Promoting Adoption and Implementation of the

Canadian Standards and Indicators for Health Promoting Schools across Canada

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Table of Contents

Abbreviations 3

Executive summary 4

Introduction 5

Approach 6

- Step 1: Literature review 6
- Step 2: Expert consultations 6
- Step 3: Consensus-building process 6

Findings 6

- A new tool/resource: What could it look like? 6
- A new tool/resource: Who is the target audience? 10
- A new tool/resource: What content should it have? 11
- What tools/resources do schools currently use? 13
- What does a successful HPS school look like? 14
- What factors enable the successful implementation and maintenance of HPS? 15
- What factors hinder the successful implementation and maintenance of HPS? 17
- Financial considerations for the successful implementation and maintenance of HPS 20

Conclusions 22

Glossary 24

References 25

Abbreviations

AI	Artificial Intelligence
CDC	Centers for Disease Control and Prevention
CSH	Comprehensive School Health
EDIA	Equity, Diversity, Inclusion, and Accessibility
HPS	Health Promoting School
IUHPE	International Union for Health Promotion and Education
JCSH	Pan-Canadian Joint Consortium for School Health
WHO	World Health Organization

Executive summary

Health Promoting Schools (HPS) is an internationally recognized approach for supporting improvements in student educational outcomes while addressing school health in a planned, integrated, and holistic way. Schools are ideal settings to promote health as healthy habits make students better learners. In December 2023, the Pan-Canadian Joint Consortium for School Health (JCSH) released a report on the *Canadian Standards and Indicators of Health Promoting Schools* to guide the planning, implementation, and maintenance of HPS in Canadian schools. Subsequently, the question arose how to best support schools to adopt and implement the *Canadian Standards and Indicators for Health Promoting Schools* in their school communities across Canada. Below are the key findings of the project that involved a literature review of peer-reviewed and grey literature about the approaches, tools, and resources used for the planning, implementation, and maintenance of HPS, along with the factors that can support or hinder the planning, implementation and maintenance of HPS; two consultations with JCSH members and other experts to gather their perspectives; and a consensus-building process among 53 experts working in the school settings:

key findings

► Among 16 tools/resources, the ones that were judged to be extremely useful or very useful included: 1) a detailed guide (i.e., document with a detailed guide to help schools move from planning to implementation and maintenance of HPS), 2) online inventory (i.e., a website with an inventory of available resources and short "how-to" videos with practical suggestions on how to implement and maintain HPS), 3) an AI-powered online platform (i.e., interactive AI-powered online platform where school members fill out a quick survey about their school context, assets and resources, and receive a list of tailored metrics and actions), 4) a game platform (i.e., interactive, game-like learning platform where different members of the school community, including students, can learn about HPS and how it can be implemented and maintained in their school), and 5) professional development (i.e., in-school professional development training delivered by an HPS expert).

► These tools/resources target various audiences, so exploring how they can be combined may be worthwhile. The top three tools (i.e., online inventory, detailed guide, AI-powered online platform) can seamlessly merge into one comprehensive platform: the ideal solution could be a dedicated website that hosts an inventory of relevant materials (e.g., "how-to" videos, interviews with experts, peer-reviewed publications, and relevant grey literature), along with a detailed guide on the implementation and maintenance of HPS, and an integrated AI-powered chatbot that school administrators could use to help them identify implementation strategies and activities tailored to their unique school context, as well as pinpoint barriers that can be addressed at both the school and school authority levels, and enablers that can be built upon.

► In this new tool/resource, experts would appreciate seeing specific actions that need to be taken at the school and school authority levels to implement and maintain HPS; strategies for how schools can better support students from diverse cultural backgrounds; best practices for the implementation and maintenance of HPS; strategies to help school communities build partnerships with local organizations and tap into their resources; milestones and measures that can be used to track the school's progress toward HPS; and strategies for building on specific assets in school communities.

► Experts saw a successful HPS school as one that: involves every member of the school community who are working toward creating a healthier school community; has health promotion fully integrated into the school community; sets clear goals for health promotion and regularly assesses its progress; employs creative, engaging, and culturally relevant health promotion activities; supports and cares about school staff; and makes use of existing assets to respond to the school's unique needs.

key findings

► This vision of a successful HPS school can be realized if the factors that enable the implementation and maintenance of HPS are proactively identified and built on. The key enablers include school administrators understanding the significance and value of HPS to their school, knowing their school context, culture, priorities, assets, and needs, and allocating time for the planning and implementation of HPS. Furthermore, there are additional enablers at the school community level—over 70% of experts strongly agreed or agreed that the school community should build upon existing assets, demonstrate commitment to and foster a sense of ownership over the implementation and maintenance of HPS.

► The barriers that were deemed to hinder the implementation and maintenance of HPS revolved mostly around insufficient staff time, human resources, and funding, which appears to be particularly critical in the planning phase and the first year of implementation. In fact, nearly all experts (94%) indicated that funding is extremely important or very important to building capacity within schools by providing "paid release time for designated staff to act as a HPS coordinator for the school."

These results will help guide future efforts in developing tools and resources that will assist schools in adopting and implementing the *Canadian Standards and Indicators for Health Promoting Schools* within their school communities.

Introduction

Health Promoting Schools (HPS) is an internationally recognized approach for supporting improvements in student educational outcomes while addressing school health in a planned, integrated, and holistic way.[1] HPS has been shown to improve student educational and health outcomes, and established as the most effective and cost-effective approach to school-based health promotion.[2–4]

In December 2023, the Pan-Canadian Joint Consortium for School Health (JCSH) released a report on *Canadian Standards and Indicators for Health Promoting Schools* to provide a foundation for education and health systems to work together to create healthy school environments to improve the health and well-being and academic outcomes of all students.[5] Subsequently, the question arose how to best support schools to adopt and implement *Canadian Standards and Indicators for Health Promoting Schools* and, more broadly, the HPS approach in their school communities across Canada. Specifically, input from schools was needed to understand what supports (i.e., tools, resources) may assist schools in adopting healthier practices and creating supportive environments by identifying areas for improvement, recommending strategies and specific actions, and offering metrics to track progress. This document, developed for, and in collaboration with, the JCSH, reports on a consensus-building process with representatives from schools and school authorities across Canada to determine what tools or resources could assist schools (administrators, educators, students and parents/guardians, and school health professionals) in adopting and implementing the *Canadian Standards and Indicators for Health Promoting Schools* in their school communities. Furthermore, this report offers a comprehensive overview of key factors identified through the consensus-building process that may facilitate or hinder the implementation and maintenance of HPS in Canadian schools.

Approach

Step 1: Literature review

The first step included a comprehensive review of peer-reviewed and grey literature (e.g., government websites, and national and international reports) on the approaches, tools, and resources that are being used to adopt and implement HPS in schools. The following search strategy was employed in Google Scholar, PubMed, Education Resources Information Center, and Google: *("comprehensive school health" OR "health promoting school*" OR "coordinated school health" OR "whole school") AND ("implement*" OR "adoption" OR "support*" OR "strategy*" OR "plan*")*. Recognizing a broad set of factors that may support (i.e., enablers) and hinder (i.e., barriers) the planning, implementation and maintenance of HPS in schools, a concurrent search of peer-reviewed and grey literature was conducted using the following search strategy: *("comprehensive school health" OR "health promoting school*" OR "coordinated school health" OR "whole school") AND ("enabler*" OR "facilitator*" OR "resource*" OR "support*" OR "factor*" OR "barrier*" OR "challenge*" OR "obstacle*" OR "limit*").* These searches were supplemented with a review of implementation guidance from the School for Health in Europe (SHE) Network, World Health Organization (WHO), International Union for Health Promotion and Education (IUHPE), and Centers for Disease Control and Prevention (CDC). In total, 150 articles and documents were identified; 17 of these[6–22] provided relevant content and informed subsequent steps.

Step 2: Expert consultations

Informed by the literature review, two rounds of consultations were held with JCSH members and other experts to gather their insights on:

► approaches, tools and/or resources that school communities are more likely to adopt and use in their everyday practice;

► factors that may support and hinder the planning, implementation and maintenance of HPS, as well as strategies that schools can use to build on enablers and overcome barriers.

