject area in schools, there are state or national specialist teacher associations that bring together beginning and experienced teachers, district and other consultants, program developers and academics. There are some associations that bring together physical education and health education teachers but they are usually dominated by a focus on PE. Home economics teacher associations have disappeared in most jurisdictions as well. There are splinters of networks addressing specific health and social topics but they include all aspects of promotion and prevention, not only teaching.</p> <p>Technology may provide the means for overcoming this barrier through a global, virtual association but they need to be applied and supported so that the HPSD teachers can form professional relationships that help them to improve their teaching practice as well as advance their careers or specific priorities.</p>
<p><u>Careers:</u> Another key part in workforce development's service for individuals is career advancement. This guidance on paths and barriers to advancement is especially relevant today, where the practice of internal labor markets is uncommon, particularly among women and minorities. In the past, advancement often took place in internal labor markets (ILMs) so promotions and upward mobility occurred within the same firm workers were hired in. "They promoted predictability, stability, and long-term skill development". ILMs no longer dominate the field of career advancement as a result of the dualization of labor markets. This term refers to the noticeable split in "primary sector" and "secondary sector jobs" where the former is recognized for high skills, wages, and stability while the latter is marked by the opposite.</p>	<p>Although the career paths in education could be categorized as an "internal labour market", with predictable stable employment for the same or related employers, the characteristics of educator career pathways are quite unique.</p> <p>The steps in the career ladder are quite few and quite limited regarding a logical growth of skills and experience. The entry level job (classroom teacher) is much the same as the potential final job (also classroom teacher). Becoming a school administrator entails a very different set of responsibilities and skills, often are not similar to the attractions of the classroom (and not really desirable to many teachers). Pay increases are provided for years of experience and increased academic qualifications but these factors are not really directly related to improved teaching skills or knowledge.</p> <p>Very good and very poor teaching skills can be recognized but, for the most part, it is difficult and counter-productive to try to differentiate among most teachers. Holding teachers accountable for the success of their students is</p>

	<p>very problematic, since individual student learning is so dependent on factors beyond the control of teachers, the school and even the education system. Consequently, career rewards are relatively intrinsic in education, revolving around the successes and failures of their students as well as their continuing interest in the subject matter that they have been assigned to teach. The career pathways for HPSD teachers has rarely been studied or discussed in school health promotion. This needs to be rectified.</p> <p>The situation for professionals working with or within schools (school nurses, school social workers, development workers etc.) also offers unique challenges. Essentially, an assignment to work with schools in these sectors is almost a step off the career ladder. The higher rewards in these systems are in health care (with expertise about specific diseases rewarded), in counselling and management of vulnerable populations in social services and in prosecuting rather than preventing crime. Further, the public health and prevention sections of these health, social service, law enforcement and other sectors are relatively underfunded, so advancement positions are less available. Consequently, the career rewards for these professionals is also more intrinsic than most other careers.</p>
<p><u>Public and Private Collaboration:</u> Collaboration between public organizations (a non-profit or government administered organization like Job Corps) and private corporations is an essential aspect of workforce development. Research by Harvard professor James E. Austin has defined three stages of collaboration: philanthropic, transactional, and integrative. In the philanthropic stage, the relationship between the partners is donor and receiver. For Timberland, this meant donating 50 pairs of boots to City Year for their youth service corps uniform. The next stage, transactional, is defined by more involvement by both partners and an increased flow of mutual resources. Timberland supplied City Year's entire uniform and raised their contribution to \$1 million. They assisted the non-</p>	<p>The examination of public, private and philanthropic collaboration in school health promotion and social development is another unexplored question in research and policy-related discussions.</p> <p>The three stages of cooperation described here; philanthropic, transactional and integrative are present, but predominantly most of the funding or support provided by donor organizations (private foundations, country-based development agencies, health/other ministries supplying funding to schools) for research or demonstration projects are in the first stage (philanthropic). This funding is usually short term, providing equipment, research or start-up funding without any commitment to an enduring relationship or support.</p>

