The 360 WORKSHOPS

VIRTUAL REALITY

TO HELP TEENS WITH SOCIAL
AND EMOTIONAL LEARNING

BOOKLET:
Virtual Reality, Social
and Emotional Learning
and School

Institut Pacifique

UNIVERSITÉ DE SHERBROOKE

UNLTD

Jasmin Roy
Sophie Desmarais
FOUNDATION

CREDITS

PROJECT LEADERSHIP AND COORDINATION

Jasmin Roy, President, Jasmin Roy Foundation

Mylène Isabelle, Project Manager, Jasmin Roy Foundation

EDUCATIONAL BOOKLET RESEARCH, DESIGN AND WRITING

Isabelle Boissé, Senior Director - Development, Research and Innovation, Institut Pacifique

Geneviève Duchesne, Trainer, Consultant and Mediator, Institut Pacifique

Amandine le Polain de Waroux, Trainer, Consultant and Mediator, Institut Pacifique

Rebecca Medeiros, Trainer and Consultant, Institut Pacifique

Vincent Domon-Archambault, D.Ps., clinical psychologist

Miguel M. Terradas, Ph.D., clinical psychologist, Professor, Department of Psychology, Université de Sherbrooke

SCENARIO RESEARCH AND WRITING

Guillaume Corbeil, Co-Writer

Jasmin Roy, President, Jasmin Roy Foundation

Vincent Domon-Archambault, D.Ps., clinical psychologist

VIDEO PRODUCTION

Carl Ruscica, Director

Francis Gélinas, Producer

John Hamilton, Executive Producer, UNLTD Inc.

Sébastien Gros, Photography Director, UNLTD Inc.

CAST

Dounia Ouirzane in the role of Léa

Jacob Sillon in the role of Valère

Lori-Lune Sévigny in the role of Juliette

Marek Cauchy-Vaillancourt in the role of Philippe

Renaud Labelle in the role of Charles

Ted Pluviose in the role of the coach

Zakary Auclair in the role of Fred

EDUCATIONAL BOOKLET GRAPHIC DESIGN

Carlos Paya, Révolution Publicité et Design

EDUCATIONAL BOOKLET LINGUISTIC REVISION

Jean-Sébastien Bourré

Desjardins Foundation

PRESENTATION
OF THE PARTNERS

JASMIN ROY FOUNDATION

The primary mission of the Jasmin Roy Foundation is to fight bullying, violence and discrimination against elementary and secondary school children. Its goal is to promote caring environments for students by supporting and organizing various initiatives that provide more effective intervention with victims, aggressors and witnesses. The Jasmin Roy Foundation's team is committed to finding long-term solutions to the problems of violence and bullying in all walks of life; the Jasmin Roy Foundation's team also seeks to create caring and positive work environments by preventing harassment as well as elder abuse.

INSTITUT PACIFIQUE

Since 1976, the Institut Pacifique has been developing programs and services to prevent violence and psychosocial problems among youth in early childhood education, schools and communities. Over time, the conflict resolution expertise and reputation of the Institut Pacifique spread beyond the Montreal region and throughout Quebec, Canada and abroad. The Institut Pacifique promotes peaceful conduct on a daily basis in order to prevent these problems and build violence-free environments.

SHERBROOKE UNIVERSITY

A prestigious and modern institution, Sherbrooke University (SU) is one of the top-rated universities in Canada. Recognized for its human dimension and its innovative character, it is distinguished by its student-centred culture and various initiatives to promote everyone's success.

SU is also distinguished by its comprehensive programs at all three levels, covering a broad range of disciplines (nearly 400 degree programs). The University offers a diversified program that meets training needs, particularly at graduate levels (research programs, master's programs, continuing education, microprograms and customized training).

The high quality of the work carried out by its professors has enabled SU to acquire an excellent international reputation and to participate in major discoveries and innovations in various disciplines. Significant investment by public and private partners in recent years has also enabled it to modernize and develop new high-calibre research infrastructure.

It is a rewarding human and academic experience to study in SU's dynamic and stimulating environment.