Feedback from these two rounds of consultations was synthesized into statements related to the development of tools and resources for adopting and implementing the *Canadian Standards and Indicators for Health Promoting Schools* and the key enablers and barriers to the planning, implementation and maintenance of HPS in Canadian schools.

Step 3: Consensus-building process

To achieve broader input and establish consensus on the most suitable tools/resources as well as enablers and barriers, a Delphi process was utilized. A Delphi process is a structured, iterative, online consensus-building method that serves as an effective alternative to large, in-person stakeholder meetings.

A total of 103 education experts from JCSH Member Jurisdictions across Canada expressed their interest in participating and sharing their expertise. Eighty-one experts whose current role was "School health coordinator, lead or manager at the school authority (board, district, division)," "School principal or vice-principal" or "School health facilitator or champion in the school" were invited to participate in two rounds of the consensus-building process. Fifty-eight education experts completed the first round, which consisted of a mix of questions that primarily asked experts to rate statements regarding a new tool/resource, the content they would like to see in this new tool/resource, and the barriers and enablers to the planning, implementation and maintenance of HPS on a five-point Likert scales, ranging from "extremely useful" to "not useful," "strongly agree" to "strongly disagree," or "extremely important" to "not important." Experts were also asked to provide comments next to their ratings and suggestions in open-ended questions.

In the second round, education experts were presented with the results from Round 1 and were asked to re-rate the statements, with some items revised based on initial feedback received in Round 1. Fifty-three experts completed Round 2: 43% were school principals or vice-principals, 30% held positions as school health coordinators, leads, or managers within the school authority (board, district, division), 20% served as school health facilitators or champions in the schools, with the remainder being teachers, student services administrators, and school counsellors. More than half of experts have been in their current roles for over five years: 38% for 5-15 years and 15% for more than 15 years. Experts' feedback, provided in the comment boxes next to the statements and in response to open-ended questions, underwent thematic analysis. The quantitative and qualitative results from Round 2 are detailed in the next section.

Findings

A new tool/resource: What could it look like?

Drawing from the literature review and expert consultations, a list of 16 tools and resources that could potentially support HPS implementation efforts in Canadian schools was compiled. These tools/resources and their brief descriptions are provided in Table 1.

Table 1

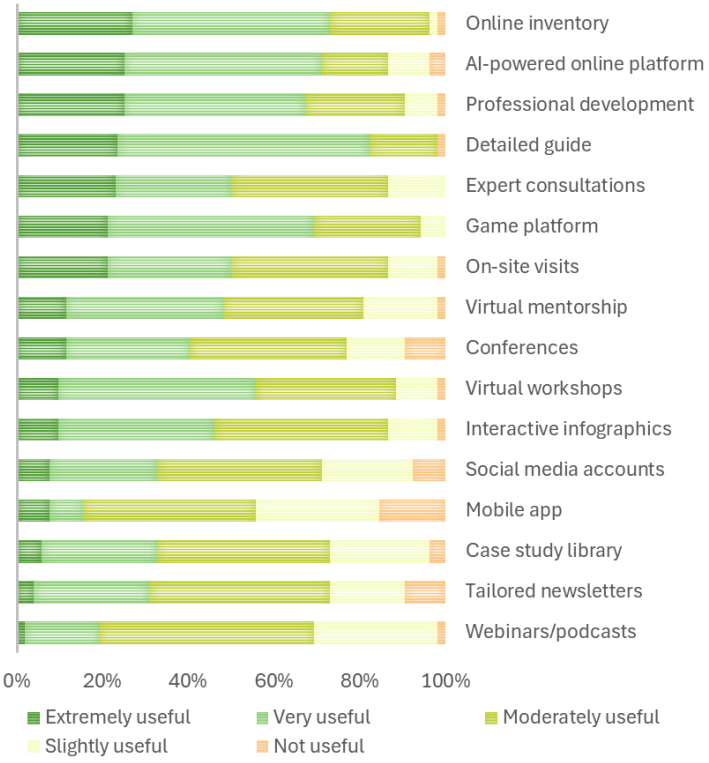
Abbreviation	Description of a tool/resource
Detailed guide	Document with a detailed guide to help schools move from planning to implementation and maintenance of HPS
Mobile app	Mobile app hosting recently published standards and indicators for HPS in Canada
Online inventory	Website with an inventory of available resources and short "how-to" videos with practical suggestions on how to implement and maintain HPS
AI-powered online platform	Interactive AI-powered online platform where school members fill out a quick survey about their school context, assets and resources, and receive a list of tailored metrics and actions
Game platform	Interactive (game-like) learning platform where different members of the school community (including students) can learn about HPS and how it can be implemented and maintained in their school)
Interactive infographics	Interactive infographics that show key concepts, steps, and metrics relevant to the implementation and evaluation of HPS activities
Virtual workshops	Virtual workshops with interactive sessions guided by experts in the field of HPS and implementation science
Virtual mentorship	Virtual mentorship programs in which schools are paired with HPS experts who provide ongoing and school-specific guidance and support
Expert consultations	On-demand expert consultations
Webinars/podcasts	Webinars or podcasts with case studies and discussions on what worked and did not work when implementing and maintaining HPS
Case study library	Case study library showcasing different schools' experiences and journeys with HPS and highlighting diverse strategies and outcomes
Social media account	Dedicated social media account (e.g., Instagram, Facebook, Blue Sky, X) that regularly posts practical aspects of implementing and maintaining HPS
Professional development	In-school professional development training delivered by an HPS expert
Tailored newsletters	Customized email newsletters tailored to each school's assets, needs, and progress in the implementing and maintaining HPS
On-site visits	On-site visits to successful HPS schools
Conferences	National conference focusing on the HPS approach

In Round 1, experts were offered an opportunity to add other tools/resources to the aforementioned list. Several experts noted that the proposed list was comprehensive (*"I don't really have any more [to add]. A large range and variety listed above should be sufficient if a school, person, group of people are given the time to learn and work with the resources."*) Therefore, no new tools/resources have been added in Round 2.

Experts were asked to rate each of the 16 tools/resources in terms of their perceived usefulness: from "extremely useful" to "not useful" (Figure 1). Based on the percentage of experts who rated tools/resources as extremely useful (dark green bar) or very useful (light green bar), the following tools/resources emerged as promising: 1) detailed guide (79%), 2) online inventory (72%), 3) AI-powered online platform (70%), 4) game platform (68%), and 5) professional development (66%). The remainder of the tools/resources were judged to be of relatively limited use. Indeed, a mobile app was rated as not useful or only slightly useful by more than 40% of experts.

"There are quite a few excellent resource and tool ideas mentioned!"

Figure 1



These findings closely align with responses to a question that asked experts to select the top three most useful tools/resources from the same list (Figure 2). The top three choices were an online inventory (selected by 51% of experts), a detailed guide (43%), and an AI-powered online platform (36%). Nearly one-third (30%) of experts selected a game platform, while slightly more than one-quarter (26%) chose professional development as one of the top three most useful tools/resources. The remaining tools/resources were selected by fewer than 25% of experts, with only one expert choosing social media accounts and tailored newsletters, and no one selecting a mobile app.

These quantitative findings are supported by the qualitative data from the comment boxes. One expert noted that the online inventory *"with go-to activities, videos, and resources could get other educators participating more with promoting all things health[-related] in schools. Educators often don't want extra 'things' to plan, so having ideas, activities, lessons, and games ready to go would be super helpful."* Another expert noted that having *"a step-by-step guide to implementation would be very helpful. People are feeling overwhelmed, and implementation needs to be as smooth as possible without adding more to workload."*

Experts saw an AI-powered online platform as a powerful tool that could "*help provide a custom fit of resources […] as well as be able to provide culturally aware [health promotion activities] and publications."* Finally, experts valued engaging formats, such as gamification and interactive learning, that can help motivate staff and are of particular value when engaging students in HPS: *"I believe an interactive learning platform will reach more audiences. Ultimately, we want students to eat healthy food so the tool needs to be something that will engage, teach and have students feel like they are invested in the process."* According to another expert, one example of an interactive tool suited for students is BrainPop platform: *"I love the BrainPop platform ... I think a similar tool, offering relevant content tailored to students' needs, would be a valuable resource"* (Translated from French).