<p>profit with "finances, marketing, and human resource management". In return, "City Year organized community service projects for Timberland employees" and "led Timberland employees in team building and diversity training". The exchange of resources is no longer one-sided in the transactional stage.</p> <p>Integration</p> <p>The highest level of collaboration is integration. This stage requires further involvement than the transactional stage and is characterized by "imprinting" on each other's organizational culture. City Year's commitment to community service has been engrained in Timberland, now that their employees get 40 hours of paid time off each year for service activities. The company has helped City Year in expanding its operations nationally.</p>	<p>Larger donors, such as the World Bank and the Global Partnership for Education, provide ongoing, but still categorical funding, for their "partner" countries, provided that the countries use the funds as stipulated.</p> <p>In some cases, donors will fund an ongoing regional or global initiative on a specific topic for a designated time/period of five or more years. Often, these topic-focused funds will devolve into a project funding program, where multiple organizations compete for project funding on that topic for a period of years. After that time/period, the donor organization usually moves on to another topic or priority.</p> <p>Rarely, do we find funding that is integrative, where both the donor and the recipient are committed in the long-term through a program or sustained multi-component approach. Even rarer are any examples where the donor is willing to fund the development of any part of the HPSD workforce.</p>
<p><u>Barriers</u> to workforce development collaborations: Collaborations are key to the success of workforce development programs but factors like <u>competition</u>, <u>high initial upfront costs</u>, and <u>fragmented governance</u> make it hard for programs to work together.</p>	
<p><u>Competition</u>: The workforce development system has recently been experiencing increased competition as new actors enter, resources dwindle, performance measures arise, and federal funding decreases. These factors, especially the cuts in federal funding, pressure organizations to collaborate with other organizations that oftentimes have different missions. The forced partnerships resulting from this bring new factors to the table, heightening the chaos within the already struggling system. Though required partnerships sound positive or at least non-competitive, it is important to remember that workforce development agencies prioritize themselves first, as any organization would. The competition for scarce resources is fierce when trying to accomplish and even</p>	<p>There can be an underlying competition between and among governmental and non-governmental organizations in school-based and school-linked programs. This is especially true when a research or demonstration project convinces government ministries to create, expand or discontinue a program.</p> <p>Those that are outside of the formal education, health or other systems will want to retain funding so that they can continue to employ their staff. Government or agency staff will prefer to transfer any on-going funding to the formal system. Wages and job security/ advancement are likely better in the formal systems, so NGO employees often migrate to those jobs and careers. As well, when public employees leave</p>

<p>surpass new performance measures to secure more funding and stay in business. This is where the root of tension and hesitancy to collaboration lies- with institutions fighting for survival in the midst of partnership with others.</p>	<p>their jobs in the public sector, either through retirement or through lay-offs, they often end up in the NGO sector.</p> <p>The benefits and risks associated with these cross public-voluntary sector employee shifts has not been studied regarding the long-term development of the HPSD workforce.</p>
<p><u>High initial upfront costs:</u> In order for collaborations to be relatively successful, the companies involved are expected to spend a significant amount of time and resources in discussing labor market issues and the ways in which these issues should be addressed in the partnership. In addition, they have to weigh the costs and benefits, and recognize the values of a future in cooperation which are customarily seen long term. Proposals should be specific and codeveloped so there is a clear structure to the work. "Starting with a full consideration of what all sides need lays the base for a successful partnership". Considering there are no short-term incentives to reward this front load effort required from companies engaging in collaboration, the motivation to do so is weak.</p>	<p>In school health and development work, the barrier of initial up-front costs is often addressed by reducing the size or reach of a demonstration or research project to a limited number of schools or region. Training costs are reduced by having fewer employees to support. As well, the scope of the training is often narrowed such that employees are basically informed about the experimental program to be delivered rather than developing new work strategies or skills.</p> <p>Consequently, the second phase of scaling up from a successful project is made more difficult. And the longer-term planning to maintain and sustain the program is not done. This includes any workforce planning. University faculties, local agencies and school districts and even existing ongoing professional development programs are not consulted in advance or their roles negotiated,</p>
<p><u>Fragmented governance:</u> Inherent to the concept of partnership and collaboration is the meshing of various organizations. When these diverse companies join, the accountability systems and governances they once individually had vanish. They lack "a centralized authority through which leadership, accountability, and governance can be provided which may hinder workforce development collaborations".</p> <p>The root of a faulty framework stems from the fact that most collaborations are only established through memorandums of understanding (MOUs). This expression of agreement does not do enough to address large governance issues, ensure participation among the collaboration, define leadership, and add more specified accountability measures.</p>	<p>Inter-ministry, inter-agency and inter-disciplinary coordination and cooperation in school health and development is often discussed and rarely funded. This gap applies to workforce planning and coordination in most jurisdictions.</p> <p>Advocates and, to a lesser degree, researchers have identified several strategies that go beyond a written MOU or agreement to support coordination. These strategies are usually not applied in any systematic manner but they include coordinated leadership at senior and middle management levels, coordinated policies, assigning coordinators at all levels, informal mechanisms such as coalitions, shared vision statements, joint professional development, support for inter-professional networking as well as formal mechanisms such as active joint</p>

