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KA2 Strategic Partnership Project

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Activity 1.2

Draft guidelines (instructions and guidance) for using
the screening instrument

Output Leader: INIB/Visio



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1. Foreword

The Guidelines for using the iExpress toolkit are a result of a team cooperation within the Erasmus plus program – Cooperation for innovation and the exchange of good practices – Strategic partnership for school education, with main objective: innovation. The project is coordinated by Royal Dutch Visio, Huizen, the Netherlands, the partners are Foundation ASPAYM Castilla Y Leon, Valladolid, Spain, National Institute for the Blind, visually impaired and Deafblind, Reykjavik, Iceland and The School for the Blind, Budapest, Hungary

This guidelines document is part of the complete iExpress toolkit and is available on the project website <http://www.iexpressmyself.com>. The document is for non-commercial distribution and can be used for free for educational or professional purposes.

All documents related to the correct and effective use of the iExpress screening tool for low vision and blind children can be found on this platform (www.iexpressmyself.com) and are free to use. The most important documents of the toolkit are translated into the iExpress partner languages: Dutch, Hungarian and Icelandic.

2. Disclaimer

By using these Guidelines, you accept this disclaimer in full. These Guidelines have been produced solely for using the iExpress toolkit for low vision and blind MDVI¹ students developed during the iExpress myself project. The information included in the Guidelines does reflect neither the opinion of the European Commission or the National Agencies nor any person acting on their behalf concerning the content included into the Guidelines. The European Commission has not verified, nor do they make any representations or assurances as to, the quality, nature of, efficacy or otherwise of these Guidelines or as to the accuracy, completeness or adequacy of any information contained in the Guidelines.

Should you wish to use the materials in the Guidelines, you agree to acknowledge that the materials were originally developed by the Erasmus plus partnership for the Erasmus + Programme. See the terms and conditions of use for the iExpress application on the iExpress website. Further legal provisions are explained in chapter 6 of this document.

The iExpress software is developed in compliance with the GDPR by the developer and data processor, iExpress partner ASPAYM.

The mention of specific organisations or manufacturers' products does not imply that they are endorsed or recommended by the project partnership in preference to others of a similar nature that are not mentioned. All reasonable precautions have been taken by the project's partners to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and uses of the material lies with the reader.

¹ When we speak about students with MDVI, we mean individuals who are Multiple Disabled with a Visual Impairment

3. Introduction

These guidelines provide recommendations about strategies to be used to identify the ability of MDVI students for using Information and Communication Technology (ICT) in their daily activities by using the screening instrument for low vision and blind MDVI students. The guidelines are written for professionals² who work with MDVI students. The professional has knowledge about ICT skills and ICT adaptations that are useful for our target group³. And the professional has knowledge about screening MDVI students in general and processing the outcome to a concrete and practical conclusion or advice.

3.1 Description and outcome of the project

The most relevant priority according to the objectives of our project is "Open education and innovative practices in the digital era." For our target group, the use of innovative digital practices is an important opportunity to improve their wellbeing, since for many students with MDVI, digital solutions offer new ways of making it possible to participate. The outcome of this project will offer MDVI professionals a complete toolkit (Screening lists, software and training materials for professionals, ICT plan and these guidelines) to help students with MDVI to further explore their abilities by using ICT. The toolkit provides the professional improved options to measure and monitor the development and progress of the ICT skills of the students.

3.2 Objectives

Students with MDVI are facing major challenges in expressing themselves, in communication and learning. Experience and knowledge in how assistive devices could help this target group is starting to grow slowly. The MDVI target group is relatively small but complex. However, MDVI students have a right to learn and develop themselves to the best of their abilities.

Our society is digitizing more and more. This requires that students must be taught other skills that are indispensable in the 21st century. These 21st century skills can make a very big difference for this target group, because the use of ICT and Technology can contribute to increasing independence / self-reliance.

² By professionals we mean everybody who works with MDVI students and have a certain degree in education or experience in assessing tests and screening

³ Multiple Disabled Visually Impaired, developmental age 0-4

3.3 Impact

A validated screening instrument was developed during the first iExpress Myself project. Now a set of guidelines and a software tool to work with the instrument and to follow and monitor the students has been developed. We have evaluated that this increased the awareness of teachers, trainers and professionals working with MDVI about the possibilities for making learning easier for the target group. Also it increases the autonomy and the social inclusion of the MDVI student. They can better use the possibilities of their residual vision, increase communication options and decrease the level of stress, also it increases their activity options. MDVI children experience increased wellbeing in social activities and the system around them, at school and at home.

The MDVI student has complex needs and communication in general is a challenge for this group. However, communication is a basic need for every person. With improved ICT skills with the help of the ICT screening and the ICT plan, we have gained insight into the possibilities of the student to further develop the first levels of communication of action and reaction. Existing tools such as e.g., switches that could not be used or not been used properly before can now be used in the right way and even further expanded. On the long term, these basic skills can then lead to the further development of activity/communication option that are so valuable for the target group.

The toolkit provides the professional with improved options to measure and monitor children's development and progress (regarding ICT). In addition, we hope that the professional can measure and monitor the ICT capabilities of their students more effectively and efficiently. Also, a major impact for them will be that by carrying out the screening and keeping track of the development results and ICT plan of the students in the tool, research data will become available on the long term in the iExpress database. Based on this data, it is possible that new developments regarding ICT use can be further shaped by the target group.

4. Theoretical accountability

The toolkit will offer the professionals the tools to help students with MDVI to further explore their abilities by using ICT in their daily life at school and/or at home. The screening instruments for low vision and blind MDVI students in the toolkit are validated instruments, therefore it is important that you understand the background of the instrument and that you follow the instructions and recommendations set by the iExpress II project group when using the instruments.

4.1 Target group

The toolkit is developed for Multiple Disabled and Visually Impaired (MDVI) students with a developmental age between 0 and 4 years. Besides for MDVI students you can use the toolkit for every multiple disabled child or adult with a developmental age between 0 and 4 years. For these persons you should use the 'Low Vision screening'.

A lot of the MDVI students also deal with mild to severe motor problems. These kind of motor problems can have a big influence on the choice of devices you are going to use for ICT activities. We have not included the severe motor problems in the iExpress screening. Because of the varying nature of these problems, it was not possible to include them in the validated screening. Of course, it is still possible to use the screening for students with severe motor problems, however you might need to think of additional adjustments that you would have to consider.

4.1.1 Definition Multiple Disabled and characteristics

There are two key characteristics of people with severe multiple disabilities: a deep intellectual disability and a very serious movement disability (Nakken, 2011).

"[...] it consists of persons with such a deep intellectual disability that standardized tests for determining the mental capacities cannot or hardly be used and which are furthermore characterized by a serious form of neuromotor dysfunction (expressed in spastic tetraplegia, for example). Consequently, they understand little or no spoken language, have virtually no symbolic interaction with objects and virtually no self-reliance skills." (Nakken, 2011, in Maes, Vlaskamp & Penne, p. 18). Nakken (2011) also states that these persons usually have sensory limitations and health problems. The very serious intellectual disability is often the result of damage that is present in the central nervous system. Another consequence of the same damage is that there is almost always a serious motor impairment (Vlaskamp, 2005a).