While the four tools mentioned above (i.e., online inventory, detailed guide, AI-powered online platform, game platform) captured experts' attention, several quotes underscore the significance of the human element, which remains central to professional

development activities, school visits, and conferences, all of which were viewed as impactful for fostering buy-in and connections, and witnessing implementation in action:

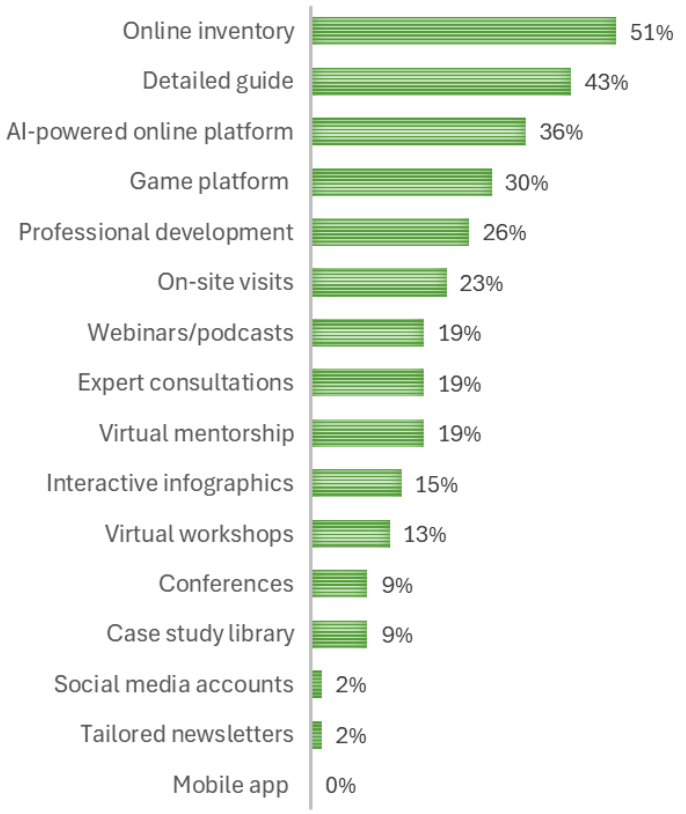
> *"Visits help support staff and student in implementation, consistency, and excitement of initiatives. Being able to observe successful programs in their context would be very beneficial."*

> *"Any way to build collaboration with other schools and mentors ... sharing success stories and other resources is helpful."*

Nonetheless, virtual interactions were preferred due to the significant amount of time and travel costs they can save.

Experts were also asked to identify combinations of tools/resources that could be most useful to schools. It became apparent that **no single tool could serve this purpose and target all audiences**. Interestingly, the three top tools (i.e., online inventory, detailed guide, AI-powered online platform) seamlessly lend themselves to merging into one comprehensive platform:

Figure 2



> The **ideal solution** could be a dedicated website that hosts an inventory of relevant materials (e.g., "how-to" videos, interviews with experts, peer-reviewed publications, and relevant grey literature), a detailed guide on the adoption and implementation maintenance of HPS, and an integrated AI-powered chatbot that school administrators could use to help them identify implementation strategies and activities tailored to their own school context, as well as pinpoint barriers that can be addressed at the school and school authority levels and enablers that can be built upon.

Indeed, the importance for the tool/resource to provide tailored approaches resonated with several other experts who noted:

> *"What would set it apart is being culturally responsive (for me, that would be with an Indigenous lens, using parent-friendly language, and respectful of various reading levels...)."*

> *"Local connections and resources are the toughest usually for us. Living in rural [Saskatchewan], practical ideas and suggestions from other rural schools [would be] so helpful!"*

> *"Too often we, in the North, do not see ourselves as reflected in any tool. Offer suggestions that if one strategy isn't working, then [these are] ways to think about an alternative strategy..."*

Experts were also asked to think beyond the list of tools/resources provided for their consideration: *"If you could request the Joint Consortium for School Health to develop any tool or resource to support HPS implementation and maintenance in schools, what would it be? Why do you think this new tool/resource would meet school needs when it comes to HPS implementation and maintenance? What aspects of this new tool/resource would set it apart in terms of usefulness,*

compared to other tools or resources? How does it build on existing assets?"

While suggestions revolved around the tools/resources included in Table 1, interesting thoughts emerged about an AI-powered online platform, with one expert commenting: *"If I could request the Joint Consortium for School Health to develop any tool or resource... the most useful resource would be an AI-powered HPS Assistant."* Other experts noted that *"by leveraging AI, schools would have a dynamic, responsive, and efficient resource to maintain and improve their HPS programs, ensuring better health outcomes for students and staff [and] metrics and actions for our school-specific context would make the process so simple and easy."* Somewhat similar to AI-powered HPS Assistant is another expert's idea of having *"an Online HPS Hub [that] would offer an interactive space where schools can collaborate, access materials, and receive personalized support."* This comment is in line with the above findings on what an ideal tool could look like.

A new tool/resource: Who is the target audience?

The list of 16 tools/resources offers a diverse array of tools that likely target a variety of audiences. Therefore, experts were asked to identify the **main** target audience for each of these tools/resources (Table 2).

Table 2

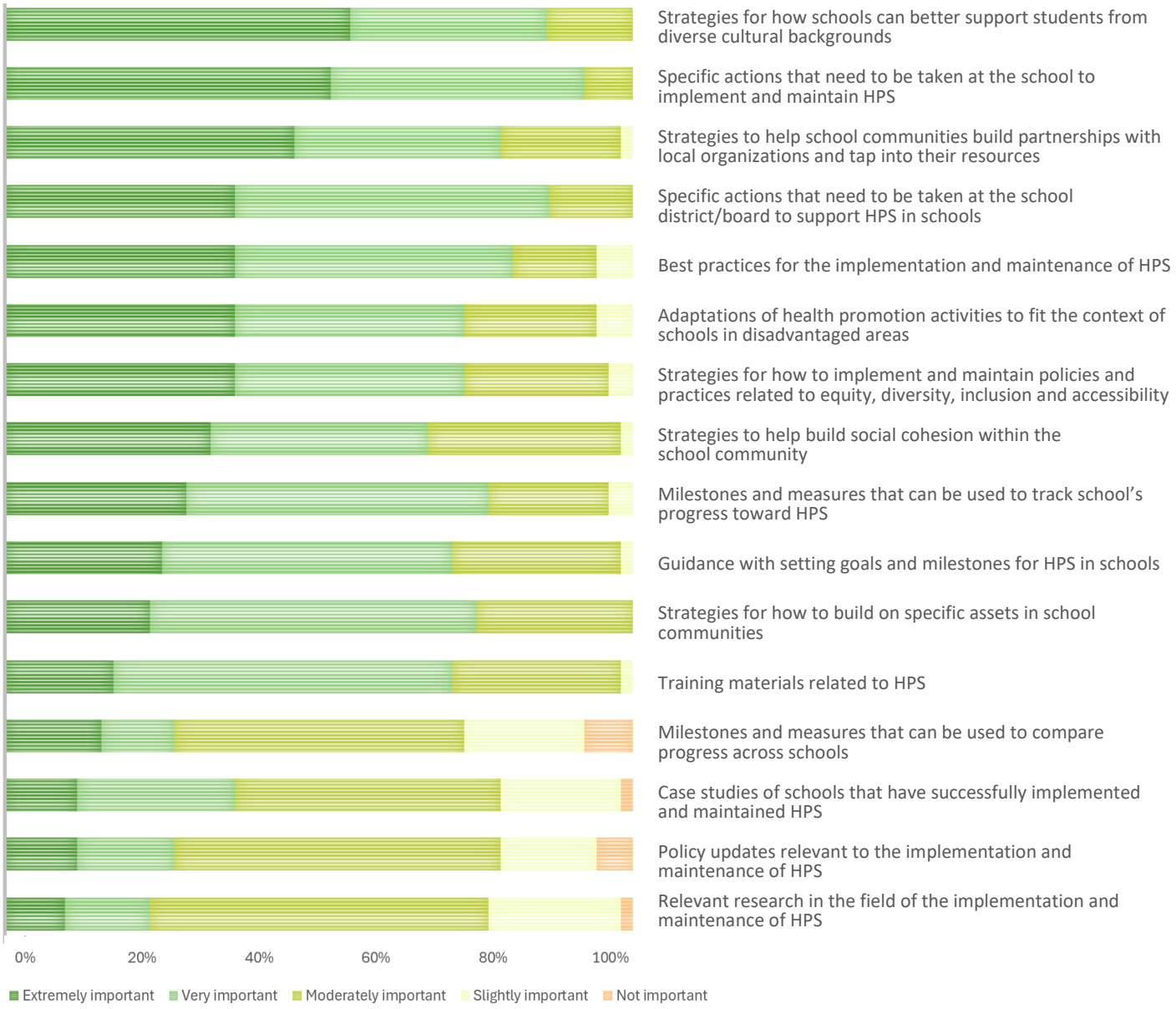
	School administrators	School staff	School authorities	Students	Families	Broader community
Detailed guide	87%	68%	51%	8%	13%	9%
Mobile app	66%	75%	49%	17%	21%	23%
Online inventory	68%	100%	38%	11%	13%	11%
AI-powered online platform	83%	89%	32%	26%	15%	11%
Game platform	34%	81%	21%	92%	55%	32%
Interactive infographics	81%	79%	62%	25%	42%	40%
Virtual workshops	74%	92%	36%	15%	17%	11%
Virtual mentorship	77%	87%	34%	15%	2%	6%
Expert consultations	81%	83%	47%	9%	4%	8%
Webinars/podcasts	89%	85%	53%	15%	15%	13%
Case study library	79%	79%	58%	13%	17%	25%
Social media accounts	66%	87%	51%	53%	66%	58%
Professional development	75%	100%	28%	11%	6%	2%
Tailored newsletters	74%	79%	43%	28%	49%	30%
On-site visits	81%	74%	42%	25%	13%	6%
Conferences	77%	68%	53%	11%	6%	17%