	<p>committees, written agreements, joint budget preparation, joint service delivery plans and so on. All of these strategies have been focused more on program and policy rather than workforce development but they could be quite easily.</p> <p>There are some intra-professional and inter-professional models of cooperation within universities to educate various types of professionals that can be applied more systematically and also evaluated for costs, benefits, barriers and other aspects.</p> <p>Given that the focus of the workforce being discussed here is schools-related, it makes sense that we consider the role that education faculties can play in reaching out to other faculties to enhance such inter-disciplinary efforts.</p> <p>There are also models of university-school board partnerships to develop teachers that could be extended to include other agencies and professionals.</p> <p>This initiative is seeking to establish a global Consortium of Education and Other Faculties (GCEOF) to promote these kinds of models in the expanded “education workforce” that includes other professionals in other sectors that work with and within schools.</p>
<p><u>Successful conditions for work force development programs</u> Although workforce development strategies vary by whether they are focused on demands due to the location or from industries in the area, or both, common threads run through the success stories evaluated by economic developers thus far.</p>	
<p><u>Pre-assessment of community needs:</u> Prior to implementing a sector- or place-based approach, an analysis of the community's current and anticipated needs should be undertaken. One report details a sector analysis to determine the</p>	<p>Although there are projections of significant shortages of teachers and some specific warnings about subject specialists in science and mathematics, few studies or reports have been done on the need for HPSD teachers. Better data, especially since HPSD education and related</p>

<p>need for more healthcare workers in a particular community, for example.</p>	<p>services are so urgent to ensure equity in educational access and attainment is critical.</p>
<p><u>Ties with employers</u>: Both sector and place-based strategies emphasize the importance of ties with the employers. Even in place-based strategies focused on finding work quickly must tie efforts to employers to determine who is hiring.</p>	<p>Close coordination between government ministries and local school districts and local agencies will help schools to find qualified and interested staff to work in HPSD related assignments.</p>
<p><u>Adaptability</u>: Programs must be flexible, so that they can change when market or work force conditions change. One marker of adaptability is the presence of mechanisms to listen to what the community saying, evidenced by the close ties with community stakeholders and nonprofits as explained above.</p>	<p>The International Teachers Task Force⁵ recommended that the education provided by non-governmental organizations should be integrated within education systems as part of a larger effort to build capacity on low resource countries.</p>
<p><u>Adequate funding</u>: This last item almost goes without saying, but we should never be silent on the need for adequate funding for workforce development.</p>	<p>The International Teacher Task Force⁶ also recommended that aid funding to low resource and conflict/disaster-affected countries must be increased and that these increases needed to account for an expanding teacher work force and the need to raise teacher salaries, qualifications and training. HPSD education, a critical part of what is often called “basic education” needs to be considered much more explicitly in such budgetary planning by donor organizations.</p>

To conclude, the valuable, strategic systems-focused thinking and long-term actions derived from a workforce development or planning approach has rarely been used in HPSD education. To date, the author of this paper has found only one country (USA) that regularly monitors the qualifications and experience of its HPSD teachers. But even that country uses very few of the WfD concepts noted above.

Defining Competencies or Building Attributes?

Competency and a listing of competencies is often used in staff and workforce development. This summary is less certain about its validity and will probe a bit here before turning to applications to teacher competencies and to competencies in other professionals and sectors below.

As usual, Wikipedia⁷ provides us with a beginning. In its summary of competence from a human resource/workforce development perspective. We learn that “competency has different meanings and remains one of the most diffuse terms in the management development sector, and the organizational and occupational literature”.

The Wikipedia summary goes on to say that “The Occupational Competency movement was initiated by David McClelland in the 1960s with a view to moving away from traditional attempts to describe competency in terms of knowledge, skills and attitudes and to focus instead on the specific self-image, values, traits, and motive dispositions (i.e. relatively enduring characteristics of people) that are found to consistently distinguish outstanding from typical performance in a given job or role.”

Given that teaching and other professions that work with people) is both an art and a science, it is important to consider the beliefs, self-efficacy, social backgrounds, career aspirations and pathways, perceptions/understanding of health and social issues, professional norms and professional socialization as part of any workforce development plan.

In other words, unlike the traditional, linear ladder of skills (from beginner to expert) in various competency models, we should be building or deconstructing/rebuilding a wide variety of attributes (skills, knowledge, beliefs, norms and more) within a group of employees. Yes, there are some basic sets of knowledge, skills and attitudes, but given the variety of student needs and learning styles, we should expect that the teaching work force should include a variety of teaching strengths and styles.

A small-scale Delphi consultation⁸ on the core competencies of health teachers shows how our views of competencies can quickly narrow in scope, leaving out the values suggested by McClelland and others. The initial set of 32 competencies proposed had included a wide variety of attributes and traits, not only knowledge and skills. However, by the end of the Delphi process, the list had narrowed to eight knowledge items, three skill items and one values item.

The aforementioned Wikipedia summary also tells us that “different competencies predict outstanding performance in different roles, and that there is a limited number of competencies that predict outstanding performance in any given job or role. Thus, a trait that is a “competency” for one job might not predict outstanding performance in a different role. There is hence research on competencies needed in specific jobs or contexts.”

In other words, “competencies” are context and situation dependent. The knowledge, skills and attitudes of a teacher in a conflict-affected country or region are likely very different than those valued in high resource and peaceful countries. Further, it is suggested here that in the education sector, there are several job assignments that will require quite different sets. All teachers will require some basic attributes that relate to the health and safety of their students. However, secondary teachers, specialist health teachers, guidance counsellors, school principals, school district administrators, teacher aides and others will have other sets of competencies.