The terms intellectual disability and motor disability will be further explained below.

An intellectual disability occurs in 1% of the general population and a severe intellectual disability in 0.6%. An intellectual disability is referred to if the following three criteria are met:

- There are significant limitations in the field of intellectual functioning (IQ <70)
- There are significant limitations in the field of adaptive behaviour
- This was created before the age of 18

(American Association of Intellectual and Developmental Disabilities, 2010; American Psychiatric Association, 2013).

In case of a serious intellectual disability, the estimated IQ is between 20-25 and 35-40 and the development age ranges from two to a maximum of four years. A very severe intellectual disability is based on an IQ below 20-25 and a maximum developmental age of two years (American Psychiatric Association, 2000, Došen, 2005; Maes, 2010; Kraijer & Plas, 2002). The IQ of students with MDVI is not possible or very difficult to measure, among other things due to the lack of suitable, standardized and valid measuring instruments (Nakken & Vlaskamp, 2007, Vlaskamp, 2005b).

A severe motor impairment usually means that students cannot sit, stand or move independently and have serious limitations in the use of hands and arms. They are "wheelchair-bound" and large and small motor skills are severely disrupted (Vlaskamp, 2005a). However, the nature and extent of the intellectual and motor impairments can vary considerably. Nakken and Vlaskamp (2007) wonder whether it is better to speak of a spectrum of very serious intellectual and multiple disabilities in this target group.

In addition, there are usually additional limitations or disorders. These concern, among other things, speech disorders, sensory impairments (visual, auditory and tactile), psychiatric disorders and behavioural disorders (American Psychiatric Association, 2013; Arvio & Sillanpää 2003; Batshaw, Shapiro & Farber, 2007; Zijlstra & Vlaskamp, 2005).

According to the American Psychiatric Association (2013) this group has a three to four times higher chance of having additional disorders. Cross-sectional research shows that an additional visual impairment or blindness in adults with a (very) severe mental disability can occur in up to 66.7%. Depending on the severity of the intellectual disability of the group of subjects studied, a visual disability is more common. For 40% of them the visual impairment had not been noticed before. Authors write in their conclusion that these persons should be considered visually impaired until the contrary is proven (Van Splunder, Stilma, Bernsen & Evenhuis, 2006).

Due to all differences in degree, quality and quantity of disorders, or combinations of disorders, limitations of a very different nature arise. Every person within this target group has a unique composition of possibilities and limitations in functioning (Vlaskamp, 2005b). Every student with multiple disabilities needs a unique package of care and support, therefore also presents a unique educational challenge. Teachers and professionals need specialised training and skills to understand how these students experience and understand the world.

4.1.2 Classification of visual impairment

The term "visual impairment" is a heterogeneous concept (Dote-Kwan & Chen, 1995; Loots, 2010). Visual limitations come in many different forms. This can have a variety of causes and each cause can have a variety of consequences. This has to do with differences in:

- time of occurrence of the restriction
- the severity of the limitation
- the location in the body where the cause of the disability is (Loots, 2010)

Firstly, there is a distinction between visual limitations that are congenital and later developed, for example due to illness or brain injury. The time of emergence has important consequences for the

required interventions (Dote-Kwan & Chen, 1995). If the disability is congenital, the person lacks visual information from the start of his development. If the restriction arises later, the person can draw visual information from his memory and use it as a frame of reference.

Secondly, there is the distinction in severity of the visual impairment. Here one can start from two different perspectives:

- severity of the limitation in visual perception, whereby a distinction can be made between visual acuity and visual field of the person.
- severity of the limitation in the functioning of the person (Loots, 2010).

The World Health Organization (WHO) has described criteria for this.

1. Normal Vision
2. Moderate Vision Impairment (<0.3 and ≥ 0.125)
3. Severe Vision Impairment (<0.125 and ≥ 0.05)
4. Blindness (<0.05)

The complexity of problems for MDVI students have consequences for their cognitive and communication possibilities. Communication is usually still in the pre-verbal stage, a few will be able to make limited use of speech or sign language. The language concept, the concept of cause-effect and spatial insight are also limited (Vlaskamp, 2005).

With all the special characteristics of students with MDVI described above, including the limitations in communication, it is to be expected that they will be strongly impeded in the learning process. Learning will probably take place through conditioning, accommodation and assimilation (Vlaskamp, 2011). Due to the visual impairment of the students with MDVI, learning will be even more difficult. Where students with a single disability can compensate, seriously multiple restricted students cannot or hardly do so. For example, a student with visual impairment can use the sense of touch and sense of hearing and can examine the source of the sound by going to it and feel what it is. A student with severe multiple disabilities often fails because, for example, they are wheelchair-bound.

4.1.3 Determine the developmental age

There are a lot of tests and methods to determine the developmental age of a student. Every country and even institution uses their own preferred method of testing. Some tests are more focused on the IQ that can be tested with the more traditional IQ-test, but for MDVI students this is not the most reliable test.

4.2 Information, Communication and Technology

ICT is the abbreviation of Information, Communication and Technology. Nowadays we cannot think of a world without information and communication technology. We are more and more depending on computers, tablets, smartphones and of course, the internet. Using ICT gives us quick access to a lot of information all over the world. It also helps us to finish a lot of activities a lot quicker than before. But besides the practical use for any person in daily life, ICT provides huge opportunities for persons with disabilities to become an active member of the society. Think about all the adapted devices that

are developed to get access to computers and tablets. For example, using eye-gazing is offering communication possibilities for a lot of disabled persons who have trouble speaking. Using voice input and dictating functions are offering another form of communication possibilities for disabled persons who have trouble using their hands and arms. For visually disabled persons the accessibility option of speech support on a lot of devices is a wonderful solution so they can hear what message someone has sent or where they are, while navigating on their computer.

Such equipment could increase the ability of these individuals to participate in the society. That is why it is important to also look at the possibilities of using ICT by MDVI students in their daily activities. Besides possibilities for better communication, you can think of more options for play, activities for free time, making music, listening to music, watching videos, joining social media etc. The iExpress screening starts by exploring the very first ICT skills - to have attention for something, to understand the action-reaction process and the first steps of operating functions - and builds up in very small steps to the use off a PC or tablet.

4.3 Explanation of the categories in the screening instrument

The aim of the iExpress screening instrument is to know what skills related to the use of Information and Communications Technologies (ICT) are mastered by students with multiple disability and visual impairment (MDVI). This screening instrument would allow the professional to measure the degree in which ICT could be used at school to teach and train new skills to this population, and it would allow measuring the progress in ICT skills over time.