Experts identified school administrators and school staff as the main target audiences for most of the tools/resources on the list, including those tools/resources that were identified as particularly promising (i.e., online inventory, a detailed guide, an AI-powered online platform, professional development). However, one of the tools (i.e., game platform) stands out in that 92% of experts stated that the main audience for this tool/resource is students. This tool can also reach families (as suggested by 55% of experts). Although a social media account was not deemed to be a particularly useful tool/resource (Figures 1 and 2), it could accompany a new tool/resource if the goal is to reach families and students.

A new tool/resource: What content should it have?

To understand what content the experts deemed particularly important and thus necessary to consider in the development of a new tool/resource, experts were invited to reflect on a variety of content components and indicate their significance (Figure 3).

Figure 3



The following content was deemed extremely important or very important by close to or more than three-quarters of experts (Figure 3):

► specific actions that need to be taken at the school (91%) and school authority (85%) levels to maintain and implement HPS;

► strategies for how schools can better support Indigenous students (e.g., land-based learning) and those from diverse cultural backgrounds (83%);

► best practices for the implementation and maintenance of HPS (79%);

► strategies to help school communities build partnerships with local organizations and tap into their resources (77%);

► milestones and measures that can be used to track school's progress toward HPS (75%);

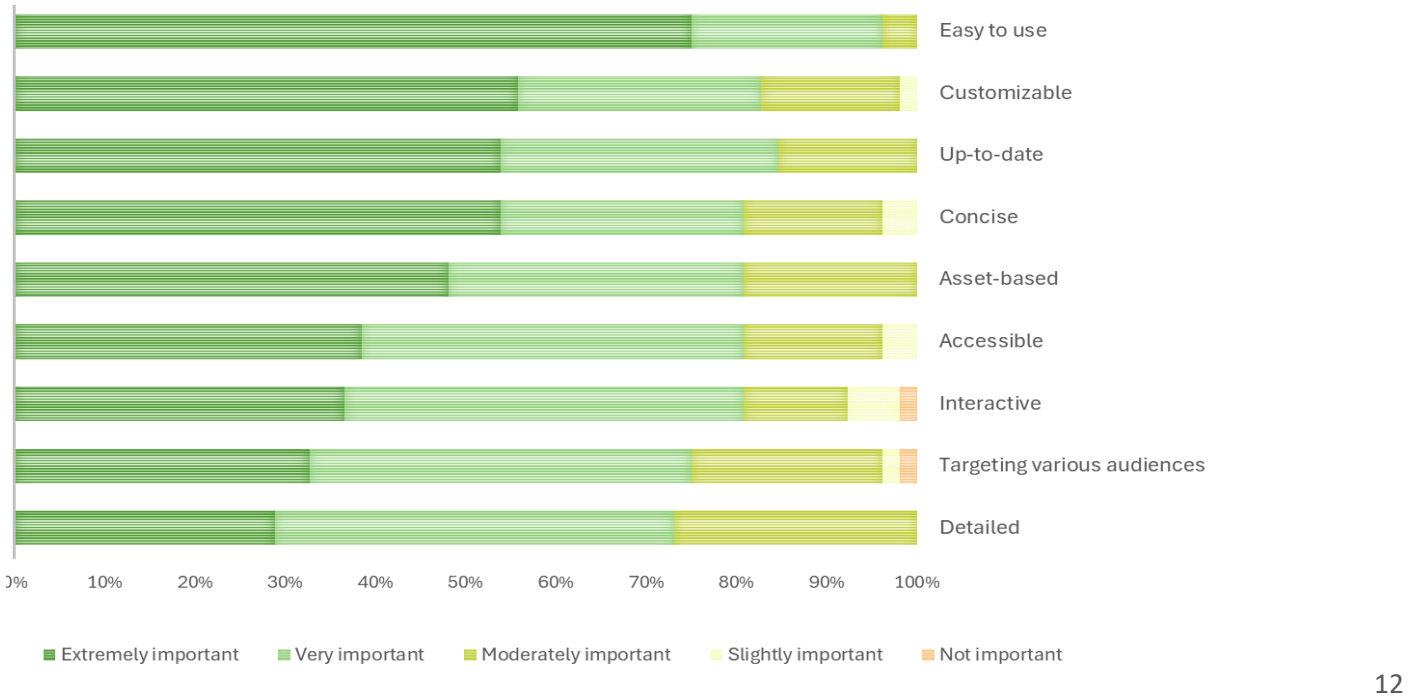
► strategies for how to build on specific assets in school communities (74%).

Other content components (e.g., training materials related to HPS; guidance with setting goals and milestones for HPS in schools; strategies to help build social cohesion within the school community; strategies for how to implement and maintain policies and practices related to equity, diversity, inclusion and accessibility; adaptations of health promotion activities to fit the context of schools in disadvantaged areas) were deemed extremely important or very important by about 70% of experts. However, content related to case studies, policy updates, and research was judged to be of relatively limited importance, with close to half of all experts indicating this content is only moderately important.

Experts considered nine characteristics of a new tool/resource and assessed the importance of each characteristic: ease of use, customization, currency, conciseness, asset-based design, accessibility, interactivity, detail, and targeting various audiences.

Over 70% of experts deemed all characteristics to be extremely important or very important (Figure 4). Notably, 'ease of use' was particularly emphasized, with 74% rating it as 'extremely important.' This was highlighted by one expert: *"It has to be easy to use, or it won't be used."* The necessity for a new tool/resource to be as easy to use as possible stems from the busy nature of the school environment: *"Schools are busy places with staff juggling many different roles and tasks throughout the day, and efficiency is helpful..."* Furthermore, considering the high staff turnover in schools, especially in socioeconomically disadvantaged areas, the tool must be straightforward enough for anyone stepping into the role of implementing the HPS approach: *"There is often so much staff turnover that not requiring previous HPS training would be helpful…"* The tool also needs to be regularly updated to ensure that the HPS activities being implemented align with best practices and the latest research: *"Information [should be] consistently updated [and include] the latest and greatest news on what works."* Importantly, the tool or resource must be tailored to the local context of each school to include, ideally, a list of local resources that can be utilized: *"Understanding the resources in your area is important to build community connections, parent and school connections."*

Figure 4



What tools/resources do schools currently use?

Experts use a variety of existing tools/resources, such as:

- Physical and Health Education Canada "Creating a Healthy School Community" e-learning modules (23%)
- Joint Consortium for School Health “Healthy School Planner” (26%)
- Canadian Healthy Schools Alliance “Canadian Healthy School Standards” (30%)
- Provincial/territorial student health surveys (34%)
- School authority student health surveys (38%)

Most of the experts reported using these tools/resources only one or a few times a year (40%), with less than 20% of experts indicating using them weekly or monthly.