VIRTUAL REALITY TO HELP TEENS WITH SOCIAL AND EMOTIONAL LEARNING

This booklet makes the link between the concepts of virtual reality, social and emotional learning (SEL), and the school environment. These concepts represent three interdependent areas which, when combined, promote significant learning in teens while ensuring a broader positive impact in schools.

The term virtual reality (VR) refers to a computer-generated real-time environment in which the user can navigate, perceive, feel and interact in a manner that is similar to the real world. VR can take many forms. Video games, interactive scenarios and immersive films are examples of this technology whose use is gaining popularity. However, despite their differences, all of these approaches immerse users in an interactive virtual environment through the use of various technological tools. VR thus allows individuals to react instinctively in a virtual environment that gives them the feeling of truly "being there" (Cummings & Bailenson, 2016; Riva, Mantovani & Bouchard, 2014).

Research has shown that VR environments and characters can potentially elicit empathy and perspective, social attitudes and behaviours, and a wide range of emotions. Moreover, it appears that the behavioural responses of VR participants are comparable to those observed during the real situations they simulate (Bouchard et al., 2013; Chicchi Giglioli et al., 2017; Gillath et al., 2008). This suggests that VR can quite reliably and accurately depict everyday situations. It has many advantages, including the ability to simulate situations that are difficult to replicate in a natural context, control the stimuli presented, have flexibility with scenario content, generalize the findings in the real world (ecological validity), ensure the safety of participants during experiences, and facilitate the replication of protocols. Moreover, the use of VR is entirely consistent with the optimal programming approach proposed by certain authors who have documented best SEL practices. This approach emphasizes the importance of active, explicit learning focused on the development of specific skills and presented in sequences of coordinated activities (Greenberg, Domitrovich, Weissberg & Durlak, 2017). This type of programming is linked with a significant increase in the effectiveness of SEL intervention programs (Durlak et al., 2011).

VR thus has the potential to be an innovative prevention and intervention approach to promote prosocial behaviour in schools. Moreover, studies conducted at Stanford in 2009 and 2013 showed that virtual immersion in various environments reduced the subjects' racism and prejudices while improving their empathy and altruism. In school, VR has been used more specifically to stimulate learning in youth (Meyer, 2016, Passig & Schwartz, 2014, St-Jacques et al., 2007) as well as in certain anti-bullying programs (Nocentini, Zambuto & Menesini, 2015). VR may ultimately be a good way to captivate teens' interest, since they often enjoy this medium (Bouchard, 2011, Pujol-Tost & Economou, 2009, St-Jacques et al., 2007).

FIVE COMPONENTS OF SOCIAL AND EMOTIONAL LEARNING

Social and emotional learning (SEL) is the process through which individuals acquire and effectively apply the knowledge, attitudes and skills needed to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (J. A. Durlak, et al., 2015).

There are five basic SEL components, which affect students' well-being and academic success.

1 SELF-AWARENESS AND EMOTIONAL AWARENESS

Self-awareness and emotional awareness is students' ability to:
- recognize and identify their thoughts and emotions;
- understand the impact of their thoughts and emotions on their behaviour;
- use appropriate vocabulary and words to describe their emotions and needs;
- recognize their strengths and limitations and have an accurate and positive self-perception.

The positive impacts among students who have this skill include:
- satisfaction with their lives;
- continued studies;
- social and professional success;
- improved self-confidence.

By contrast, several studies show that students who do not have this skill are more prone to mental health problems, drug and alcohol addiction, and academic difficulties.

2 EMOTIONAL AND BEHAVIOURAL SELF-CONTROL

This skill refers to students' ability to manage their emotions and behaviour in various situations. In addition, students are able to identify ways to calm down.

Many studies show that students who are able to manage their emotions have better self-esteem and better interpersonal skills. By contrast, internalizing and externalizing disorders, attention disorders, and emotional and academic problems are more prevalent in students who lack this skill.

3 SOCIAL AWARENESS

This skill refers to students' ability to:
- consider the perspectives of others;
- show empathy;
- anticipate the feelings and reactions of others;
- recognize and identify the emotions of others;
- recognize that words and actions can affect others;
- understand and consider the viewpoint of others;
- understand social and ethical norms for behaviour;
- recognize and appreciate diversity;
- identify family, school and community resources that support healthy social functioning.