As well, the professions from other sectors that work within schools who straddle two types of job demands will require a different set of attributes. For example, school nurses will need a set of skills and knowledge related to their preventive care tasks. At the same time, if school nurses are enabled to extend their work to the full scope possible, they will need other skills on organization development, consensus-building, community mobilization and so on.

The Wikipedia summary also includes discussions about other ways of viewing “competencies”. These include general areas such as Meaning (identifying with the purposes of the organization or job assignment), Relations (creating and nurturing relationships with stakeholders), Learning (looking for situations to apply their knowledge and reflecting on those experiences) and Change (being able to adapt to new demands and change).

The Wikipedia summary also lists different and more specific competencies. These include organizational, core, behavioral, functional, management, initiative/creativity, judgement, cooperation/teamwork, quality, reliability, support for diversity, job/technical knowledge, quantity of work, communication, customer/client service, problem solving, attention to detail, organization, quality control, responsiveness and innovation.

Finally, the Wikipedia summary suggests that competency-based models can be used in different phases of workforce development. These include selection of potential employees or trainees, education & development, performance management, career paths and succession planning.

To conclude this brief discussion of competencies, it is evident that competency and competency models may fail to capture the diversity, multiple dimensions, contextual variations and job demands if they continue to be simplified into hierarchical, lists of generalized concepts. Consequently, in this paper on workforce development and planning, we will be using the term “attributes”. We hope that this departure from the competency language will enable us to consider a wider, more complex understanding of not only the knowledge, skills and attitudes but also the underlying traits and characteristics that should form part of the education and development of professionals.

Teacher Education and Development

Having spent some time here on the implications and nature of workforce planning as well as a brief discussion of employee competencies as a goal, we can now turn to the education and development of teachers, other educators and other professions that work with and within schools.

The intense competition for attention and resources among the various health/social issues and paradigms for addressing these issues within the school day is carried over to the initial teacher education and professional development programs for teachers and other educators.

As in HPSD education, most of the work and resources in teacher education and development is funded and directed towards specific issues and their related prevention programs. Most of the activity is devoted to informing and preparing teachers to implement those programs rather than development of general skills, knowledge and attitudes/beliefs about health, social development, equity or barriers to learning/education.

Further, classroom teachers play several roles in promoting health, personal/social development, safety, social, economic literacy and sustainable development. In the classroom, it is difficult and likely

problematic to try to separate "health" from other forms of human and social development that are part of the social role of education and schooling.

As well, we should recognize that educator knowledge, skills, beliefs and professional socialization, teaching practices related to health, personal and social development will develop over the life of their careers and therefore, we should recognize the different stages and structures inherent in that development. These states and structures will vary according to the national, state/provincial and local community context.

Stages and Structures in Teacher Education & Development

The ISHN International Discussion Group on Teacher Education & Development⁹ has described the various stages and structures that prepare and provide professional development to teachers in high income countries. Teachers working in low resource and conflict-affected countries would likely have similar but likely less robust resources and pathways.

The first point made in this summary is that there are several types of teachers, each with slightly different pathways in their initial education and ongoing development. These include:

- elementary school teachers (who teach most subjects to their classes of students)
- middle school or junior high school teachers (who may teach groups of subjects to teams of students)
- secondary school teachers of health, personal and social development
- secondary school teachers of physical education (this includes elementary school PE specialists) and whose courses may also be combined with health education
- secondary school teachers of family studies/home economics
- secondary school teachers who teach moral, character or religious education courses
- secondary school career education teachers whose courses may also include health & personal/social development
- secondary school vocational education teachers who teach programs leading to jobs or training in health-related careers
- secondary school science teachers whose courses or content on environmental sciences may contain linkages to human health
- elementary and secondary school guidance counselors who may also teach some courses
- elementary and secondary school principals/headmasters

There are many stages in the development of teachers that are necessary in acquiring these teaching capacities. Proponents of various knowledge, attitudes and skills for teachers (such as health) could choose to intervene in any of following stages to influence the professional preparation of teachers. Most of these interventions within TED programs is topic-focused and short-term, often in the form of a workshop, online learning materials or presentation to a class of prospective teachers.