The iExpress toolkit includes two separate screening instruments for the following groups:

- Blind students with a developmental age from 0-4 years (annex 7.1)
- Low Vision students with a developmental age from 0-4 years (annex 7.2)

The definition for Visual Impairment is based on the World Health Organization (WHO) in the ICD-10 (International Classification of Diseases update and revision from 2006): Vision function is classified in 4 or more broad categories:

1. Normal Vision
2. Moderate Vision Impairment (<0.3 and ≥ 0.125)
3. Severe Vision Impairment (< 0.125 and ≥ 0.05)
4. Blindness (<0.05)

When a student's vision is in category 2 or 3, we are talking about Low Vision and for them you can use the Low Vision list. When a student's vision is in category 4 you must use the iExpress screening list for Blind students.

The iExpress screening instrument for Low Vision contains five separate components (A-E), the screening list for Blind students contains only four (A, C-E). All components are described below.

4.3.1 Focusing attention (A)

Before a student can react on any action, you must be sure that they have attention for the stimuli you are offering. In the first category we are only testing whether a student can focus his attention

on an auditory and/or visual stimulus on a computer screen or tablet. We only look for the reaction part on a stimulus, focusing attention. With MDVI students we know that especially maintaining their attention on a stimulus is a challenge. That is why it is important to know whether they can focus their attention on the stimuli. But we also measure whether they can maintain their attention on the stimuli for more than 5 seconds. To be certain that this is not just a coincidence, we must see this happen in 4 out of 4 times you are offering the same kind of stimulus. Besides this, we also are interested in the combination of stimuli the student can handle. For low vision students we are screening this category with only visual stimuli, but after that we will also do this with the combination of a visual and an auditory stimulus together. The combination can strengthen the attention of the student, but it also can be too much. Should the latter be the case, you know that you must use only visual or only auditory stimuli and should not combine them in the training after the screening. When a student is reacting intensely on two kinds of stimuli at the same time in the screening, you can decide to shut off one of the stimuli during the rest of the screening. This should be noted in the comments section of the screeninglist. For the blind students we will only be testing with auditory stimuli.

4.3.2 Follow (not for blind) (B)

For the students with low vision, we are testing some starting skills in following visual stimuli on the computer screen or tablet. It is still only the reaction on a certain stimulus that we are looking for. The student does not have to start any action to get a positive score for this category. It is important to have some basic information about the student's skills to follow, so that we know what kind of software suits the student best. Note that we are not executing a complete visual field test or visual following test. In the screening we are offering stimuli that are moving from left to right, right to left, from top to bottom and from bottom to top. To make sure that it is no coincidence that the student follows the stimuli, we want to see each direction followed at least two times. We also measure the length of the paths the student can follow in the different directions.

4.3.3 Press and release (C)

In the Press and Release category we want to assess whether a student can press on a key, touchscreen, or similar device that is connected to a computer or tablet. We are not looking to see whether the student is pressing at the exact moment, but just whether he is able to press. Besides pressing we also want to assess whether the student can release again after pressing. An extra item in this category is to test whether a student is also able to hold the key, switch or touchscreen for more than 1 second before releasing. Like in the other categories we are offering the different items more than once. To make sure the reaction is no coincidence we repeat this item 4 times for the student.

4.3.4 Action and reaction (D)

When we have determined - by assessing the previous categories - that a student is able to focus attention and able to press and release a device (and we know what the low vision student is able to follow on the screen) we can start with assessing the action and reaction abilities of the student. In this category we want to assess whether the student understands that when he or she is pressing on a device, he or she is causing a reaction on the screen. This is a skill that is most likely difficult to master independently for a student with multiple disabilities. Students with a

developmental age between 0 and 1 year will most likely not be able to execute those type of tasks. Above the developmental age of 1 there is an increased change that the student understands more about the relation between their own action and the reaction on the screen (cause-effect and action-reaction).

4.3.5 Operation (E)

In the last category we gain information about the student's skills level of action and reaction. In this category we want to assess in which way the student can operate on the computer or tablet with a device. Through different items we are going to assess whether the student can move the cursor with the help of a computer mouse (not suitable for blind students), switch controller, touchscreen or other device in a certain direction. When the student is able to do so, we want to find out whether he or she can bring the cursor to a specific on screen object (which we can offer in two sizes depending on the student's visual disability or on how accurate the motor coordination of the student is). For all students we also want to assess whether they can activate the selected object with the device they are using. The last item is only for low vision students where we want to find out if they can select an object, hold it and bring it to another place, which we call 'drag and drop'. More difficult skills (such as choosing between different objects, matching objects etc.) are not included as items to be assessed in the iExpress screening tool. However, in the training section of the software (developed under iExpress II) there are several activities that you can use with the purpose of training these skills.

5. Recommendations and instructions for use

5.1 Equipment and materials

In order to execute the screening in a correct and appropriate manner we prescribe using certain equipment and materials. The validation of the screening instrument is based on working with the prescribed equipment. There is always a possibility that equipment is lacking or that the available equipment is not suited for the student. In that case you are advised to adjust or change that specific equipment to the requirements you need. These guidelines will provide you the necessary insights into these requirements. All recommendations given below describe the ideal scenario.

- **Chair** – Make sure that the chair is positioned at the proper height for the student. The student's feet are required to be touching the ground (or must be placed on a footboard) with the complete sole of the foot. The upper legs must rest on the seat. When the student has their own adjusted chair or wheelchair, make a note in the comments sections about how the student is sitting in this chair or wheelchair.
Is he sitting straight up or maybe a little bit tilted back? Can the student hold his torso up in the chair or does he need more support so that his arm is free to use for the screening activities? Can the student hold his head up for longer time or does he need head support? When using a head support, does he have the opportunity to turn his head? All this information is important to write down in your report (in the comments section).
- **Table** – Ideally one uses a table that is easy to adjust to the proper height. For the low vision students, it would be also ideal that the centre of the computer screen or tablet is at eye level. A mouse, switch, touchscreen or other devices for operation are preferred to be positioned on hand level. When using a computer or tablet as screen and as operating device, try holding it at eye level and find out whether the student can lift his hand and arm to touch the screen in the right way. When this is not possible or too hard for the student, you can play a little bit with adjusting the screen until the student can touch the screen, but he or she can still see the visual stimuli on the screen. Blind students are unable to look at the screen, so with blind students it is only important to put the device at optimal height, angle, direction and distance so that they can reach and use it in the most operable way.
- **Personal computer with touchscreen** (screen size 22", when available a 24" would be recommended) – We prescribe using a personal computer with touchscreen so you can use all the operation possibilities that were used during the validation process (mouse, switch and touchscreen)⁴. It is also possible to use a personal computer without touch screen. You can still do the screening; however, you cannot test whether it is easier for the student to operate the computer with a switch or mouse or directly by using the touchscreen.
- **Tablet** (screen size 12" for Android tablets or 12,9" for Apple tablets) – We prescribe using a tablet with a mounting arm to position it on the appropriate height and angle for the student. It is possible to put a screen protector over the tablet but be aware that this can influence the

⁴ See the validation report that was produced during the iExpress Myself project (www.iexpressmyself.com).

sensitivity of the touch screen in a negative way. Look at the website www.iexpressmyself.com (downloads) for the latest technical info about the software and the kind of tablets that comply with the software.