When students' social awareness is well developed, they have:
- good school adjustment;
- fewer incidences of bullying;
- improved prosocial behaviour;
- good emotional self-control.

By contrast, low social awareness among students is associated with an increase in their level of aggression.

4 RELATIONSHIP SKILLS

Relationship skills refer to students' ability to:
- establish and maintain positive and rewarding social relationships with a variety of individuals
- resolve conflict constructively;
- communicate clearly and listen well;
- be assertive;
- surround themselves with helpful resource people;
- work as a team and cooperate;
- resist inappropriate social pressure;
- seek or offer help when needed.

Students who have this skill are better able to establish positive interpersonal relationships, cooperate, have better self-esteem and enjoy school.

Students who lack this skill have:
- low self-esteem;
- antisocial or more aggressive behaviour;
- difficulty building stable relationships and resolving conflict;
- difficulty working as a team.
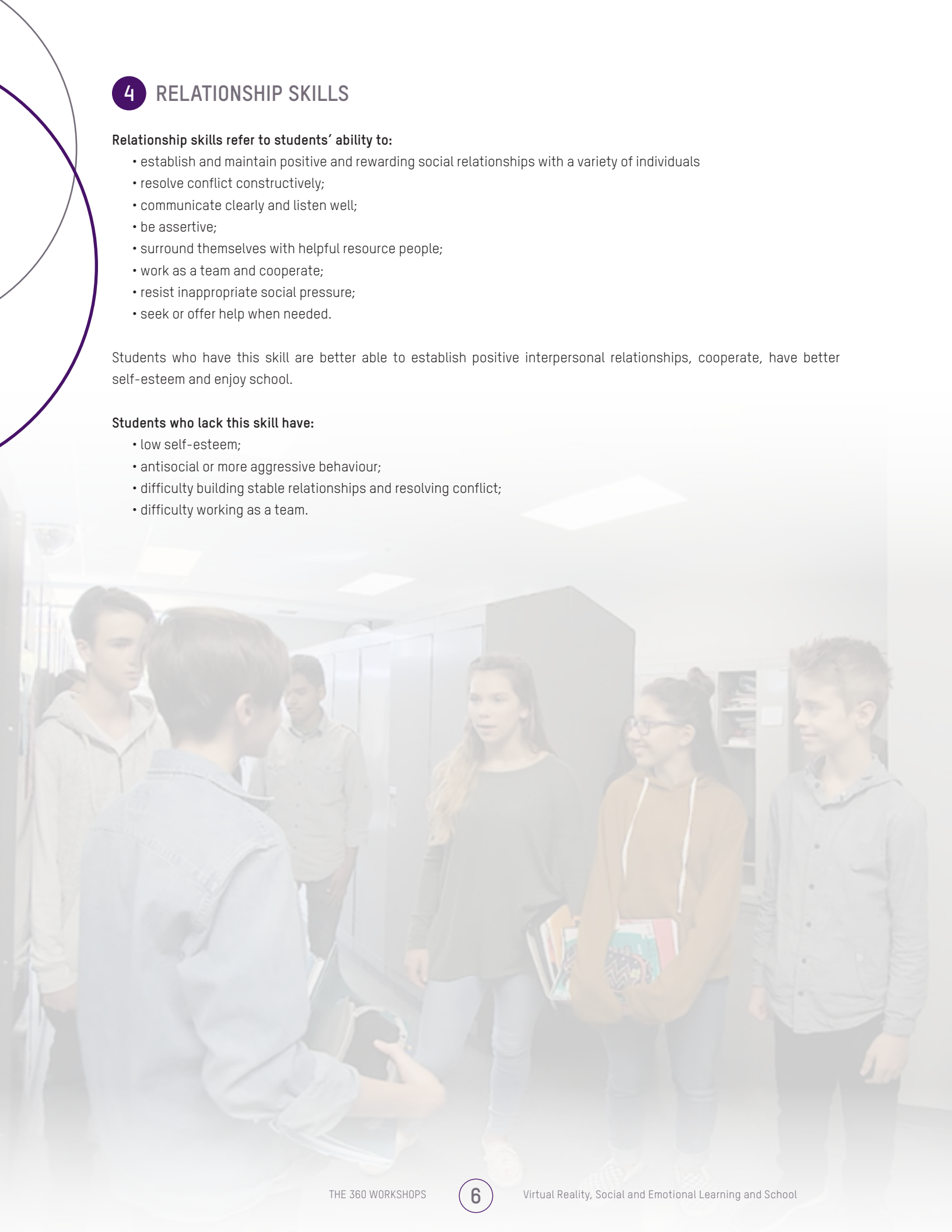
5 RESPONSIBLE DECISION-MAKING

