

# THE MIDDLE YEARS DEVELOPMENT INSTRUMENT

Measuring and mapping children's social and emotional health, well-being and assets in the middle childhood years: A tool for policy and programming



The middle years are a time of heightened risk but also great opportunity. Middle childhood - the time between 6 to 12 years of age - marks a distinctive period in human development. Children experience important cognitive, social and emotional changes that establish their identity and set the stage for development in adolescence and adulthood (Eccles, 1999).

The Middle Years Development Instrument (MDI) is a self-report questionnaire that asks children in middle childhood about their thoughts, feelings and experiences. The MDI is the first survey of its kind to gather information about the lives of children both in school and community, from their own perspective. The survey uses a strengths-based approach to assess five dimensions of child development that are strongly linked to social and emotional well-being, health, academic achievement, and overall success throughout the school years and in later life:

## What is the Middle Years Development Instrument (MDI)?

- The MDI is a **population-level survey** in Canada that gathers comprehensive information on the lives of children in **grades 4 and 7**, from the children themselves.
- The MDI was created to address the lack of population-level data on the social and emotional health, well-being and developmental assets of children in middle childhood inside and outside of school.
- The survey is not used for individual diagnosis or assessment of children, or comparison of individual teachers, classrooms or schools.



### Social & Emotional Development

Optimism, empathy, happiness, prosocial behaviour, self-esteem, self-regulation, sadness and worries, responsible decision-making\*, self-awareness\*, perseverance\*, assertiveness\*.



### Physical Health & Well-being

General health, body image, nutrition, meals with family members, and sleeping patterns.



### Connectedness

Presence of supportive adults in schools, families, and neighbourhoods, sense of belonging with peers, and friendships.



### Use of After-school Time

Time spent participating in organized and unorganized activities including team and individual sports, lessons (e.g. music, art, academic), watching TV (e.g. online streaming of TV, movies and videos), playing video games, socializing with friends, reading, homework, working\* and volunteering\*.



### School Experiences

Academic self-concept, school climate, school belonging, future goals and victimization (bullying).

\*Only children in grade 7 are asked to report on these areas.

*"[The MDI] gives us something that we all have in common that we can discuss, that we can use to plan, and to implement practices, programs, and services for children and their families."*

*- Angelo Lam, Coordinator for Tri-Cities Middle Childhood Matters Committee*



## The MDI...

- Uses a strengths-based approach and focuses on children's positive assets;
- Helps us understand the development of the whole child;
- Offers children a voice and an opportunity to share their thoughts, needs and wishes; and
- Provides a reliable and valid way to assess children's development and well-being.

The MDI was developed by a collaborative group of researchers at the Human Early Learning Partnership (HELP), educators and community members interested in tracking trends and patterns in children's social and emotional health, well-being and developmental assets. The MDI was developed with the goal of providing policy makers, educators and community organizations with essential data to support decision-making aimed at creating the conditions in which children can flourish.

The MDI is supported by funding from The United Way of the Lower Mainland, the BC Provincial Ministries of Education, Health and Children and Family Development, as well as participating school boards (districts) in BC.

## WHY THE MIDDLE YEARS MATTER

Middle childhood, from ages 6 to 12, is an important period in human development and a time of transition into early adolescence. During this time, children experience significant cognitive, social and emotional changes that set the course for success in their adolescent and adult years. Research shows that a child's overall health and well-being during this critical period of development affects their ability to concentrate and learn, develop and maintain friendships, and navigate thoughtful decision-making.

As the elementary school years progress it is common to observe declines in children's self-reported confidence, self-concept, optimism, empathy, satisfaction with life and social responsibility. However, these declines are not inevitable. During these transitional years there are many opportunities within school and community environments to promote resiliency and buffer children from these risks. Children in their middle years can develop social and emotional competencies and lifelong patterns of behavior that will help them thrive.

## WHY MEASURE AND MAP CHILDREN'S WELL-BEING?

The middle years are an important period for the development and strengthening of these social and emotional competencies and their related outcomes. With an emerging focus on the importance of these competencies across sectors, there is an increasing need for quality, population-level data to guide policy

development and program investments. The purpose of the Human Early Learning Partnership's (HELP) middle years research is to gain a deeper understanding of how children are doing at this stage in their lives, at a population level. Children's perspectives on their experiences both inside and outside of school provides important information to support evidence-based decisions on funding allocation, program delivery and policy development across sectors.

The MDI provides a reliable method for assessing children's social and emotional development, physical health, relationships, experiences in school and community and participation in after-school activities. It offers children an opportunity to share their experiences and opinions related to these areas of their lives. They are also able to share their wishes and perceived barriers related to their participation in after school activities.

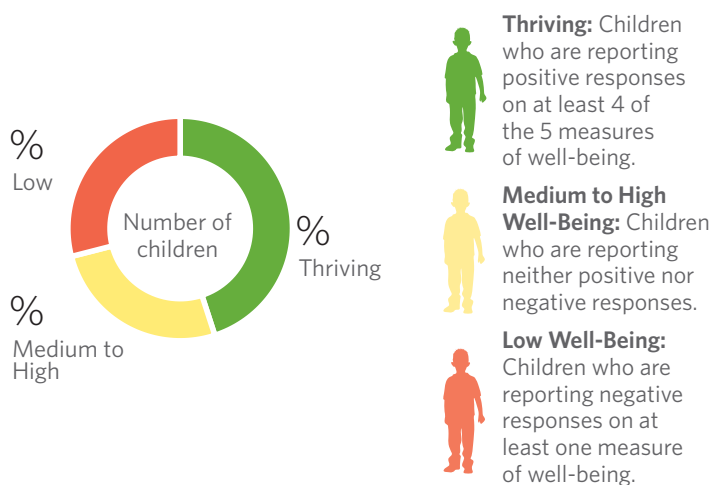
## VALIDITY AND RELIABILITY

The MDI was developed based on five decades of research on resiliency and risk in the field of child development. Four studies have been conducted to test the validity of the MDI survey, in both urban and rural communities in BC. Results from these studies show the MDI has both strong reliability and validity as a measure of children's overall well-being. Data checks are repeated every year to ensure data collected meet rigorous research standards.