Experts were asked to reflect on what they liked and did not like about the tool/resource they were currently using (see Table 3). Experts appreciated that the tool/resource they currently use is easy to understand and use (57%), helps identify priorities for health promotion in schools (51%), helps set goals and milestones for health promotion in schools (43%), and helps identify specific actions for health promotion in schools (43%). However, some experts noted that the tool/resource they used was too lengthy (21%), contained information that was generic and not specific to their school (19%), did not help build on existing assets and resources (17%), and had rigid structure (15%).

Table 3

What did you like about the tool/resource?	%	What did you not like about the tool/resource?	%
Easy to understand and use	57	Too lengthy	21
Helps identify priorities for health promotion in schools	51	Information provided is generic and not specific to a specific school	19
Suggests specific actions for health promotion in schools	40	Information provided does not help build on assets and existing resources in schools	17
Helps set goals and milestones for health promotion in schools	43	Rigid structure (e.g., sections are pre-set and cannot be changed)	15
Helps identify specific actions for health promotion in schools	43	Information overload	13
Format (e.g., printable PDF)	38	Takes too much time to learn how to use it	6
Flow and its organization in general	25	Difficult to understand	4
Tracks and logs the actions taken towards the goals and milestones for health promotion in schools	17	Training required on how to use it	2
No additional training required	25	Not relevant to school needs	0
Identifies achievements in terms of successful health promotion in schools	13		

What does a successful HPS school look like?

Educators recognize the value of the HPS approach, saying that "*all other priorities cannot be reached if health is not a top priority*." However, only 43% of educators reported that the HPS approach was a top priority or high priority in their schools, with every fourth educator (25%) reporting that the HPS approach was low priority or not a priority at all in their school. In the lead-up to identifying current enablers and barriers to HPS implementation and maintenance, experts were asked to share their perspectives on what constitutes a successful HPS school. According to experts, a successful HPS school is one that:

► involves every member of the school community working toward the common goal of creating a healthier school community	*"A health-promoting school is one that is constantly working towards creating safe, caring, supportive, engaging, and healthy environments for all students to learn and grow."* *"Engages with students, families, staff, and the broader community to contribute to a health-promoting school culture."* *"A successful HPS school to me is one where students, staff and families work together for the overall health of a school."*
► has health promotion fully integrated into the school community	*"[HPS is an] integrated approach to wellness for all students and staff; [health promotion is] not confined to physical education/health classes."* *"[There is] systemic, multifaceted integration of concepts, programs, and theories related to HPS [into the school culture]."*
► sets clear goals for health promotion and regularly assesses its progress	*"Action plans initiated, followed through and reflected upon."*
► employs creative, engaging, and culturally relevant health promotion activities	*"Activities that are engaging to students and also develop parent and community knowledge."* *"A school that has sustainable and engaging practices that go beyond the school walls to engage the broader community and students' families."* *"Students value and want to eat healthy food, initiate gardens, and learn from local farmers."*
► supports and cares about school staff	*"Teachers and staff are supported through manageable workloads, professional development, and a collaborative culture."*
► makes use of existing assets to respond to the school's unique needs	*"It should align with the health curriculum and be seen in correlation to what is already being done in schools."* *"Each school finding a unique way to promote health to best suit their environment and population."*

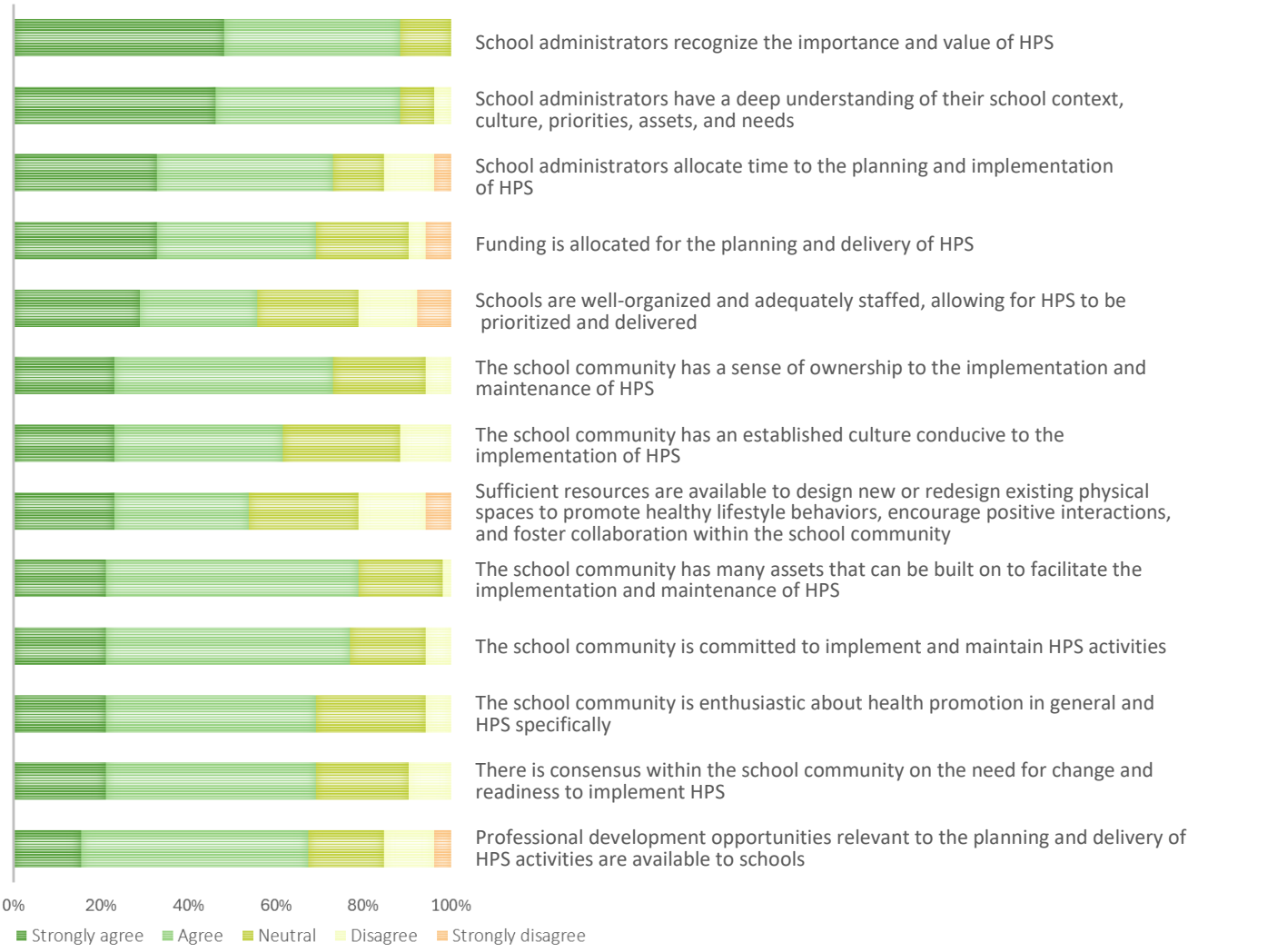
What factors **enable** the successful implementation and maintenance of HPS?

A list of 13 enablers that can support schools in implementing and maintaining HPS was compiled based on the review of the literature and the consultations with JCSH members and other experts. Experts were asked to rate the importance of each of the 13 enablers that may support HPS implementation and maintenance in schools (Figure 5).

The findings presented in Figure 5 underline the importance of school administrators to the success of HPS: 87% strongly agreed or agreed that school administrators who recognize the importance and value of HPS and have a deep understanding of their school context, culture, priorities, assets and needs are two essential enablers. More than 70% also strongly agreed or agreed that school administrators should allocate time to the planning and implementation of HPS. Another group of enablers that stand out is the one related to the school community, with experts highlighting the importance of the school community building on the existing assets (77% strongly agreed or agreed), being committed to implementing and maintaining HPS activities (75%), and having a sense of ownership over the implementation and maintenance of HPS (72%).