- **Mounting arm for the tablet** – There are a lot of different mounting solutions for tablets, but not that many for the bigger size tablets. Look for a version you can secure on a table or the armrest of a wheelchair. Look at the internet for mounting solutions for tablets in your country.



(Source: <http://www.inclusive.co.uk/>)

- **Computer mouse** – Make sure that the computer mouse is easy to reach for the student if you want to use this device during the screening. Additionally, you can put a mouse mat on the table. A computer mouse can be very difficult to use for our target group. A lot of fine motor coordination skills are required. We will not recommend letting the student use a computer mouse during the screening, but rather switches or the touchscreen. It must be said; however, an advantage of using a mouse instead of the touchscreen or switches, is that you can put the mouse close to the hand of the student in resting position, while the touchscreen has to be on eye height. And the student is still able to move the cursor easily. But the mouse arrow on the screen can be hard to see and follow for the student. So, when there is a good reason to use a computer mouse instead of the other options, consider that there are a lot of different versions of a computer mouse. It must fit well in the hand of the student. When the student is not able to click on the left or right mouse button, think of adapted versions of the mouse.
- **Switch and other adapted devices for mouse functions** – You can use switches when the touchscreen is too difficult to touch in the right way or with the right pressure and a computer mouse is too difficult. An advantage of switches is that you can put it close to the hand in resting position and the touchscreen can still be held on eye height. Depending on the motor functions of the student you can choose to use a big or small switch. Every switch has his own pressure sensitivity. Most of the time this information is provided on the supplier's website. There are also mounting solutions available for switches to put them in another position instead of just putting them on a table. To use switches with a tablet or computer you need a switch interface. This interface connects the switches with the device on which you will play the software. There are different switches, there are also different interfaces.



(Source: <http://www.inclusive.co.uk/>)

5.2 Application protocol

Carry out the screening in a quiet room with no disturbance from other students or staff. This should be a room where you are able to adjust the brightness of the light or blind the windows when necessary. The student must be provided with the best functional seating position as described above. All the items should be assessed with the student sitting in front of the computer screen or a tablet and looking forward. The distance from the eyes of the student and the screen should be between 10 and 40 cm. If an item cannot be evaluated for a student, the score of that item would be 0. If at any moment the student's response is negative to a stimulus (i.e., screaming, turning away because the student does not want to see it, hitting to the screen out of frustration) the test may stop. When possible, try to continue at a later stage.

It is recommended that the screening is performed by a professional that is experienced in working with the MDVI target group and is informed on how to use ICT adaptations for this group.

5.3 Preparation

- Set up a quiet room where you can perform the screening
- Make sure that the iExpress application is properly installed on the computer or tablet with the latest updates
- Start up the computer and the needed software program
- Start up the tablet and make sure you have enough power

- Test if the sound on the computer or tablet is working properly
- Make sure all the applications and software are properly installed on the tablet and the computer is updated with the latest updates.
- Check if you have all the additional hardware devices you may want to use and check whether they work properly with the computer and/or tablet
- Check the internet connection to allow the application to store data in the cloud/remote server
- Make sure that you have familiarized yourself with the training documents for using the software that are part of the toolkit (all documents can be downloaded at www.iExpressmyself.com)
- Make sure you have set up a profile for the student in the iExpress application
- Make sure you have made a new ICT plan and ICT screening for the student
- Adjust the application to the needs of the student (contrast, colours)

5.4 How to use the screening software

Next to the screening instrument and additional information on the software, the toolkit contains an extended user training document for the professionals. The training materials should be studied carefully before executing the screenings with the students. This training document should be considered as an integral part of this guidelines document. The training document also includes examples of how to use the practice features that are also part of the application. (Additional information can be found and downloaded at www.iExpressmyself.com)

5.5 Completion

- Estimated time of the screening = 15-30 minutes
- Scoring = A four-point scale from 0 to 3. "0" indicates the lowest level of function and "3" the highest level of function. Maximum score Low Vision is 45, for Blind is 24
- Verbal mark = When, in addition to the first instructions, you must give the student verbal support to execute a certain task, you should indicate 'verbal mark' in the scoresheet belonging to that item
- Practicing mark = When the student does not understand what to do after your instructions and you have given him or her some time, you can practice together once or more (specifics are written by each scoring item in the screening). In that case you are required to indicate 'practicing mark' in the scoresheet.

5.6 Interpretation

For Low-Vision:

0-12 = Level 1: The professional must train some basic skills before using ICT in the learning process of the student to train new skills on different areas.

13-26 = Level 2: ICT could be partially used in the learning process of the student to train new skills on different areas.

27-45 = Level 3: ICT could be used in the learning process of the student to train new skills on different areas.

For Blind:

0-8 = Level 1: The professional must train some basic skills before using ICT in the learning process of the student to train new skills on different areas.

9-16 = Level 2: ICT could be partially used in the learning process of the student to train new skills on different areas.

17-24 = Level 3: ICT could be used in the learning process of the student to train new skills on different areas.

5.7 ICT plan

Within the application there is an ICT plan that is created automatically by the software as soon as you have done a screening with the student. (Annex 7.3 contains a manual how to create the ICT plan in the software). The data of the screening are stored in a database in the ICT plan of the software. This insight enables the professional to set next goals. These goals can be described in a written ICT plan that can be added to the student's file or school plan (annex 7.4).

In this plan the professional sets out ICT goals that the student will work on to improve the ICT skills. The goals are directly derived from the score items from the screening instrument. The goals are divided into small steps, so that progress can be better measured. For each goal, it is indicated with which ICT tools (software and hardware) they practice achieving the goal. In addition to ICT goals, specific preconditions are also stated in the ICT plan that are essential for proper training and to increase the ultimate chance of achieving. Preconditions may, for example, be demands made on the space or specific interventions during training.

By unambiguously recording all this information in the ICT plan, all professionals work in the same way on a specific training goal and fit the ICT training level well in line with the possibilities of the student.

5.8 Practice features in the software

The software also has a training section where the components from the screening (A-E) can be practiced. There are 4 sections (the first one gathers Focus and Follow). Each section contains different games to practice this specific skill.

5.9 Factors of influence

Students with MDVI often have multiple conditions that need to be considered. Beside a visual impairment and low developmental age, they have often limited motor skills, impaired stimulus regulation, limited attention span or another neurological disorder.

All these conditions must be taken into account during the practise of the ICT skills and during the screening. Consult the student file or school plan that describes which factors of influence are important for this student to consider.

6. Legal provisions

6.1 Privacy and data protection

The iExpress software complies with the GDPR to protect the privacy of the students/clients that are screened by use of the application. When downloading and using the software, the user is asked to agree with the terms and conditions and the privacy policy. Both documents can be found on the website www.iexpressmyself.com.

