

GETTING STARTED WITH TELEPRESENCE ROBOTS IN SCHOOLS

- TOOLS FOR A SUCCESSFUL START



Telepresence
Experience
Network

Introduction and table of contents

'Getting started with telepresence robots – tools for a successful start-up' is the network's first edition of the guidebook to a successful start-up with telepresence robots in schools. The idea is that the network can keep adding tools and new reflections to this guidebook as the work and efforts of the network progress. The content of this guidebook is a result of the discussions and exercises from the network's first 3-day workshop in September 2021.

The guidebook contains:

- Questions and reflections that can be useful for practitioners to think about before getting started with telepresence robots.
- A workbook that can be used for workshops with teachers and other practitioners. The workbook offers different exercises designed to initiate discussions and reflections about the technology and its applications. The workbook uses the AV1 robot as an example, but it can easily be replaced by another telepresence solutions.
- A template for an intervention setup and an agreement template that can be used by schools when trying out a robot.

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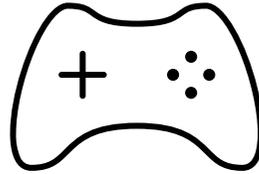
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What's important to think about when choosing a telepresence robot to be used in schools?



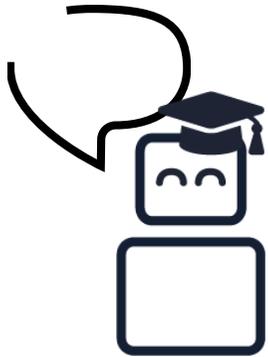
The appearance of the robot and the end user's perception of the robot.



The user's ability to move and control the robot.



The quality and the stability of the robot's different functions (e.g. camera, microphone, network connection etc.)



The different features and functions of the robot that allows the user to interact with the robot's surroundings.



Data security and privacy



Easy and reliable technical support from the robot provider.

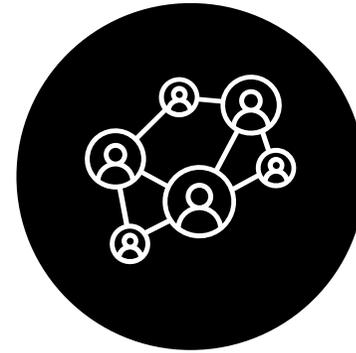
Reflections on how best to implement telepresence robots in schools (1/2)

Implementation processes of new ideas or solutions can be very complex, and one size rarely fits all. However, based on the common experiences of the participants in the network with implementing telepresence solutions, here follows some basic things to think about when implementing a telepresence technology in schools.



ALIGN EXPECTATIONS, SET REALISTIC GOALS AND FORMULATE A PLAN

- Talk about what both the student and the school expect from each other and the technology before putting it to use – make sure that the expectations can be aligned.
- Set realistic and manageable goals for what the outcome of using the technology should be – take small steps.
- Formulate a plan that reflects the expectations and goals and clearly defines the agreement and the responsibilities of everyone involved.



INFORMATION AND PREPARATIONS

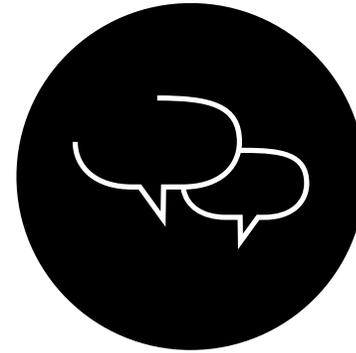
- Make and distribute information material for students, parents, teachers, school management or other relevant partners and spread awareness about the technology.
- Introduce the technology to the teachers and the class and give them a chance to try it and talk about it before it is put to use – make sure everyone is comfortable with the technology.
- Let the student get use to participating and experience the world through the robot before putting the technology to use in the classroom

Reflections on how best to implement telepresence robots in schools (2/2)



OWNERSHIP AND INCLUSION

- Make sure that the student's wishes and needs are in the centre of the intervention.
- Focus on real inclusion of the technology in the school day so the student does not just become an observer to what goes on in the classroom.
- Include classmates and all relevant teachers/staff in the intervention so everybody feels some level of ownership of the technology.



FOLLOW UP AND ADJUST

- Follow up on the use of the technology regularly and adjust the plans and agreements if necessary.
- Remember to evaluate the intervention and compare the results with the initial expectations and goals.