Indeed, the importance of the whole community being on board has been highlighted by one expert saying: *"The school community needs to believe the work is needed and worthwhile for forward movement to occur […] Without ownership, [HPS] is just a background thought, and [it] doesn't thrive or grow."*

Figure 5



Experts were again asked to identify the three main enablers (Figure 6). In keeping with the previous question, "School administrators have a deep understanding of their school context, culture, priorities, assets, and needs" and "School administrators recognize the importance and value of HPS" were selected as the top enablers by 60% of experts. Interestingly, enablers related to the school community were selected as one of the top three enablers by just a few experts: the school community being committed to implementing and maintaining HPS was selected by less than 20% of experts, with other enablers at the school community level being selected by 4-8% of experts.

This might indicate that most experts place the responsibility on school administrators to create favourable conditions for the successful implementation and maintenance of HPS. The need for strong administrative leadership has been highlighted by several experts:

"In order for staff members to believe in this project, it's vital that school administrators believe in it too." (Translated from French)

"If leadership is not on board, forward movement will be stunted."

"School administration leads the direction of all school initiatives."

Figure 6

Moreover, comments from experts highlighted the importance of having school administrators understand the unique context of their schools and align HPS efforts with their school's unique needs: *"Leaders need to understand the strengths and stretches of the school community to move forward."* Although the significance of proper staffing in schools may not have been obvious in the expert responses to the previous question Figure 5), 47% identified it as one of the top three enablers, with two experts noting the following:

> *"With the increasing demands placed on schools, adequate staffing is vital to the success of any initiative."*
>
> *"We are stretched thin, and it is hard to take on extra."*

Relatedly, 43% of experts selected "Funding is allocated for the planning and delivery of HPS" as one of the top three enablers, with several experts making the following comments:

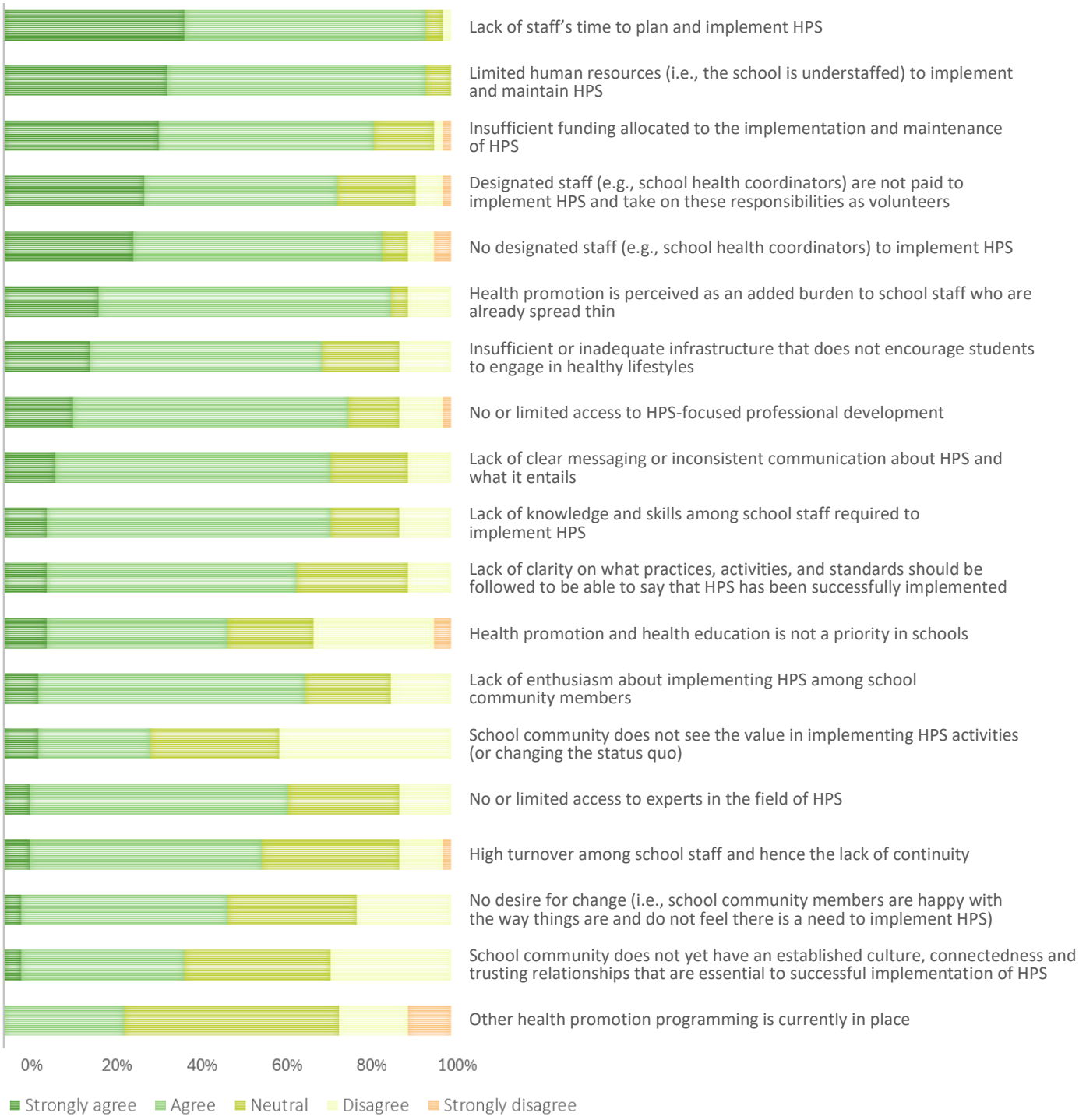
> *"Release time and coordinated efforts are important to allow staff to grow and implement initiatives."*
>
> *"Planning time is important for educators; if we are not given time, nothing will be implemented or accomplished."*
>
> *"Our budget is extremely tight, and we wouldn't be able to implement this program [HPS] without funding."*

What factors **hinder** the successful implementation and maintenance of HPS?

Experts were also asked to indicate their agreement that each of the 19 factors identified through the literature review and consultations with JCSH members can hinder the implementation and maintenance of HPS in schools (Figure 7). More than 90% of experts strongly agreed or agreed that "Limited human resources (i.e., the school is understaffed) to implement and maintain HPS" and "Lack of staff's time to plan and implement HPS" are barriers to becoming a successful HPS school.

The top six statements that at least 75% of experts strongly agreed or agreed to be important barriers: "Limited human resources (i.e., the school is understaffed) to implement and maintain HPS" (92%); "Lack of staff's time to plan and implement HPS" (92%); "Health promotion is perceived as an added burden to school staff who are already spread thin" (85%); "No designated staff (e.g., school health coordinators) to implement HPS" (83%); "Insufficient funding allocated to the implementation and maintenance of HPS" (81%); "No or limited access to HPS-focused professional development" (Figure 7).

Figure 7



The aforementioned barriers relate to limited capacity to support HPS in schools, stemming from insufficient staff time, human resources, or funding. These same factors were selected most frequently as the top three barriers (Figure 8), with experts highlighting the numerous demands faced by school staff, which make additional initiatives hard to maintain in the presence of competing priorities: *"Administrators are overworked in most boards. This is very important work but something else would need to be taken away to add this."* One expert noted: *"Staff are already exhausted; adding another program would not be well received*," while others mentioned that the pandemic has made implementation even more challenging: *"Following the pandemic, school staff have become more resistant to*