This skill refers to the ability to make constructive and respectful choices about behaviour and social interactions based on: ethical standards, physical and emotional safety of the individuals concerned, social norms, the well-being of oneself and others, and the realistic evaluation of the consequences of actions.

Students with these skills are better able to make ethical choices based on clear and motivating goals.

By contrast, students who lack these skills have more difficultly resolving academic, personal and interpersonal problems. In addition, these students exhibit more self-destructive and socially inappropriate behaviour.

In short, the SEL-based approach significantly improves:
• self-image;
• academic performance;
• attitude towards and motivation in school;
• school attendance and perseverance;
• prosocial attitudes and behaviour;
• social skills;
• mental health and social and emotional skills.

There is also a significant reduction in:
• emotional distress;
• substance abuse;
• antisocial attitudes and behaviour.

(Durlak et al., 2011; January et al., 2011; Korpershoek, Harms, de Boer, van Kuijk & Doolaard, 2016; Morrison, Gutman & Schoon, 2015; Sklad et al., 2012; Wilson, Gottfredson & Najaka, 2001; Zins et al., 2007)

The SEL-based approach also significantly reduces emotional distress, substance abuse, and antisocial attitudes and behaviour.

There is a decrease in risk factors and an increase in protective factors related to students' academic and personal adjustment.

MEDIUM TO LONG-TERM IMPACT OF THE DEVELOPMENT OF VARIOUS SKILLS

Various long-term effects have been identified in adults who have benefited from universal and ongoing educational interventions to support SEL throughout elementary school:

- Students' interpersonal and intrapersonal skills affect their ability to learn and academic skills;
- They have a higher level of education, so they have a greater choice in terms of jobs;
- They demonstrate better emotional and mental health;
- They are more involved in their community;
- They are less likely to commit criminal acts and use drugs and alcohol;
- The school dropout rate is lower among these individuals;
- They have better academic performance;
- They have a better attitude towards school and education as well as towards themselves and others;
- They have better social and emotional skills;
- They have better mental health (anxiety, depression and emotional distress);
- They have better social behaviour;
- They have fewer behavioural problems;
- They have a better atmosphere at school and in the classroom.