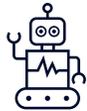


WORKSHOP WORKBOOK

EXERCISE FRAMEWORK



You will be split into smaller groups and assigned a work location



The work location represents a classroom setting for testing the AV1 robot



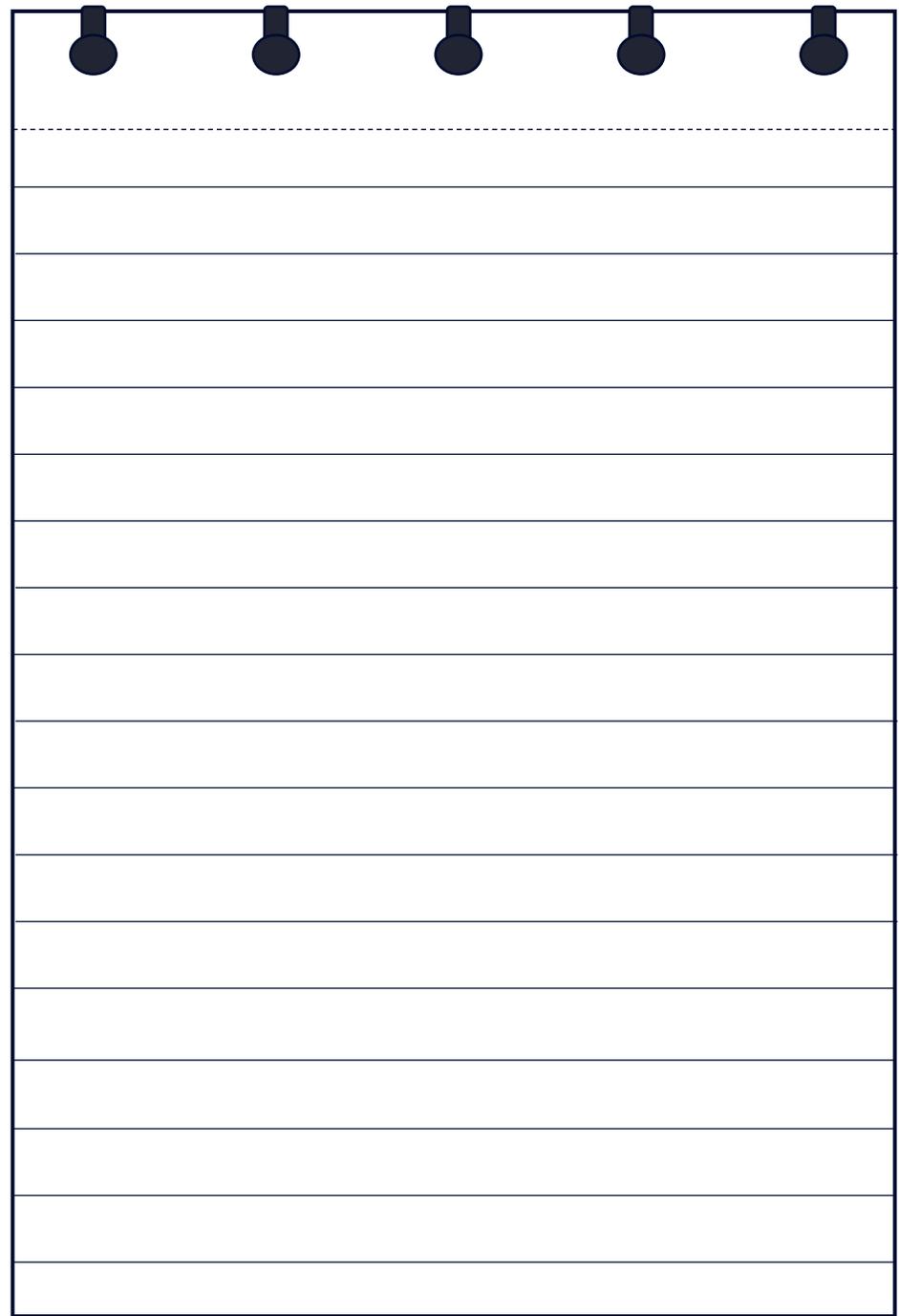
Each group will have a team captain who is responsible for guiding the group through the different exercises in this workbook



The group will choose a person who is responsible for writing down the group reflections for each exercise



When the workshop is over the team captain is responsible for handing in the workbooks



CASE #1

4.A – Child diagnosed with cancer

The student: The student has suddenly become seriously ill with cancer and must be admitted to the hospital and go through a lot of examinations. He does not know how long he will be sick or whether he will survive at all. The student will go through physical changes during his treatment. For a longer period, the student must be hospitalized, some days in isolation, which means he won't have any visits from family and friends.