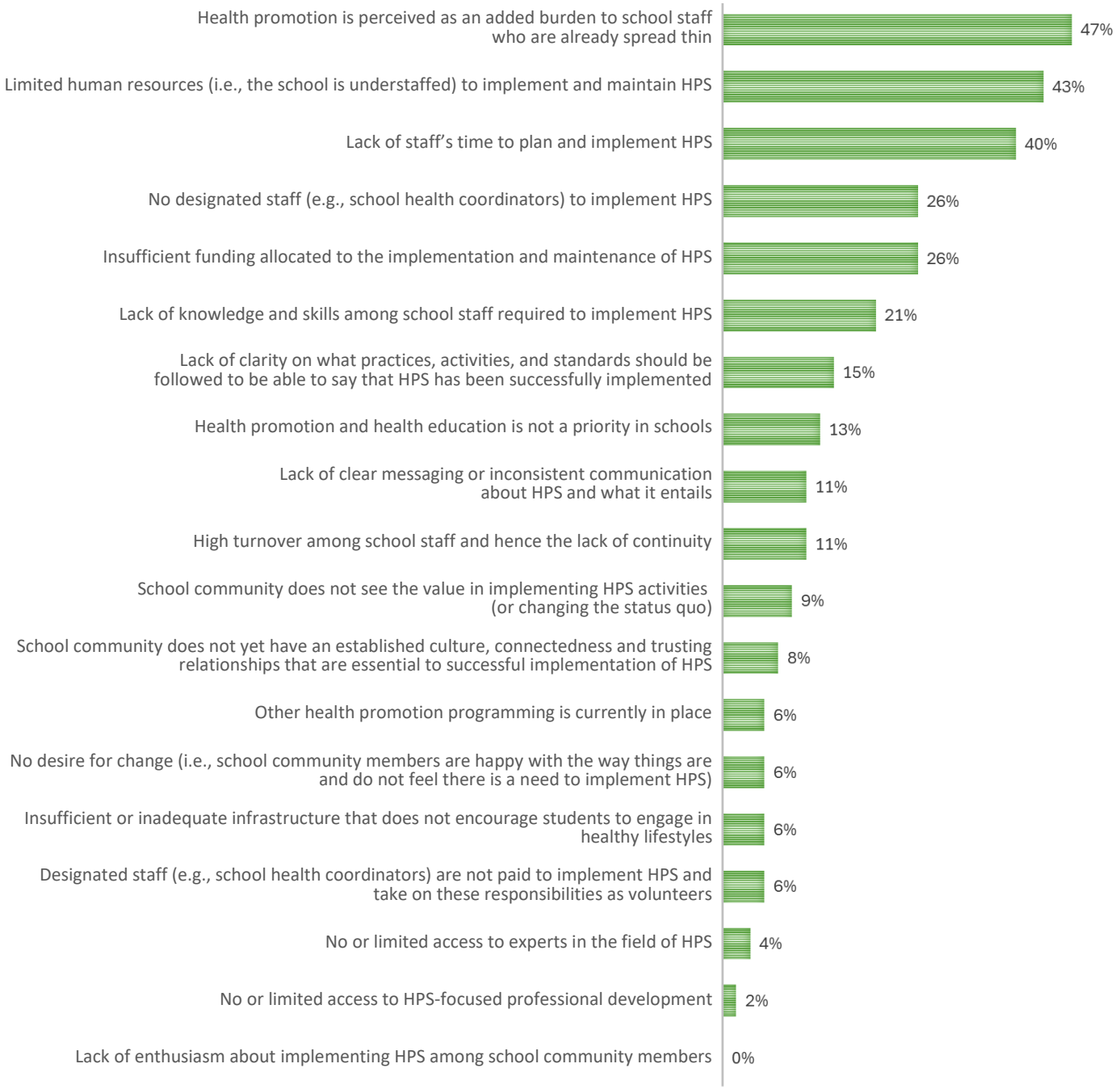
implementation." Due to a lack of sufficient time, one expert remarked, *"we do not even have enough time to plan regular lessons, and [HPS implementation] would be an additional burden."* To address the perception of HPS as a burden, several experts identified the need for health champions, stating:

> *"Without dedicated staff to support HPS, it becomes just another demand on school staff."*

> *"When schools are understaffed, plans [to implement HPS] cannot receive the time and attention needed for effective implementation."*

Moreover, sufficient funding should be *"built into the core budget … to make [HPS implementation] a priority."* The next section explores the budgetary considerations when implementing and maintaining the HPS approach.

Figure 8



Financial considerations for the successful implementation and maintenance of HPS

Experts were asked to rank the importance of funding for HPS planning, implementation, and maintenance. Experts considered funding to be most important in the planning phase (selected by 42% of experts) and the first year of implementation (50% of experts) (Table 4). Funding during the maintenance phase appeared to be less critical.

Table 4

	Rank 1	Rank 2	Rank 3	Rank 4
In the planning phase of HPS	42%	35%	12%	12%
In the first year of implementing HPS	50%	35%	6%	10%
In subsequent years of implementing HPS	2%	23%	50%	25%
Throughout the years of maintaining HPS	6%	8%	33%	54%

Next, experts were asked to consider a list of 13 activities and identify the importance of funding for each activity and choose top three priorities for funding allocation (Figure 9). Nearly all experts (94%) indicated that funding is extremely important or very important for providing "Paid release time for designated staff to act as a HPS coordinator for the school."

Two activities that were considered only moderately important were "Inviting speakers from other provinces and territories to share their experiences with HPS" and "Sending staff to national/regional conferences on HPS approach." However, between 70% and 90% of experts considered funding for the remaining activities to be either extremely important or very important.

Among the top three priorities for funding allocation to promote successful implementation and maintenance of HPS in schools, funding for "Paid release time for designated staff to act as a HPS coordinator for the school" and "Hiring additional support staff (e.g., health educators, counsellors)" was prioritized by 66% and 55% of experts, respectively.

Experts were also given a chance to consider a scenario whereby their school received an extra $1,000 (or school authority received an extra $50,000) to spend on activities related to HPS implementation and maintenance. Experts were asked which activities they would allocate extra funding to. Some activities were related to those included in the list in Figure 9, such as:

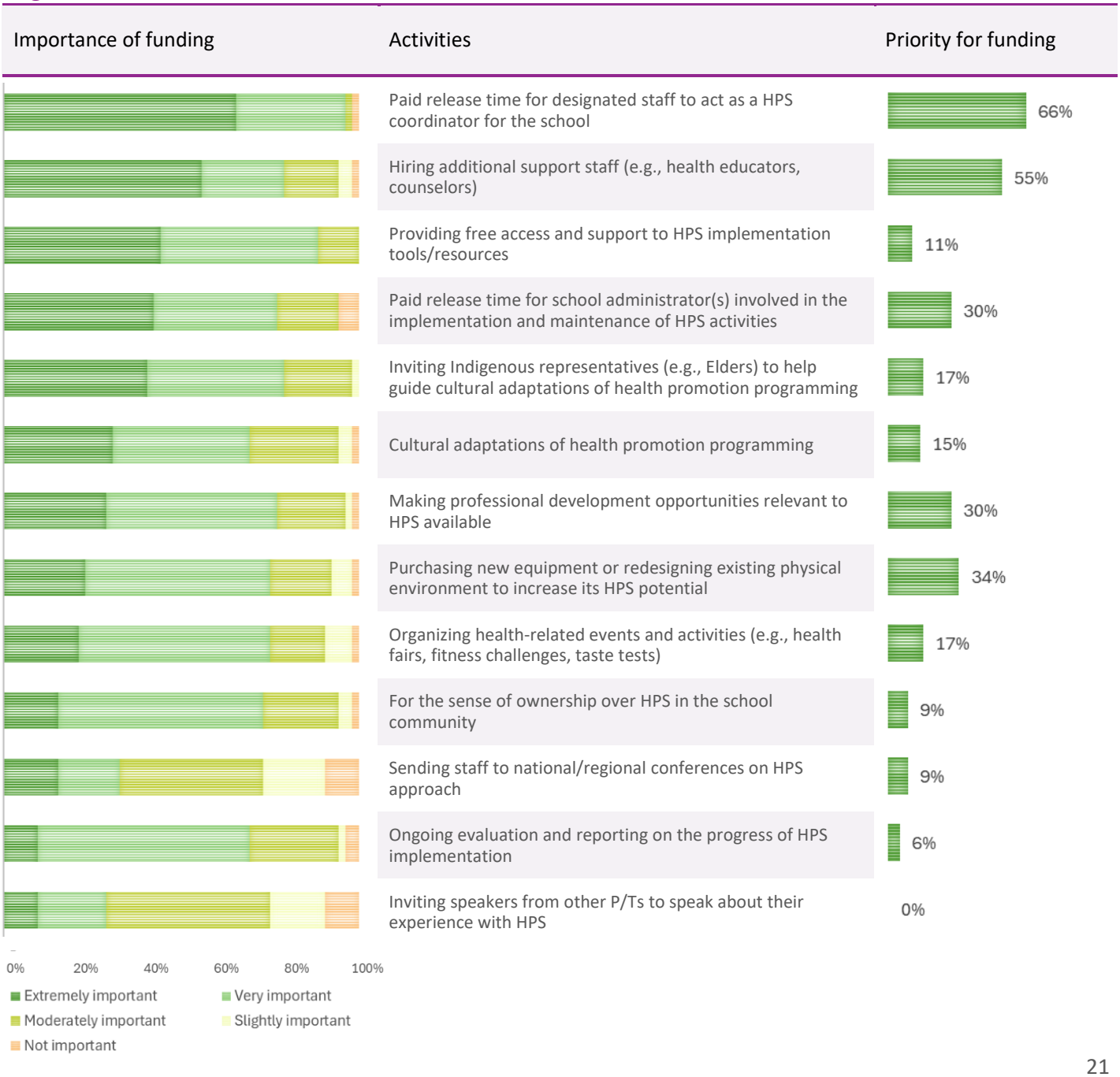
- Physical resources and infrastructure to support initiatives, purchasing new equipment and materials: *"Facilities - renovating our current space and purchasing appliances that would help us implement the [HPS] program."* Another expert at the school authority level noted that these extra funds could be used to address inequities between schools by supporting infrastructure projects in underserved areas: *"Funds could support a specific infrastructure project, like an outdoor space or trail development at a school that experiences further intersectional challenges within its community (e.g. rurality, family income levels, quality and age of school infrastructure, proportion of students among equity-deserving communities."*
- Hiring a dedicated staff member: *"If a school authority had an extra 50,000, I would advocate spending it on having a dedicated staff member to support division health implementation and maintenance."*
- Release time: *"Release time for a teacher to work on this programming, going into classes and supporting teaching staff and students and parents."*
- Professional training: *"I think it would be important to take time to understand HPS more fully and whether that's training or time spent on creating quality resources as a divisional team to share out to schools, that money could be dedicated [to] educating professionals in building foundational understanding and capacity."* Another expert noted the need for these professional