Pre-service Education and Training provided by Faculties of Education

- Requiring or favouring certain types of undergraduate studies in a related discipline(s) as a condition for entry into the faculty of education program
- Requiring or favouring certain practical life experiences related to the teaching assignment (eg working with children, sports etc)

- Structuring and selecting recruitment strategies used by education faculties to identify good candidates appropriate to teaching about health, social, safety and environmental issues
- Entrance requirements to education faculty programs that relate to the issue
- Developing a profile and philosophy of the education faculty program that favours health and social concerns.
- Defining the program requirements related to major and minor studies, the required and elective courses related to the issue and the content of specific courses to encourage studies related to health, safety, social and sustainable development.
- Ensuring that the student teaching practicum includes time in an assignment that allows for practice and experimentation in the health, safety, social or sustainable development.
- Supporting new teachers in the teaching profession with induction programs that support for related skills, knowledge, practices.
- Organizing university-school board partnerships to train and develop teachers in health and social development knowledge, beliefs and skills

In-service Training and Development provided by school boards and education ministries

- Offering ongoing and regular training, orientation sessions , teacher release time and funds in the issue and teaching methodologies that are relevant to health, safety, social and sustainable development
 - selected workshops, conferences inside or outside school districts
 - online webinars, online courses or courses
 - encouraging or supporting school district programs, policies and staff development related to technology
 - Identifying and assigning mentors within the school district that can assist the new teacher on the issue
 - creating working teams within the school or school district to support teachers in selecting, implementing, or adapting instructional programs and teaching/learning materials on the issue
- Organizing university-school board partnerships to train and develop teachers in health and social development knowledge, beliefs and skills
- Encouraging teachers to participate in professional associations and communities of practice relevant to the health, safety, social or sustainable development
- Encouraging teachers to take specialized certificate programs related to health, safety, social or sustainable development.
- Encouraging teachers to take post-graduate studies leading to a Masters or Ph.D. that includes a focus on health, safety, social or sustainable development
- Encouraging teacher participation in action research projects on health, safety, social and sustainable development

Ongoing reflection and discussion provided by individual educators and their professional associations

- regular reading of professional magazines, blogs, web sites and similar sources
- regular attendance at workshops and conferences
- maintaining a set of career goals that includes an annual professional development plan
- regularly seeking feedback and discussions with colleagues, supervisors, parents and students

Models and Approaches to Teacher Education and Development

The ISHN International Discussion Group has also described some of the models and approaches¹⁰ used in teacher education and development.

There are several different approaches and models of teacher education and development that suggest different pedagogical and adult learning bases. These include:

For Teacher Education (Pre-service programs, initial teacher education)

- The Applied Science Model put forward by Michael J. Wallace in 1991. The model derives its authority from the achievements of empirical science. The Applied Science Model is based on the following assumptions: Teaching is a science and as such can be examined rationally and objectively. Teachers learn to be teachers by being taught research-based theories. These theories are being conveyed to the students only by those who are considered to be the experts in the particular field. Teachers are said to be educated when they become proficient enough to apply these theories in practice.
- The Craft Model is the oldest form of professional education and is still used today in ESL teacher education, albeit rather limitedly. Its conceptual basis, however, is widely utilized in practicum courses in which students work with classroom teachers, often called cooperating teachers. The basic assumptions underlying this model are as follows. In its most basic form, Craft Model consists of the trainee or beginner working closely with the expert teacher. The practitioner is supposed to learn by imitating all the teaching techniques used by the experienced teacher. Knowledge is acquired as a result of observation, instruction, and practice.
- The Reflective Model: Reflective practice has become a dominant paradigm in language teacher education research and programmes worldwide. But it is not an innovation in teaching. It has its roots in the work of a number of educational theorists and practitioners. The Reflective Model is based on the assumption that teachers develop professional competence through reflecting on their own practice. In other words, a teaching experience is recalled and considered to reach an evaluation and to provide input into future planning and action

An observation about Canadian teacher education programs (Gambhir et al, 2008) would likely be applicable to most high income, developed countries. "There has shift is from the traditional skill-based transmission and training models to more holistic views of teacher preparation. A holistic orientation uses social constructivist approaches of learning that focus on the development of the individual while fostering awareness and understanding of education in the broader context – community and world. Teacher education pedagogy builds on this broader perspective of the “whole teacher” and emphasizes reflective practice, critical inquiry and the engagement of candidates in learning communities (Sleeter, 2004; Taylor & Sobel, 2001). Through mentored course assignments and class discussions, candidates are asked to deconstruct their ideas and question assumptions about teaching and the profession. University partnership and practicum offices and schools try to work closely to ensure consistency and coherence between what is taught in classes and what happens in candidates’ school placements."

For Teacher Development (In-service, professional development programs)

- Program or curriculum-based models that are designed to implement a specific instructional program or a new curriculum that includes new learning objectives, suggested or required learning activities and/or student assessment techniques. This is sometimes referred to as a "cascade" model where knowledge is passed down from experts, usually through workshops and training sessions.
- Skills-based models that focus on general or specific teaching skills such as inter-active teaching, classroom management, student questioning, lesson planning and many more. These models often use a scaffolding approach, where the skills are developed over time in a planned sequence, going from dependence on experts to independence.
- Concerns-based Adoption Models
- Mentoring or Coaching Models
- Thoughtful or reflective teaching models
- Social-professional networking models
- Site/organization-based models where teachers work in teams on individually on long-term plans. This can be done at a school level or at a school district level, often through teacher centres.
- Self-directed models where the teacher determines the goals, plans and activities
- Action-research models where teachers use data and student/parent feedback to improve their practice
- Multi-level or comprehensive models where teacher development is part of a system-wide approach that develops the skills of school principals, support staff such as guidance counsellors and school psychologists
- Comprehensive, inter-sectorial models that develop teacher competencies in partnership programs with other sectors that employ professionals such as public health nurses, social workers, addictions workers, police officers etc.