The teacher: Thinks the student is a good student who does his homework and is well behaved. The teacher's assessment is that the student is at the right academic level in relation to age and grade level.

The class: The student has many good friends in the class who are worried about their classmate and sad about him not attending school.

CASE #2

8.b – the student comes from a troubled home and is diagnosed with ADHD

The student: The student lives at home in an unstable family situation, where the parents cannot agree and are too busy with their own problems to be good and invested parents for their child. The student is the oldest in the group of children and is therefore often left to himself without attention and structure. The student has begun to stay away from school, and when the student shows up, he is often tired and disruptive. The student likes being in school, but the lack of attention and support from his parents makes it difficult to show up in class and when he shows up, he struggles with concentration difficulties and hyperactivity.

The teacher: The teacher knows the student well and they have a good relationship. The student has started to lag behind academically due to the increasing absence and the teacher has difficulty accommodating the student in the class due to his disruptive behavior.

The class: The student still has some good friends in the class, but the classmates experience the student as a disruptive element and have difficulty accommodating the student the days when it is hard for the student to be in school.

CASE #3

5.c – the student has a chronic illness

The student: The student suffers from muscular dystrophy, which means that there are often days or longer periods of time where she cannot attend school and participate on the same terms as the other students. The student increasingly feels disconnected, both academically and socially during the periods when she is unable to physically participate in school.

The teacher: Likes the student but is concerned about her academic level due to long periods of absence. The student's academic level is assessed to be significantly below the class average. 5.C is a very socially well-functioning class, but it also means that class can be a bit difficult to keep quiet and concentrated during classes.

The class: The student has only a few good friends in the class but is not teased or kept out of the social activities during the periods when she is able to attend school. In class there has not been much talk about what it means to have a chronic illness and what it means for a child not to be able to attend school and social activities on an equal footing with other children.