## MEASURING SOCIAL AND EMOTIONAL WELL-BEING & ASSETS

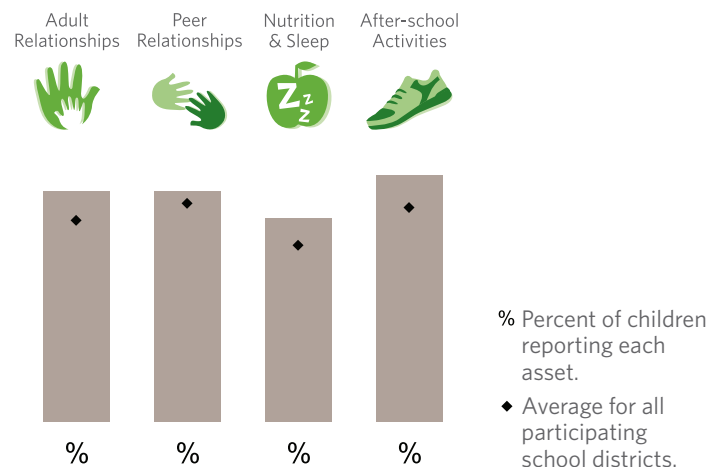
The MDI consists of measures relating to children’s physical health and social and emotional development that are of critical importance during the middle years: Optimism, Happiness, Self-Esteem, Absence of Sadness, and General Health. Scores from these five measures are combined to create the **MDI Well-Being Index**, which assesses three categories of well-being: ‘Thriving,’ (or experiencing ‘High’ well-being), experiencing ‘Medium to High’ well-being, or ‘Low’ well-being. (Fig. 1)

FIG 1: THE WELL-BEING INDEX



Assets are positive, everyday influences that are known to protect children against vulnerability and promote positive well-being during the middle years. The **MDI Assets Index** measures qualities present in children’s lives that make a difference: Positive Adult Relationships, Positive Peer Relationships, After-school Activities, and Nutrition & Sleep. (Fig.2) Each asset is calculated and reported as the percentage of children reporting the presence of the asset in their lives.

FIG 2: THE ASSETS INDEX



Resiliency research shows that assets are qualities in children’s lives that promote positive development. This aligns with one of the key findings of the MDI that indicates children’s self-reported health and well-being is related to the number of assets they perceive in their lives. As the number of assets in a child’s life increases, they are more likely to report higher levels of well-being.

## HOW ARE MDI DATA COLLECTED AND SHARED?

The MDI survey is completed by children online during class time. Children completing the survey are supervised by a classroom teacher, principal or other school staff. Participation in the MDI is completely voluntary. Individual schools or teachers may choose to opt out, parents may withdraw their children at any time and children also have the option to decline participation. Completed MDI surveys go to a secure data processing lab at the University of British Columbia where data are cleaned and analyzed. The systems and processes used to collect, store and report on MDI data meet or exceed the requirements of BC and federal privacy legislation. All personal identifier information is removed before records are encrypted and stored in a highly secure data storage facility at the University of British Columbia.

A series of reports and maps are produced for participating school boards. These reports summarize and contextualize the responses students have provided in each area of the MDI.

**School District and Community Reports** - These reports contain data representing all of the children who were surveyed within a school district. Data are aggregated and averages are reported and mapped at both the school district and the neighbourhood levels:

**School Reports** - These reports contain data specific to the population of children who participated in the MDI at an individual school. These reports are internal and are not released publicly. School reports can be shared with teachers, parents, and community partners at the discretion of the school district administration.

School District and Community Reports are made publicly available at [www.earlylearning.ubc.ca/maps/mdi/nh](http://www.earlylearning.ubc.ca/maps/mdi/nh)



## MOVING TO ACTION: HOW CAN MDI DATA BE USED TO IMPROVE CHILDREN'S LIVES?

The MDI is a tool to support governments, educators, health professionals and community organizations to make evidence-based decisions. It offers valuable information to help monitor the impact of programs, practices and policies designed to improve the well-being of children in schools and in communities. To support these activities the data collected from the MDI are reported at three different levels of geography: school, neighbourhood and school board, illustrating the importance of multiple contexts including home, school and community in fostering children's well-being.



- Schools use MDI results to set goals, develop strategies for creating supportive environments for children, and to build connections with community organizations;
- School boards use MDI results to inform community-school partnerships and to develop services;
- Municipal and community service providers use MDI information to help identify children's needs and to create after-school activities and school-aged childcare programs; and
- Municipal and provincial governments use MDI results to guide policy and curriculum development.

The MDI has been implemented in 29 of 60 school boards (districts) in British Columbia, and is being piloted in multiple provinces and territories across Canada in 2016. It is also implemented in regions in the United States, Australia and Peru.

Additional resources, including an MDI guide, a range of videos, presentation slides, worksheets, community stories and links to academic research on child development are also available. These resources provide support for exploring, interpreting and moving to action with MDI data in various contexts. Please visit the HELP website for a detailed example of the MDI reports and supporting resources: [earlylearning.ubc.ca/mdj](http://earlylearning.ubc.ca/mdj).

## RELATED RESEARCH & REFERENCES

### Why the middle years matter

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