Competencies or Growth Models that Develop and Accumulate Attributes

It would appear that teacher development is moving in a similar direction to that of initial teacher education regarding holistic, reflective practice models. The Teacher Development Trust in England ([Haynes, 2012](#)) has noted this trend and provided this summary of the example of Singapore.

"Singapore provides an interesting case study. The Ministry of Education recently launched a new model for teacher development the Teacher Growth Model based on a holistic approach to development with a student-centric focus. Professional development is encouraged through diverse methods of learning such as training, mentoring, research-based practice, network and experiential learning to synthesise teacher development across departments and schools. The Teacher Growth Model is designed to recognise teachers as professionals engaging in continual learning and growth. The Teacher Growth Model is based on five desired outcomes: the ethical educator, competent professional, collaborative

learner, transformational leader and community builder. Education has been seen as a critical component in having transformed Singapore from a developing country to a successful modern economy. Singapore consistently produces high results in international educational assessments creating global presence. Policy-makers have created an environment which not only values teachers as a 'precious resource' but continues to nurture teachers from initial teacher training through to their continuing professional development as experienced teachers. This is due to recognition that professional development of experienced teachers is of equal importance to the training undertaken by newly qualified teachers. Teachers are entitled to complete 100 hours of professional development per year to engage with the 'children of today'. Professional development emphasises the importance of collaborative learning where good teaching is not kept 'within four walls'. This platform encourages sharing ideas, developing best practice whilst focusing on student outcomes. Singapore teachers study global educational practice for local application. The identification of the importance of teachers and their continuing professional development can be translated into better student outcomes."

Positioning Topic-based Staff Development in a Broader and More Selective Approach: No More Mission Impossible

The most important change that we can make to our approach to teacher education is to position our traditional topic-focused teacher professional development programs within a broader framework for preparing general and generic skills and attributes related to student health and development. If we continue to spend the majority of our resources on topic focused, short-term workshops, we will continue to pursue an impossible mission.

When we examine the many roles that HPSD teachers will play on each health or social issue/topic, we realize the magnitude of the challenge. The extremely broad scope of the knowledge, skills, attitudes, beliefs, professional norms becomes apparent when these teaching and other roles are described in relation to the many issues that need to be addressed in schools in different contexts, including low resource, conflict/disaster affected and high resource countries. Please see the chart¹¹ that has been on this [in this draft summary](#).

This example of one issue (mental health) is one of 25 potential issues for low resource countries, one of about 20 issues for countries affected by conflict or disasters and one out of about 75 issues for high resource countries and communities.

Health, social, safety & other issue to be addressed:	Mental Health
Awareness, Attitudes, Beliefs about the issue	
<ul style="list-style-type: none"> Teacher awareness and knowledge (basic literacy) about the issue 	<p>Teachers will likely have the same misconceptions about mental illness that are prevalent in society. This can add to the stigma associated with such illnesses and reduce the possibilities that students will seek help.</p>
<ul style="list-style-type: none"> Teacher beliefs, attitudes and professional norms related to the issue 	<p>One of the strongest norms in teaching practice is to maintain an orderly learning environment. If a distressed student acts out, this can threaten the classroom environment. Skillful management of</p>

	outbursts (or withdrawal from classroom activities) is a learned attribute.
Attributes related to teaching roles	
<ul style="list-style-type: none"> Knowing what to teach, which specific objectives are most relevant & effective 	Mental health has a very broad spectrum of interpretations, ranging from “positive mental health” sometimes depicted as happiness, to serious mental health problems caused by a wide variety of chronic conditions, trauma from conflict and violence, short-term depression from life events such as bereavement and clinical illnesses. Curricula need to focus on the MH needs most relevant to their context and then teachers should be empowered to select the specific activities most relevant to their students.
<ul style="list-style-type: none"> Using teaching methods related to these specific learning objectives 	Inter-active teaching methods on sensitive topics such as MH are complex. Teachers need to know and avoid the pitfalls related to mental health and mental illness. Even choices of words will matter.
<ul style="list-style-type: none"> Using student assessment methods appropriate to those learning objectives 	Assessing students in health education is challenging and mental health is even more so. Strategies for assessing student voices such as maintaining student journals, student photo-voice projects, drama, art, and other components of portfolios are all appropriate to MH.
Attributes related to other non-teaching roles	
<ul style="list-style-type: none"> Teacher ability and willingness to identify, refer students or fellow staff who may be experiencing difficulties to various sources of support 	Recognizing MH problems is challenging and careful preparation to avoid labeling and over-reactions is needed.
<ul style="list-style-type: none"> Teacher ability and willingness to help students and parents manage their illnesses or problems within the school day 	Depression, stress, sadness and even bullying are silent threats for many students. Teachers need to be prepared carefully when they try to support students, their parents or even staff members.
<ul style="list-style-type: none"> Teacher use of appropriate classroom management techniques 	Wise decisions to allow hyper-active students to move about the classroom, nudging introverted students to work with other students in safe, comfort-inducing activities and other classroom management activities need to be developed.