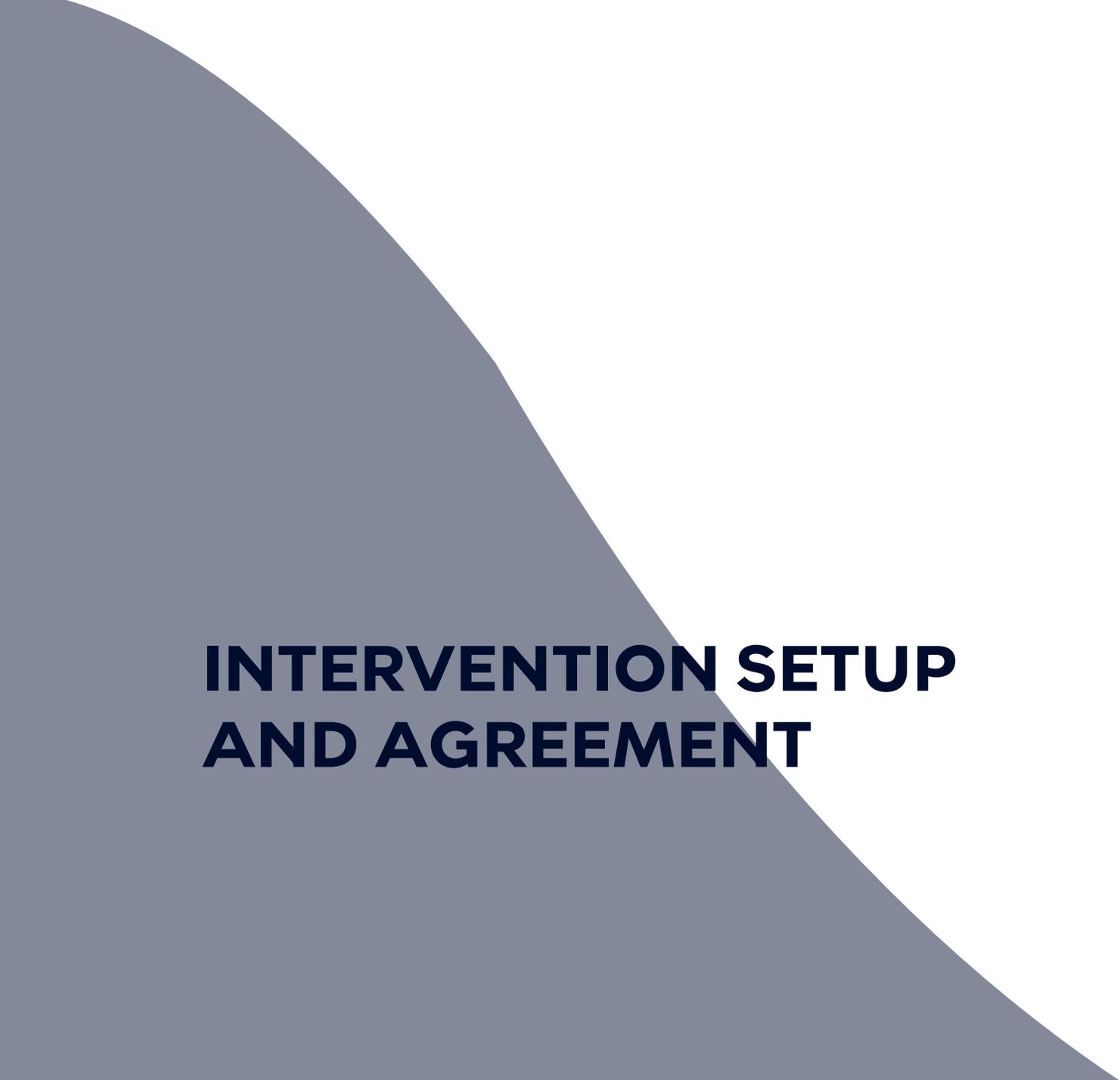
CASE #4

4.d – the student is new to the school and struggles with anxiety and school refusal behavior

The student: The student is new to the school and has had difficulties with attending school ever since she transferred to the new school. The student had to transfer school because of some bad experiences at her last school. The student has developed school refusal behavior and feel anxious when she is at school. The student is insecure and has difficulty forming new relationships but would like to get to know her new classmates.

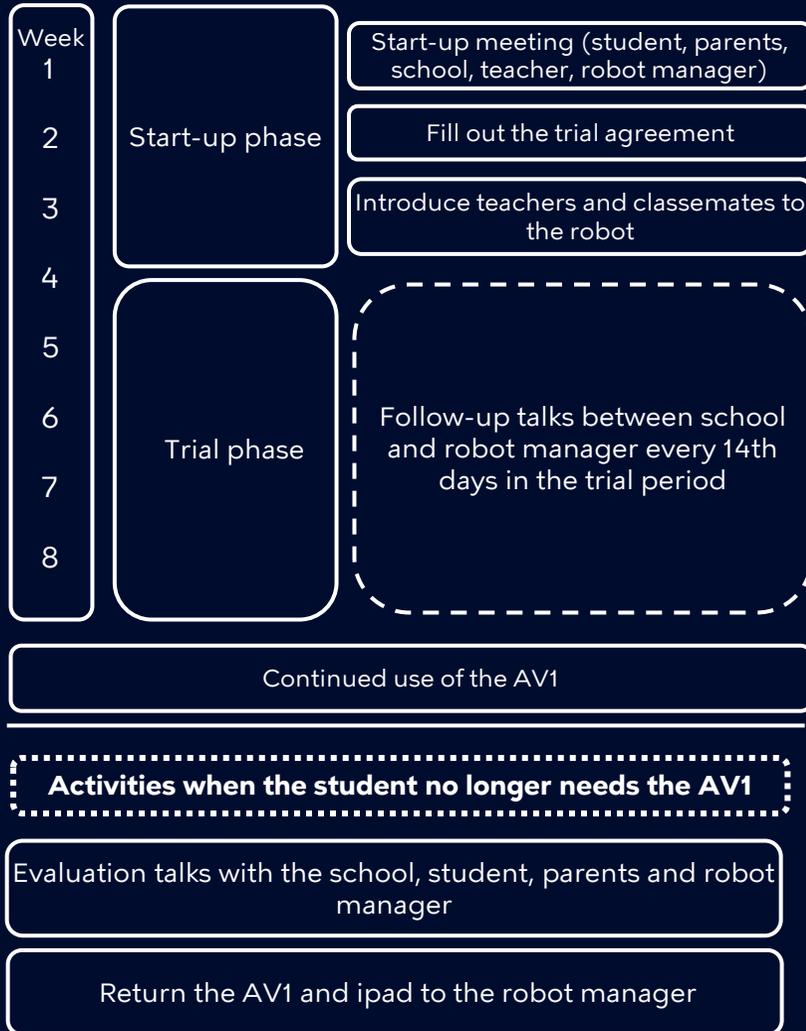
The teacher: The teacher does not know the student very well but knows that the student has had difficulty with both schoolwork and social interactions at her previous school. The teacher has previous experiences with students who were much like the new student and has previously worked with social services to help a student with low school attendance and school refusal behavior.