If you want to use the database in the application, you must request a centre-code. Follow the instructions on the website on how to request this code. You only need a centre-code if you want to save screening data. There is no need to apply for a centre code when solely using the training section of the software.

Visio is coordinator of the project, questions regarding these provisions or the iExpress software can be sent to: iExpress@visio.org

6.2 iExpress application software

Users of the iExpress software are responsible for the use of the application with their students/clients. Any data breach caused by the user that is not related to the security precautions of the software developer agreed upon in the Data Processing Agreement are not the responsibility of the software developers or project coordinator.

7. Annexes

- 7.1 iExpress Screening list with score sheet - Blind
- 7.2 iExpress Screening list with score sheet – Low Vision
- 7.3 iExpress Manual creating and using ICT plan in the software
- 7.4 iExpress Output 3 Example ICT plan

ANNEX 7.1 iExpress Screening List with Score sheet - Blind



Screening instrument **Blind**

Partners:



INTRODUCTION

The **aim** of this screening instrument is to know what skills related with the use of Information and Communications Technologies (ICT) are mastered by students with multiple disability and visual impairment (MDVI). This screening instrument would allow the professional to measure the degree in which ICT could be used at school to teach and train new skills to this population, and it would allow measuring the progress in ICT skills over time.

There are two separate screening instruments for the following groups.

- Blind students with a developmental age from 0-4 years
- Low Vision students with a developmental age from 0-4 years

The definition for Blind is based on the World Health Organization (WHO) in the ICD-10 (International Classification of Diseases update and revision from 2006):

Vision function is classified in 4 or more broad categories:

1. Normal Vision
2. Moderate Vision Impairment (<0.3 and ≥ 0.125)
3. Severe Vision Impairment (< 0.125 and ≥ 0.05)
4. Blindness (<0.05)

When a students Vision is falling in category 4 we are talking about Blind and for them you can use this list. When a students vision is falling in category 2 or 3 you have to use the list iExpress Low Vision.

Everywhere there is written "he" you can also read "she".

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Screening items:

A. Focusing Attention

A1 Keep attention on an auditory stimulus.

C. Press and Release

C1 Press an switch or hit the touchscreen.

C2 Press an switch or hit the touchscreen and hold it.

C3 Press an switch or hit the touchscreen and release it.

D. Action and Reaction

D1 Respond to an auditory instruction and knows when to proceed.

E. Operation

E1 Grab an (adapted) keyboard, switch or other devices that allows cursor movements.

E2 Make targeted movements with an chosen device and moves the cursor across an object on the screen.

E3 Complete an left-mouse-click action or activates an object on the touchscreen by an double tap.

EQUIPMENT:

- Chair (with armrests)
- Table
- Personal Computer with touchscreen (screen around 22")
- iPad
- Computer mouse and keyboard
- Switch (i.e. Buddy Button) and other adapted devices for mouse functions
- Stopwatch
- Specific software and apps

APPLICATION PROTOCOL:

Carry out the screening in a quiet room with no disturbance from others where you can adjust the brightness of the light or blindfold the windows when necessary. The student must be provided with his best functional seating position. All the items should be assessed with the student sitting in front of the computer screen or a tablet and looking forward. The distance from the face of the student and the screen should be between 10 and 40 cm. If an item cannot be evaluated for a student, the score of that item would be 0. If at any moment the student's response is negative to a stimulus (i.e. screaming, turning away because the student does not want to see it, hitting to the screen out of frustration) the test may stop.

PREPARATION:

- Set up an empty room where you can perform the screening.
- Start up the computer or tablet with the needed software programmes.
- Check if the sound is working fine on the computer.
- Check if all the devices have enough power.
- Make sure all the applications and software are installed well on the tablet and computer with the latest updates.
- Check if you have all the extra hardware devices you want to use and that it's working with the computer or tablet.
- Make sure you have the score sheet printed out or on a computer to fill in your scores and remarks.
- It can be helpful to use a camera to film the reactions of the student, so you can look back by doubts with scoring.

COMPLETION:

- Time = 15-30 minutes.
- Scoring = A four-point scale from 0 to 3. "0" indicates the lowest level of function and "3" the highest level of function. Maximum score = 24.
- Verbal mark = When you have to use verbal support beside the instruction for the student that belongs to the item, you have to make a verbal mark in the score sheet.
- Practicing mark = When the student doesn't understand what to do after you give the instruction and gave him some time, you can practice one or more times together (specifics are written by each item). Make a practicing mark in the scoresheet when you did this.

INTERPRETATION:

0-8 = Level 1 : You first have to train some basic skills before using ICT in the learning process of the student to train new skills on different areas.

9-16 = Level 2 : ICT could be partially used in the learning process of the student to train new skills on different areas.

17-24 = Level 3 : ICT could be used in the learning process of the student to train new skills on different areas.

A. Focusing Attention

1. Keep attention on an auditory stimulus.

Instruction for the student		If you hear something on the screen, try to pay attention as long as possible.
Frequency	4x	To make sure the reaction is no coincidence we repeat this item 4 times for the student.
Score	0	Not able to keep attention on the stimulus or giving an negative respond.
	1	Able to keep attention on the stimulus less or equal than 5 seconds.
	2	Able to keep attention on the stimulus for more than 5 seconds but only 1-3 out of 4 times.
	3	Able to keep attention on the stimulus for more than 5 seconds in 4 out of 4 times.
Instruction for the professional		<p>Turn the sound on with average volume. Make sure the student doesn't have any hearing problems. Explain to the student that you will start the activity so the student is prepared. After starting the program observe what kind of reaction you see by the student during the time the auditory stimulus is played. Measure how long the student is keeping his attention to the stimulus from the moment he is listening in the direction of the stimulus.</p> <p>If the student has an problem sitting towards the screen or focusing, you may make a sound by tapping on the screen to get his attention. Do this once as an practice to show what stimulus you are offering. Make an practicing mark in the score sheet if you do this. Offer the stimulus again and from this point the student must keep his attention independently.</p>
Respond		<p>A positive respond to the auditory stimulus could be: turning his ear to the sound, getting closer with his ears to the speakers, starting to swing to the music, gives an spoken response, starts smiling, try to touch the place where the sound is coming from etc.</p> <p>It is all right if they only show the look or listening respond or both at the same time.</p>

C. Press and Release

1. Press an switch or hit the touchscreen.

Instruction for the student

Press the switch or hit the screen and hear what happens.

Frequency

4x

To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score

0

Shows no reaction like pressing and / or hitting.

1

Reacts to the stimulus and starts an movement towards pressing or hitting but without success.

2

Makes an pressing or hitting movement but only succeed in 1-3 out of 4 times.

3

Makes an pressing or hitting movement and reaches the adequate place 4 out of 4 times.

Instruction for the professional

If the student is using an switch, make sure that the switch is placed where he can reach it in an efficient way. Let him hear or feel where the switch is placed. Ask the student to press the switch. Give the student some time to react at the instruction.