<ul style="list-style-type: none"> Teacher willingness to enforce school guidelines as well as participate in whole school and community activities related to the issue 	<p>Teachers showing visible support for guidelines and activities related to MH can be complex. Again, staff development is needed.</p>
<p>Other duties, roles related to the issue</p>	<p>Teachers may very well be called upon to support students after violent incidents and community tragedies or disasters. Again, specific preparation, vocabulary, awareness of support services and more is required.</p>

These lists of potential topics/issues will be overwhelming for school systems in all contexts, so we repeat the suggestion that each country needs to identify the issues most relevant to their students and **focus their resources**¹² on those issues within a stable, core HPSD education curriculum/education program.

New Directions in TED Based on a Deeper Understanding of Teachers

Another ISHN International Discussion Group¹³ has listed the workforce development strategies that have greater potential in strengthening the education workforce. They are listed briefly here:

- 8. Understand and work within the sociology, work lives, norms and constraints of teachers
 - 8.1 There are many kinds of teachers and teaching assignments. Different strategies should be developed for these different types of teachers.
 - 8.2 The classroom teacher's role in health & social development is very broad and variable. Rather than competing to develop knowledge and skills about specific health/social issues within teacher education programs, the non-education sectors can work together to develop integrated teacher learning and staff development programs.
 - 8.3 Address the role of other educators in health & social development. Train non-educational staff to work with educators.
 - 8.4 The Sociological Makeup of Teachers will affect their ability and willingness to address health & social issues. Address these in staff development programs.
 - 8.5 The Work Lives, Professional Identities and Career Paths of Educators will affect their ability and willingness to engage in H & S programs. Consider and address these factors in long-term workforce development programs.
 - 8.6 The "flat" teacher career structure will affect their engagement in H & S programs. They constantly look for new materials. They are happy to receive packages of lesson plans but will likely discard them in future years unless they are replenished refreshed with new content.
 - 8.7 The daily work routines of educators will affect their willingness and ability to engage in H & S programs. Lack of planning time, isolation when working and reluctance to collaborate with other teachers or professionals.

8.8 High rates of teacher turnover, especially for new teachers and for low status HPSD teachers, will affect the delivery of H & S programs.

8.9 Teacher health & wellness practices and their personal beliefs about health/social issues will affect their engagement in H & S programs.

8.10 Teacher stress & burnout will affect the delivery of H & S programs

8.11 The development of specific and durable Teacher Professional Identities in HPSF will affect their engagement in H&S programs. HPSD education is one of the lowest ranked teacher assignments.

8.12 Educator perceptions of health, social development, safety & similar programs will affect their engagement with such programs.

9. Recognize and address Professional Norms/Taboos in Education. Address them in TED programs

10. Recognize and address socio-political norms and ideologies that govern and constrain schools and educators. Recognize and address them in TED programs.

To conclude, the strategies used to prepare/update teachers have been piece-meal, sporadic and competitive with each other because they are focused on specific topics. We need to know much more about teacher recruitment, retention and transfers out of HPSD assignments. We need to recognize that teacher stress and worry about the social and other behaviours of their students has increased dramatically, leading to teacher dropouts from the profession at higher rates. We need to know much more about the beliefs of educators about these health and social issues. We need to know if and how this will have an impact on teacher socialization into the profession and the development of their professional identities. An education workforce development strategy is needed in each country and should be promoted at the global level.

Questions for Research & Practice

The FRESH Working Group will try to define a realistic capacity for the numbers of teachers and their qualifications and training required. The WG includes experts who have:

- defined the required teacher HPSD attributes,
- done systematic reviews of the training needed and provided,
- articulated the teacher training needed for different areas such as global citizenship, health literacy, social & emotional learning, sustainable development and social inclusion.

The WG will work with existing and developed descriptions of the stages and structures in a life time/career/workforce development approach to teacher education and development in the three different contexts.