The class: The classmates have not had the opportunity to get to know the new student and have only met the student a few times. There are other students in the class who are also challenged by anxiety to a lesser degree than the new student and students with school refusal behavior, so the class have talked about that it can be difficult for some students to go to school every day and be part of the social community in the classroom.



INTERVENTION SETUP AND AGREEMENT

INTERVENTION SETUP (TEMPLATE)



WHO DOES WHAT?



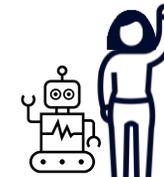
School and Teachers

- Fill out the trial agreement in cooperation with the student/family
- Are responsible for the AV1 robot and have to make sure that it is charged, turned on and in the right place.
- Contacts the robot manager if there are any problems with the technology or if the trial setup changes.
- Has follow-up talks with the robot manager and contributes to evaluation activities.



**The child (student)/
The family**

- Fills out the trial agreement in cooperation with the school
- Responsible for using the AV1 in accordance with the trial agreement
- Contacts the robot manager if there are any problems with the technology
- Gives feedback to the school and the robot manager on how the trial is going and participate in evaluation activities when the student is done using the AV1.



Robot manager

- Introduces all relevant participants to the technology and the trial setup
- Takes care of the technical setup
- Provides support and guidance to the school and the student/family when needed
- Is responsible for following up and evaluating the results of the AV1 trial.

INTERVENTION AGREEMENT

Start date:

Follow-up date:

STUDENT

Name:

Grade:

Contact information:

CONTACT TEACHER

Name:

E-mail:

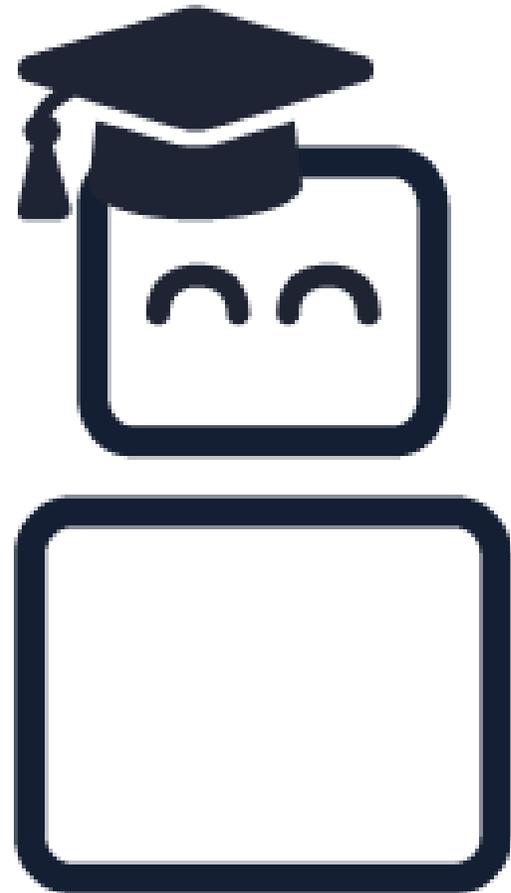
Tel. No.:

ROBOT MANAGER

Name:

E-mail:

Tel. No.:



WHY ARE WE TRYING OUT THE ROBOT?

Write down three objectives for the student's use of the telepresence robot:

1:

2:

3:

INTERVENTION FRAMEWORK

How? When? Who?

How many days a week should the student participate using the robot?	
Is the student expected to be physically present in school when not using the robot? And on which terms?	
Which classes and school activities will the robot be used for?	
Who is responsible for setting up the robot and making sure it is ready for use in the classes/activities listed above?	