

# On the Uptake

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## PREP<sup>®</sup> intervention: Improving the participation of children and youth with disabilities



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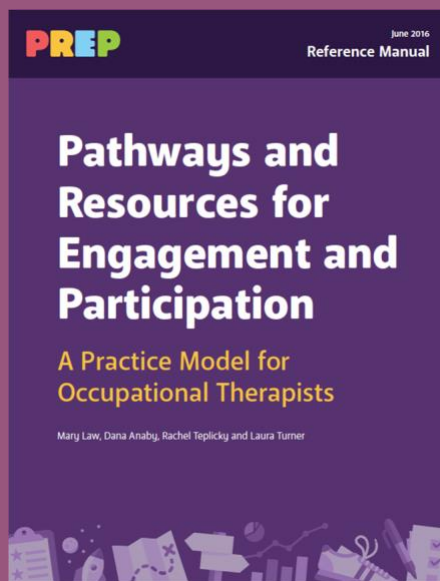
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### **The environment is key to children's participation**

Participation in home, school and community activities is not only vital to children's development and well-being but it is also globally recognized as an important outcome of rehabilitation interventions. Through participation (e.g., joining a sledge hockey team, playing music within social group, participating in

a cooking club) children learn new skills, develop friendships and build a sense of belonging to their community. The participation of children and youth with physical disability, however, is known to be restricted. Many factors can affect levels of participation such as the child's health condition, abilities and skills, and preferences; however, research shows that removing barriers and providing supports in the child's environment can be key to successful participation. A child's environment involves many aspects that go beyond the physical

accessibility or the availability of equipment/assistive devices. It also includes the social (e.g., social support from family and friends), attitudinal (e.g., perception towards disability and recreation), and institutional aspects (e.g., availability of programs and services to support participation). The environment plays an important role in determining how children and youth are able to participate. Therefore, it is a good area for intervention, especially because in many cases changing the environment is more practical than changing the child.



The PREP intervention protocol is now available on the CanChild website:

<https://www.canchild.ca/en/shop/25-prep>

### What is PREP?

The PREP is a new evidence-based intervention that aims at improving participation in any type of chosen activity. The intervention focuses on changing aspects of the child's environment and by coaching parents and other individuals involved in the child's everyday activities. The PREP, applicable for children and youth across various conditions and abilities, involves 5 steps:

#### PREP's 5-Step:

1. **M**ake goals
2. **M**ap out a plan
3. **M**ake it happen
4. **M**easure the process and outcomes
5. **M**ove forward

The intervention occurs within the child's natural environment, such as their home, community and/or school, and involves 'real-life' learning experiences. Together with the parents and child/youth, the therapist identifies specific barriers in the environment and/or supports that improve or limit participation in chosen activities. They then jointly propose and implement solution-based strategies to remove barriers and build on existing

supports. Examples of useful strategies for removing barriers in the environment and improving youth participation include: improving physical accessibility, adapting activity equipment, finding available programs, providing information about transportation, informing community agencies about how they could adapt their programs and provide accessible services, reaching out to NGOs for support, and improving attitudes of others through education.

In this type of intervention, the therapist acts as a mentor, facilitator, advocator and educator - one that brings together different stakeholders (e.g., family members, program instructors, teachers, volunteers) and builds a strong 'participation team' as well as coaches them on how to make their programs and services accessible. The ultimate goal of the PREP intervention is to give families and other relevant parties the capacity, knowledge and skills for problem solving, while facilitating successful and meaningful inclusion. Additional information about this approach can be found in the PREP manual posted on the [CanChild website](https://www.canchild.ca/en/shop/25-prep).

### What is the evidence to support PREP?

The PREP was shown to be effective in enhancing community participation of youth, aged 12 to 18, who are living with a physical disability. This intervention was tested in the provinces of Quebec and Ontario. By removing environmental barriers only, occupational therapists enabled 34 youth to successfully take part in the activities they identified, such as shopping with friends, riding a bike and joining a glee club. Their levels of performance in the chosen activities were maintained after the intervention ended.

### What are the benefits of the PREP?

Parents whose child received the PREP intervention reported many improvements following the intervention. Benefits included an improvement at the physical (e.g., fine motor skills, using impaired hand more), social (e.g., making new friends, taking on new roles in school) and emotional (e.g., self-esteem, confidence, mood) levels as well as in autonomy (e.g., engaging in community activities on their own, arranging for adaptive transportation independently). In addition, a study that examined the impact of the PREP on overall



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Want to learn more on the topic?

Helpful links:

1. JOOAY: <http://jooay.com/>
2. Childhood Disability Leisure page <https://www.childhooddisability.ca/leisure/>
3. CanChild Participation Knowledge Hub <https://www.canchild.ca/en/research-in-practice/participation-knowledge-hub>

Suggested Reading:

1. The effectiveness of the Pathways and Resources for Engagement and Participation (PREP) intervention: improving participation of adolescents with physical disabilities: [Link here](#)
2. Enhancing Youth Participation Using the PREP Intervention: Parents' Perspectives. [Link here](#)
3. Focusing on the Environment to Improve Youth Participation: Experiences and Perspectives of Occupational Therapists. [PDF here](#)
4. Pathways and Resources for Engagement and Participation (PREP): A Practice Model for Occupational Therapists. <https://www.canchild.ca/en/shop/25-prep>

participation patterns found that after the intervention, youth reduced their digital media use, did more study-related activities, and spent more time doing activities with friends. Recently, our team has found that participation in community-based activities of their choosing can also result in the improvement of motor (e.g., reaching), cognitive (e.g. attention span) and mental (e.g., anxiety) functions.

### Can the PREP work in practice?

Occupational therapists in Canada and in the UK found the PREP to be a positive and promising approach. More specifically, this was evident among therapists providing services for youth with physical disabilities as well as for children and youth with acquired brain injury. Clinicians acknowledged the various aspects of the environment that serve as barriers that can be modified. There was a special focus on the attitudinal barriers such as a lack of knowledge and/or willingness of program instructors and directors to accommodate the youth's needs. This required a lot of advocacy from therapists as well as education and training of community-based stakeholders about how they can provide accessible services. Finally, our findings show that an average of 6.5 hours is needed to accomplish each goal/activity over a period of 4 weeks, supporting the feasibility of this approach in clinical practice.

### Take home messages for clinicians

- The PREP is an efficient evidence-based intervention that can result in multiple benefits for children and youth and can be implemented in clinical practice

- The environment is key to children's participation and modifications in the environment can be a target of intervention to promote participation of children with disabilities
- Solution-based intervention strategies for removing environmental barriers, guided by the PREP approach, are effective in improving and maintaining the participation of children and youth
- Clinicians can play multiple roles in improving the participation of children with disabilities including advocating for inclusion in programs, coaching parents and activity instructors, and supporting children and youth in removing environmental barriers for activities of their choosing

### Take home points for parents

- Intervening in the child's natural environment, where they live, play and learn, can have a positive and lasting effect on their participation in meaningful activities
- The development of targeted strategies, with the support of a rehabilitation professional that helps remove barriers in the environment, can support children and families in their participation pursuits and improve their own ability to solve problems related to participation