If the student is using an touchscreen / tablet, make sure that the touchscreen is placed in an way that the student can reach it. Let him hear or feel where the touchscreen is placed. Ask the student to press the touchscreen. Give the student some time to react at the instruction.

If the student shows no respond to your instruction, he may practice an few times. Start by giving him an verbal instruction so the student can hear what happens when you press the switch or hit the touchscreen. You can guide his hand and do this once or twice together, so he feels the movement. Make an practicing mark on the score sheet if you did this. At this point the student must do this independently. You can give verbal support, in that case make a verbal mark.

Respond

The student must make an movement towards the switch or touchscreen and touch it. Besides touching, he also has to press downwards to activate the switch and make an real pressing movement. For this item, it is all right if the student will use another body part to activate. Make an note if the student does this and managed to press or touch at the adequate place.

C. Press and Release

2. Press a switch or hit the touchscreen and hold it.

Instruction for the student

Press the switch or hit the touchscreen and hold this.

Frequency

4x

To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score

0

Reacts to the stimulus and presses or hits very briefly for less than 1 second.

1

Reacts to the stimulus and presses for 1 second.

2

Reacts to the stimulus and presses for 1 - 3 seconds.

3

Reacts to the stimulus and presses for more than 3 seconds in 4 out of 4 times.

Instruction for the professional

Follow the same instruction as in item 2.

If the student doesn't understand why he has to hold the switch or touchscreen to let the activity go on, he may practice a few times as described under item 2. Now the student must do it independently. You can give verbal support for example "hold the switch down" or "hold your hand on the touchscreen". If you do, make a verbal mark.

Respond

The student must make a movement towards the switch or touchscreen, press it down or touch it and hold the position to keep the activation going on in the program.

For this item, it is all right if the student will use another body part to activate. Make a note if the student does this and managed to press or touch at the adequate place.

C. Press and Release		
3. Press a switch or hit the touchscreen and release it.		
Instruction for the student	Press the switch / screen and release it. See what happens.	
Frequency	4x	To make sure the reaction is no coincidence we repeat this item 4 times for the student.
Score	0	Leaves the hand on the switch or does not press the switch or hit the touchscreen at all.
	1	Releases successfully 1 out of 4 times.
	2	Releases successfully 2-3 out of 4 times.
	3	Releases successfully 4 out of 4 times.
Instruction for the professional	<p>Follow the same instructions as in item 2.</p> <p>Ask the student to press the switch or hit the touchscreen. When the student does, you ask him to release the switch or touchscreen. After he releases, the activity in the program will start.</p> <p>If the student doesn't understand that he has to release the pressure and keeps his hand / body part resting on the device you can let him practice a few times as described under item 2. Guide him by lifting his hand so he will hear that the program will activate at the moment he releases the switch / screen. Now the student must do this independently. You can give verbal support, for example "release it". In this case make a verbal mark.</p>	
Respond	The student must touch the switch or touchscreen, press it downwards to activate the switch and release it so that the switch is deactivated or there is no physical contact anymore with the touchscreen. For this item, it is all right if the student will use another body part to activate. Make a note if the student does this and managed to press or touch at the adequate place.	

D. Action and reaction		
1. Respond to an auditory instruction and knows when to proceed.		
Instruction for the student		Wait until you hear something, then press the switch / hit the screen and listen what happens.
Frequency	4x	To make sure the reaction is no coincidence we repeat this item 4 times for the student.
Score	0	Not able to wait to the auditory instruction or doesn't respond to the instruction at all.
	1	Responds to the auditory instruction with the right action in 1 out of 4 times.
	2	Responds to the auditory instruction with the right action in 2-3 out of 4 times.
	3	Responds to the visual and auditory instruction with the right action in 4 out of 4 times.
Instruction for the professional	PC	Make sure the cursor is at the position of the visual cue on the screen in order to make the switch work properly. The student only has to activate the switch and doesn't have to move the cursor to the right place. Explain to the student that he has to wait until the auditory cue is given, then activate the switch. Run the program and watch the first pattern movie together and then the auditory cue is given on the screen.
	Tablet	Explain the student that he has to wait until the auditory cue is given, and then he can hit the screen. Start the program so the cue is given on the screen. If the student doesn't understand that he has to wait you can let him practice a few times as described under item 2. From this point the student must do it independently. When necessary you may give verbal support by saying "wait" till the cue to appear and then say "press / hit now". In this case make a verbal mark.
Respond		The student should only press or hit after the cue is given by the program. It is accepted if the student will do that once or twice to quickly. He does not get a score if he will keep pressing or hitting repeatedly or let his hand rest on the switch or screen when the animation is already playing. For this item, it is all right if the student will use another body part to activate. Make a note if the student does this and managed to press or touch at the adequate place.

E. Operation

General instruction for item E1 – E2

Instruction for
the
professional

Give an (adapted) keyboard, multiple direction switches or other adapted devices that allows cursor movements to the student. Let the student hear where the cursor (focus) is in the program. Ask if the student can move the cursor to an object / sound of his choice on the screen with the device.

If you are not sure about which device the student can handle, start with an (adapted) keyboard. If that is physically too difficult try other choices. Make a note of which one is suiting the student and use this device for the remaining items tested under D. Operation.

If the student has no experience with moving a cursor on the screen, you can let him hear it once or twice audibly. You can also ask for his hand and guide the movement. Make a practicing mark if you do. From this point the student must do it independently. When necessary you can give verbal support. Then make a verbal mark.

E. Operation		
1. Grab an (adapted) keyboard, switch or other device that allows cursor movements		
Instruction for the student	Try to bring the focus to the object. Stop when you reach the object.	
Frequency	4x	To make sure the reaction is no coincidence we repeat this item (together with item 7) 4 times for the student.
Score	0	Not able to grab or place the hand on the device.
	1	Able to grab or place the hand on or near the device without a correct action.
	2	Able to grab or place the hand on the device with a moderate action.
	3	Able to grab or place the hand on the device with a perfect action.
Respond	(adapted) Keyboard	<p>The student is able to move his arm in the direction of the device, without pushing it away. The score will look as follow for the keyboard placement:</p> <ol style="list-style-type: none"> 1. Able to grab the device, but is pinching in the device with high muscle tense instead of a relax position 2. Able to grab the device, but has difficulties with his fine motor skills. 3. Able to grab the device with an relaxing muscle tense and adequate fine motor skills.
	Switches	<p>The student is able to move in the direction of the switch. He is able to press the switch with an part of his body. The amount of tension during hitting must be enough to activate the switch. The score will look as follow for the switch placement:</p> <ol style="list-style-type: none"> 1. Able to start the movement towards the switch, but he is missing the switch during hitting. 2. Able to touch the switch during hitting, but has difficulties adjusting his muscle tension. 3. Able to activate the switch with relaxed muscle tense.