In addition, many studies suggest that the SEL-based approach decreases risk factors and increases protective factors related to school and personal adjustment in children and teenagers (Domitrovich et al., 2017; Durlak et al., 2011; Sklad et al., 2012; Smith & Low, 2013; Taylor et al., 2017).
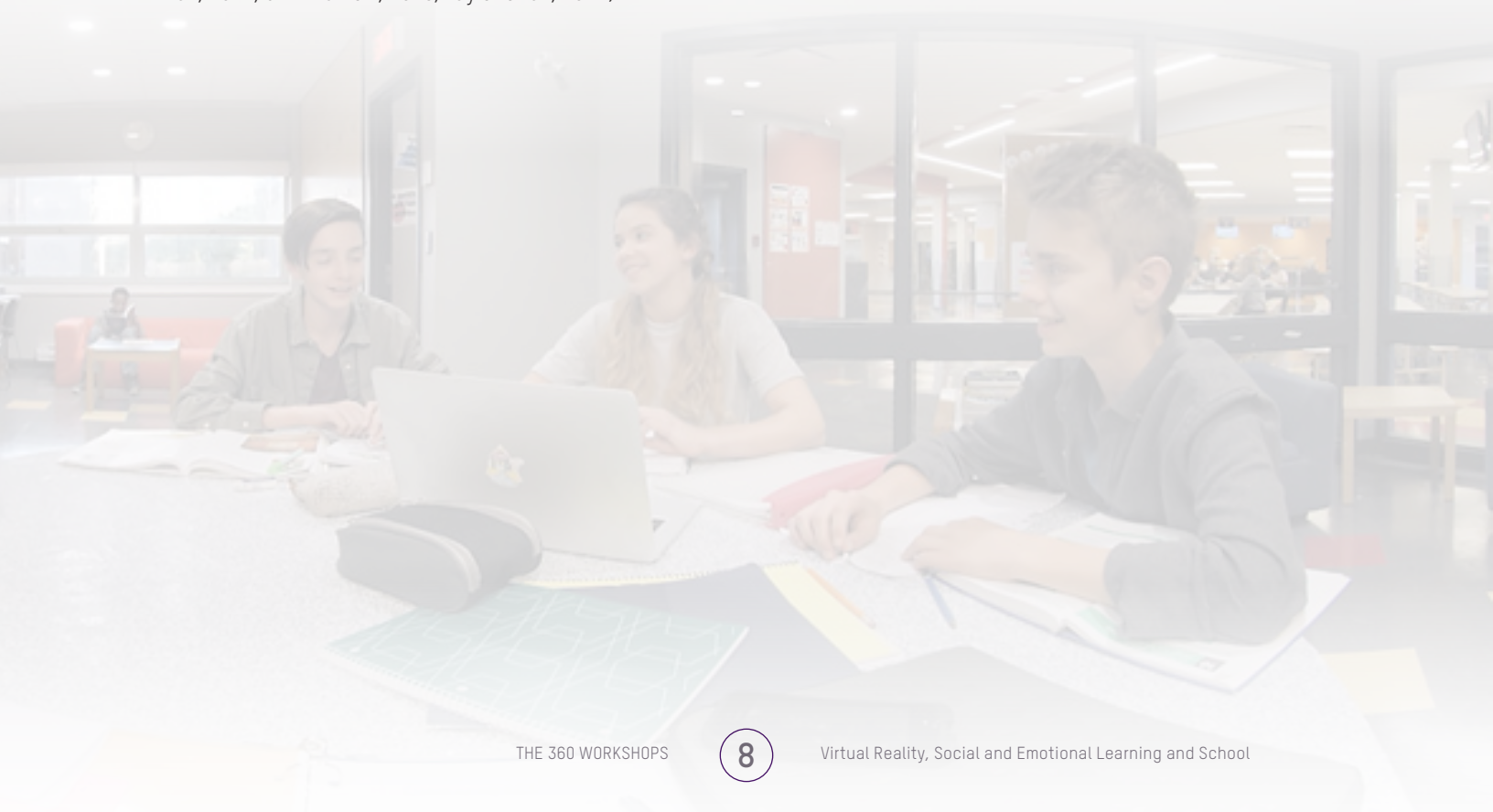
HOW CAN WE PROMOTE THE DEVELOPMENT OF SEL AT SCHOOL?

The development of SEL continues throughout life. The school is a good place for SEL development due to the time students spend there, the amount and wealth of experiences they have there, and the many interactions that students face, whether with their peers or teachers (Shanker, S., 2014):

• In-class social interaction and behaviour is taught according to the same principles as those used for school subjects;

• As an organization, the school guides students by taking into account SEL.

Moreover, by facilitating winning conditions for communication, conflict resolution, the search for solutions and group cohesion, an environment that promotes SEL development is beneficial not only for students, but also for school staff.

SEL can be taught in various ways:

1. **Explicit** = Explicitly teach a skill;

2. **Integrated** = Apply by using academic learning to make links with SEL;

3. **Applied** = Apply by putting SEL into practice with the entire group, and then with each individual in everyday situations.

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DR. STUART SHANKER, UNIVERSITÉ YORK © *Mesurer ce qui compte,* People for Education, 2014