The research and practice questions related to teacher education and development that need to be addressed in the WERA International Research Network and Global Consortium of Education & Other Faculties include:

1. What are the current levels of awareness, knowledge, skills, attitudes, aptitudes and beliefs of teachers and other educators (guidance counselors, school principals, teacher aides, support staff) regarding HPSD education?
2. What are the relevant pedagogies that need to be further developed in HPSD teaching and learning? (constructivist learning, flipped learning, inter-disciplinary learning etc.)
3. What are the models for teacher education that need to be strengthened in HPSD education (practicums, induction programs, coaching, mentoring, professional learning communities, reflection, teacher leadership etc.) rather than relying on topic-focused, program-specific implementation activities?
4. What is the status and capacity of initial teacher education programs to prepare elementary and various specialist secondary teachers to promote HPSD in their classrooms? How can existing programs be disseminated, scaled up and improved?
5. What is the specialist training offered or required for HPSD specialists in their initial teacher education programs? How can existing programs be disseminated, scaled up and improved?
6. Can the absence of HPSD teacher specialist associations in most countries be alleviated by a global, virtual network of HPSD teachers, supported by researchers, master teachers, education publishers and others?
7. How can technologies be harnessed to provide easier access for teachers to culturally relevant, contextually categorized, lesson plans, online courses in local universities that use modules prepared and shared in MOOC formats, online communities of practice, flexible, time-limited work groups, curation of information and educational resources etc.?
8. Can the IRN and GCEO encourage and facilitate the development of a new researchers' network in HPSD teacher and education development, perhaps making use of existing resources such as the university-based collections of theses, the ISHN Wikipedia style web site (www.schools-for-all.org) and similar platforms?

Education and Development of Other Professionals

The [research review](#) undertaken for the Education Workforce Initiative of the Education Commission has recognized these burdens on teacher, especially those in low resource countries. Teachers are often called upon to substitute for absent health, social and other community services and often perform a variety of preventive and treatment/response tasks well-beyond their classroom duties.

The [research review](#) done for the Education Workforce Initiative has recommended that teams of professionals be established at the school, regional and national levels to support or replace teachers in the execution of many tasks and preventive activities related to HPSD. ISHN agreed with that idea and suggested that the “team”, include professionals from other sectors that work with or within schools. Indeed, given that most of these non-educational professionals and community workers often deliver

the informal education through extra-curricular, co-curricular and non-formal learning activities, the “education workforce” should be understood to include:

- School Nurses
- School Psychologists and other mental health professionals
- School Social Workers and other social service, child protection professionals
- Allied Health Professionals for students with special health needs, behavioural problems, learning and other disabilities
- School Resource Officers/Civil Protection Officers
- School Principals
- Guidance Counsellors
- Staff from Development and Humanitarian aid organizations and their funders (Save the Children, Education in Emergencies, Plan International etc.

As well, there is a need for specialized training for national/state, community/district and local school coordinators to facilitate and support the school, inter-agency and inter-ministry teams, committees, multi-intervention programs and multi-component approaches.

We have scant knowledge, data and research about the extent to which these non-educational professionals have received initial or in-service training in the unique skills needed to work with children/adolescents and schools. We do know that “youth-friendly services” is a key concept in the delivery of preventive services. We also know that “inter-professional education” is valued and promoted to facilitate inter-disciplinary work among health care workers and therefore is likely also needed when working with other service professionals or educators. We also know that the strategic thinking, mediation and problem-solving skills, aptitudes in community and organizational development, coaching and other facets of coordination and facilitation work are absolutely needed.

Questions for Research & Practice

The research and practice questions related to the initial education and ongoing development of health, social services, child protection, youth development, psychologists, police/civil protection officers and others that need to be addressed by the Global Consortium of Education & Other Faculties include:

1. What are the current levels of awareness, knowledge, skills, attitudes, aptitudes and beliefs of non-education workers and professionals regarding school-based HPSD education/promotion and its relevance to their work, careers and professional identities?
2. What is the status of current programs and current capacity of faculties of health sciences, nursing, social services, child protection, psychology, global health/development and other disciplines to include course content on child/adolescent development, working with schools, institutions and systems, educational pedagogy, organizational development & systems change, community development and other related content?
3. Are there models and examples of infusing this content into undergraduate and graduate programs, offering specialized post-graduate programs, using schools in practicum assignments etc.?

4. Can the GCEOF develop an online course or MOOC-friendly course materials and a global community of practice of ministry, agency and school coordinators responsible for facilitating the delivery of multi-intervention programs and multi-component approaches?
5. How can school-related specialist organizations such as school nurses, school social workers, school resource officers and others be encouraged and supported to play leadership roles in HPSD education and school health/development?
6. How can information and communications technologies be harnessed to provide easier access for school nurses, social workers, physicians, resource officers and other personnel to contextually relevant planning, training, policy, monitoring and assessment tools?
7. Can the IRN and GCEOF encourage and facilitate the development of a new researchers' network in HPSD and school health/development for non-education professionals working with and within schools, perhaps making use of existing resources such as the university-based collections of theses, the ISHN Wikipedia style web site (www.schools-for-all.org) and similar platforms?

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