E. Operation		
2.	Make targeted movements with an chosen device and moves the cursor across an object on the screen.	
Instruction for the student	Try to bring the focus to the object. Stop when you reach the object.	
Frequency	4x	To make sure the reaction is no coincidence we repeat this item 4 times for the student.
Score	0	Not able to move the cursor .
	1	Is making the right navigating movement, but only 1 out of 4 times.
	2	Is making the right navigating movement, but only 2-3 out of 4 times.
	3	Is making the right navigating movement 4 out of 4 times.
Respond	(adapted) Keyboard	The student is using the right arrow keys to move the focus into the direction of the sound he likes to hear on the screen.
	Switches	The student will use the correct switches to move the cursor in the direction of the sound he likes to hear on the screen. The movement does not have to be an straight line to reach the object but random movements on the screen are not acceptable.
	Tablet with voice over	The student is swiping horizontally over the touchscreen to move the cursor in the direction of the sounds he likes to hear on the screen. The movement does not have to be an straight line to reach the object but random movements on the screen are not acceptable.

E. Operation		
3.	Complete a left-mouse-click action or activates an object on the touchscreen by a double tap with speech support.	
Instruction for the student	Try to bring the cursor to the object. Then click the enter key / push the switch / double tap the screen.	
Frequency	4x	To make sure the reaction is no coincidence we offer this item 4 times for the student.
Score	0	There is no movement towards pressing the enter key, switch or tapping on the touchscreen.
	1	Presses the enter key or switch down but not far enough to get a reaction (or hitting too hard) / the device shoots away during pressing or makes a tap movement on the touchscreen but the finger swipes away.
	2	Completes the left-mouse-click action or activates an object on the touchscreen by a double tap in 1-2 out of 4 times.
	3	Completes the left-mouse-click action or activates an object on the touchscreen by a double tap 3-4 out of 4 times.
Instruction for the professional	<p>Use the same device as in item 6 and 7. If the student can manage more than 1 device, choose the most difficult one. Make a note on the score sheet.</p> <p>The student must reach the object with the cursor. Instruct the student to activate the object with the chosen device.</p> <p>If the student has no experience with a left-mouse-click action, you can guide his hand and do this once or twice together, so he can feel and hear the movement. Make a practicing mark on the score sheet. From this point the student must do this independently. You can give verbal support, then make a verbal support mark.</p>	
Respond	(adapted) Keyboard	The student is able to activate an object by pushing the enter key without pushing one of the other keys at the same time. After activating, the student is also capable of relaxing the finger and releasing the key.
	Switches	The student is able to activate a left-mouse-click action by pushing a switch that is replacing the left mouse button. Without pushing one of the other switches at the same time. After activating, he is also capable of relaxing and / or lifting the finger or hand to release the switch.
	Touch screen	The student is able to reach the object on the touchscreen and activate the object on the screen with a double tap without shooting away with the finger and making a swipe movement or tapping too slow or too many times.

SCORE SHEET BLIND

Name		Developmental age	
Date		Date of birth	
Eye-Screen distance			
Tester / Co-Tester			

Item		Score				Marks ¹		Device ²	Operation ³
		0	1	2	3	V	P		
A	Focussing attention								
A1	Auditory stimulus								
C	Press and release								
C1	Press								
C2	Hold								
C3	Release								
D	Action and reaction								
D5	Auditory instruction								
E	Operation								
E1	Grab								
E2	Move cursor								
E3	Activate object								
	Total score								

¹ V = Verbal mark, P= Practice mark

² iPad or PC

³ Switch, touchscreen, mouse or keyboard

ANNEX 7.2 iExpress Screening List with Score sheet – Low Vision



Screening instrument **Low Vision**

Partners:



INTRODUCTION

The **aim** of this screening instrument is to know what skills related with the use of Information and Communications Technologies (ICT) are mastered by students with multiple disability and visual impairment (MDVI). This screening instrument would allow the professional to measure the degree in which ICT could be used at school to teach and train new skills to this population, and it would allow measuring the progress in ICT skills over time.

There are two separate screening instruments for the following groups.

- Blind students with a developmental age from 0-4 years
- Low Vision students with a developmental age from 0-4 years

The definition for Low Vision is based on the World Health Organization (WHO) in the ICD-10 (International Classification of Diseases update and revision from 2006):

Vision function is classified in 4 or more broad categories:

1. Normal Vision
2. Moderate Vision Impairment (<0.3 and ≥ 0.125)
3. Severe Vision Impairment (< 0.125 and ≥ 0.05)
4. Blindness (<0.05)

When a students Vision is falling in category 2 or 3 we are talking about Low Vision and for them you can use this list. When a students vision is falling in category 4 you have to use the list iExpress Blind.

Everywhere there is written "he" you can also read "she".

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Screening items:

A. Focusing Attention

- A1 Keep attention on an visual stimulus.
- A2 Keep attention on an visual and auditory stimulus.

B. Follow

- B1 Follow an object visually when it is moved horizontally from the right part of the screen towards the left part of the screen.
- B2 Follow an object visually when it is moved horizontally from the left part of the screen towards the right part of the screen.
- B3 Follow an object visually when it is moved vertically from the upper part of the screen towards the lower side of the screen.
- B4 Follow an object visually when it is moved vertically from the lower part of the screen towards the upper side of the screen.

C. Press and Release

- C1 Press an switch or hit the touchscreen.
- C2 Press an switch or hit the touchscreen and hold it.
- C3 Press an switch or hit the touchscreen and release it.

D. Action and Reaction

- D1 Respond to an visual instruction and knows when to proceed.
- D2 Respond to an visual and auditory instruction together and knows when to proceed.

E. Operation

- E1 Grab an mouse, switch or other device that allows cursor movements.
- E2 Make targeted movements with a chosen device and moves the cursor across an object on the screen.
- E3 Complete an left-mouse-click action or activates an object on the touchscreen by a single tap.
- E4 Drag and drop with an chosen device or on the touchscreen.

EQUIPMENT:

- Chair (with armrests)
- Table
- Personal Computer with touchscreen (screen around 22", recommended 24")
- iPad
- Computer mouse and keyboard
- Switch (i.e. Buddy Button) and other adapted devices for mouse functions
- Stopwatch
- Ruler of 30 cm
- Specific software and apps

APPLICATION PROTOCOL:

Carry out the screening in a quiet room with no disturbance from others where you can adjust the brightness of the light or blindfold the windows when necessary. The student must be provided with his best functional seating position. All the items should be assessed with the student sitting in front of the computer screen or a tablet and looking forward. The distance from the eyes of the student and the screen should be between 10 and 40 cm. If an item cannot be evaluated for a student, the score of that item would be 0. If at any moment the student's response is negative to a stimulus (i.e. screaming, turning away because the student does not want to see it, hitting the screen out of frustration) the test may stop.