development opportunities to be culturally responsive: *"Training for staff with the connectedness of Elders and community supports so that any implementation is culturally relevant and specific to school and community needs."*

► Engaging interesting speakers: *"For a school with $1,000, the focus could be on hosting engaging speakers who cover topics related to faith, wellness, and personal growth, with a meal or snacks provided to create a welcoming, communal atmosphere. Interactive workshops or activities, such as mindfulness exercises, group discussions, or physical activities (e.g., yoga or outdoor games), could be included to make the day more dynamic."*

► Health and well-being programs (e.g., HPS Fair, wellness days, fitness challenges, taste tests): *"I would want to expose students to activities they may not otherwise be able to participate in, due to our location in a northern rural community."*

Figure 9



Some suggestions went beyond the list provided in Figure 9, such as:

► Student engagement activities: *"I would bring in organizations to engage staff and students in activities and sessions to build excitement and engagement."*

► Monitoring the progress: *"I would spend money on action planning and data tracking tools that are user-friendly and provide helpful information to communities. [Informed by] the planning sessions, I would spend money on the priorities that were highlighted from the action planning."*

► Regional-level initiatives that would benefit multiple schools: *"With $50,000, the impact could be expanded to include multiple schools. This larger budget would allow for high-quality speakers, specialized wellness experts, and a more diverse selection of activities. A portion of the funding could be used to create resources or kits for each school to incorporate wellness practices year-round. Additionally, funds could support a series of smaller wellness days or events throughout the year, creating a continuous focus on health and faith that extends beyond a single day."*

Several experts also noted that funding allocation is highly context-dependent, and schools should have the ability to decide how to spend this additional funding: *"The school should be able to spend resources on what they deem important with a strong, focused understanding of HPS."*

Conclusions

This report summarizes the results of a consensus-building process among Canadian experts (school health coordinators, leads or managers at the school authority, school principals or vice-principals, school health facilitators or champions) on how to best support schools to adopt and implement the *Canadian Standards and Indicators for Health Promoting Schools* in schools. Results reported herein inform the development of a new tool/resource to support schools in implementing the *Canadian Standards and Indicators for Health Promoting Schools* within their school communities.

Among the 16 potential tools and resources, the following five emerged as being extremely helpful or very helpful, having been selected by at least 70% of experts:

► **AI-powered online platform** (i.e., interactive AI-powered online platform where school members fill out a quick survey about their school context, assets and resources, and receive a list of tailored metrics and actions);

► **game platform** (i.e., interactive, game-like learning platform where different members of the school community (including students) can learn about HPS and how it can be implemented and maintained in their school);

► **a detailed guide** (i.e., document with a detailed guide to help schools move from planning to implementation and maintenance of HPS);

► **online inventory** (i.e., website with an inventory of available resources and short "how-to" videos with practical suggestions on how to implement and maintain HPS);

► **professional development** (i.e., in-school professional development training delivered by an HPS expert).

While the last three options may be considered conventional, the first two – the AI-powered online platform and the game platform – highlight new opportunities for promoting HPS. The game platform has been recognized as an

effective strategy to engage students, while the other four options are designed to assist school administrators and staff.

Overall, experts have underscored the need for tools and resources that are user-friendly, up-to-date, customizable to schools' priorities and needs, and that offer concrete details and strategies to support the adoption and implementation of the *Canadian Standards and Indicators for Health Promoting Schools*. A comprehensive package of school supports may include a dedicated website that hosts an inventory of relevant materials (e.g., "how-to" videos, interviews with experts, peer-reviewed publications, and relevant grey literature), a comprehensive guide on the implementation and maintenance of HPS, and an integrated AI-powered chatbot that school administrators could use to identify implementation strategies and activities tailored to their specific school context.

Finally, experts have considered factors that may enable or hinder the successful implementation and maintenance of HPS. Among the 13 enabling factors, participants underscored the importance of school administrators' appreciation of HPS and their understanding of the school community. Experts also emphasized the necessity for school administrators to align the implementation of HPS with the priorities, assets, and needs of their school community. Among the 19 hindering factors, the six top-ranked barriers referred to capacity challenges to support HPS due to limited staff time, human resources, and funding, which was deemed most essential during the planning phase and the first year of HPS implementation. If more funding were to become available, nearly all experts indicated they would allocate it to paid release time for a designated staff member to serve as an HPS champion for their school.

Glossary

Equity, diversity, inclusion, and accessibility (EDIA): as per the Government of Canada, equity is defined as "the principle of considering people's unique experiences and differing situations, and ensuring they have access to the resources and opportunities that are necessary for them to attain just outcomes"; diversity – as "the variety of identities found within an organization, group or society"; inclusion – as "the practice of using proactive measures to create an environment where people feel welcomed, respected and valued, and to foster a sense of belonging and engagement"; and accessibility – as "the quality of an environment that enables a person to access it with ease."[23]

Health Promoting Schools (HPS): an internationally recognized approach for supporting improvements in students' educational outcomes while addressing school health in a planned, integrated, and holistic way.[24]

HPS activity: an activity that supports the implementation and maintenance of HPS.

HPS approach: the combined efforts and activities of the implementation and maintenance of HPS. The HPS approach considers the specific needs of students and school communities and is therefore unique to every school community.

Indicators: the monitoring tools or signs that indicate whether schools are meeting the Standards.

Indigenous peoples: a collective name for the original peoples of North America and their descendants. The Canadian constitution recognizes 3 groups of Indigenous peoples: First Nations, Inuit, and Métis.[25]

Local community: the community of people living and working in the school neighbourhood and various organizations external to the school but that engage with students or staff at the school. The local community may include local government authorities, nongovernmental organizations, faith- based organizations, Elders and Knowledge Keepers, private enterprises, community health services and community groups such as youth groups, and providers of organized sports, arts, and other cultures.[24]

School authority: school authorities are led by publicly elected officials and responsible for the general administration of schools in their jurisdiction, managing staff, overseeing student enrolment, and planning and maintaining school buildings. School authorities promote regular meetings so members of the school community can express their concerns and share their views on how schools in their area are governed. School authority is synonymous to school district, school division, and district education council.[26]

School community: students, their parents/guardians, school staff (e.g., teachers, principals, administrative and support staff), school governance (e.g., members of the school authority), and volunteers active in the school.[24]

School district: school district is synonymous to school authority, school division, and district education council.

School staff: teaching and non-teaching school employees.

Maintenance: continued enactment of HPS-related processes and practices established in school.

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