PREPARATION:

- Set up an empty room where you can perform the screening.
- Start up the computer or tablet with the needed software programmes.
- Check if the sound is working fine on the computer.
- Check if all the devices have enough power.
- Make sure all the applications and software are installed well on the tablet and computer with the latest updates.
- Make sure you have adjusted the speed, size and colour of the mouse pointer so it is visible for the student.
- Check if you have all the extra hardware devices you want to use and that it's working with the computer or tablet.
- Make sure you have the score sheet printed out or on a computer to fill in your scores and remarks.
- It can be helpful to use a camera to film the reactions and eye-movements of the student, so you can look back by doubts with scoring.

COMPLETION:

- Time = 15-30 minutes
- Scoring = A four-point scale from 0 to 3. "0" indicates the lowest level of function and "3" the highest level of function. Maximum score = 45.
- Verbal mark = When you have to use verbal support beside the instruction for the student that belongs to the item, you have to make an verbal mark in the score sheet.
- Practicing mark = When the student doesn't understand what to do after you give the instruction and gave him some time, you can practice one or more times together (specifics are written by each item). Make a practicing mark in the scoresheet when you did this.

INTERPRETATION:

0-12 = Level 1 : You first have to train some basic skills before using ICT in the learning process of the student to train new skills on different areas.

13-26 = Level 2 : ICT could be partially used in the learning process of the student to train new skills on different areas.

27-45 = Level 3 : ICT could be used in the learning process of the student to train new skills on different areas.

A. Focusing Attention

1. Keep attention on an visual stimulus



Instruction for the student

If you see something on the screen, try to look as long as possible.

Frequency

4x

To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score

0

Not able to keep attention on the stimulus or giving an negative respond.

1

Able to keep attention on the stimulus less or equal than 5 seconds.

2

Able to keep attention on the stimulus more than 5 seconds but only 1-3 out of 4 times.

3

Able to keep attention on the stimulus more than 5 seconds in 4 out of 4 times.

Instruction for the professional

Explain to the student that you will start the activity so the student is prepared. After starting the program observe what kind of reaction you see by the student during the time the stimulus appears on the screen. Measure how long the student is keeping his attention to the stimulus from the moment he is really looking in the direction of the stimulus.

If the student has problem sitting towards the screen or focusing, you may make a sound by tapping on the screen to get his attention. Do this once as a practice to show what stimulus you are offering. Make a practicing mark in the score sheet if you do this. Offer the stimulus again and from this point the student must keep his attention independently.

Respond

A positive respond could be: turning his head to the stimulus, starts smiling, try to touch the stimulus on the screen, getting closer with his face to the screen, etc.

A. Focusing Attention

2. Keep attention on an visual and auditory stimulus.
(don't forget to turn the sound on again)

Instruction for the student If you hear or see something on the screen, try to look as long as possible.

Frequency 4x To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score	0	Not able to keep attention on the stimulus or giving an negative respond.
	1	Able to keep visual and/or auditory attention on the stimulus less or equal than 5 seconds.
	2	Able to keep visual and/or auditory attention on the stimulus for more than 5 seconds but only 1-3 out of 4 times.
	3	Able to keep visual and/or auditory attention on the stimulus for more than 5 seconds in 4 out of 4 times.

Instruction for the professional Turn the sound on with average volume. Repeat the same instructions and stimulus as in item A1. Make sure the student doesn't have any hearing problems.

If the student has an problem sitting towards the screen or focusing, you can make a sound by tapping on the screen to get his attention. Do this once as an practice to show what stimulus you are offering. Make an practicing mark on the score sheet if you do this. Offer the stimulus again and from this point the student must keep his attention independently.

Respond A positive respond to the visual stimulus could be the same as in item A1. Respond to the auditory stimulus could be: turning his ear to the sound, getting closer with his ear to the speaker, starts to swing on the music, gives a spoken response, etc.
It is all right if they only looked or listened as a respond or did both at the same time.

B. Follow

General instruction and respond for item B1 – B4.
Items B1 – B4 are evaluated at once, but scored separately.

Instruction for the student	Look at the screen. If you see something, try to follow as long as possible.
Instruction for the professional	<p>Items 3 - 6 are evaluated at once. Explain to the student that you will start the activity so the student is prepared. Start the program. Objects will move one after each other from different directions. Observe the reaction and eye movements of the student during the time the object appears and moves on the screen.</p> <p>If the student has an problem sitting towards the screen or focusing, you can make an sound by tapping on the screen to get his attention. Do this once as an practice to show what stimulus you are offering. Make an practicing mark on the score sheet if you do this. Offer the stimulus again and from this point the student must keep his attention independently.</p> <p>Turn off the sound if the student gets distracted by the sound and stops looking at the object. Make an note if you do this.</p>
Respond	An positive respond could be paying attention on the visual object on the screen when it appears. He follows the object's entire route with eye movement or by moving his head. It is all right if the student will follow the object by placing his finger or hand on the screen and follow the object.

B. Follow		
1.	Follow an object visually when it moves horizontally from the right part of the screen towards the left part of the screen. ⑤	
Frequency	2x	To make sure the reaction is no coincidence we repeat this stimulus 2 times for the student.
Score	0	Not looking at the screen.
	1	Looking at the screen, but not able to follow the object.
	2	Performs eye movements in the direction of the object but cannot cross the centerline.
	3	Performs eye movements in the direction of the object during the entire path (at least) in 1 out of 2 times.

B. Follow		
2.	Follow an object visually when it is moved horizontally from the left part of the screen towards the right part of the screen. ⑦	
Frequency	2x	To make sure the reaction is no coincidence we repeat this stimulus 2 times for the student.
Score	0	Looks not at the screen.
	1	Looking at the screen, but not able to follow the object.
	2	Performs eye movements in the direction of the object but cannot cross the centerline.
	3	Performs eye movements in the direction of the object during the entire path (at least) in 1 out of 2 times.

B. Follow		
3.	Follow an object visually when it moves vertically from the upper part of the screen towards the lower side of the screen. ③	
Frequency	2x	To make sure the reaction is no coincidence we repeat this stimulus 2 times for the student.
Score	0	Not looking at the screen.
	1	Looking at the screen, but not able to follow the object.
	2	Performs eye movements in the direction of the object but cannot cross the centerline.
	3	Performs eye movements in the direction of the object during the entire path (at least) in 1 out of 2 times.

B. Follow		
4.	Follow an object visually when it moves vertically from the lower part of the screen towards the upper side of the screen. ⑥	
Frequency	2x	To make sure the reaction is no coincidence we repeat this stimulus 2 times for the student.
Score	0	Not looking to the screen.
	1	Looking to the screen, but not able to follow the object.
	2	Performs eye movements in the direction of the object but cannot cross the centerline.
	3	Performs eye movements in the direction of the object during the entire path (at least) in 1 out of 2 times.

C. Press and Release

1. Press a switch or hit the touchscreen.

Instruction for the student

Press the switch or hit the screen and see what happens.

Frequency

4x

To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score

0

Shows no reaction like pressing and or hitting.

1

Reacts to the stimulus and starts an movement towards pressing or hitting but without success.

2

Makes an pressing or hitting movement but only succeed in 1-3 out of 4 times.

3

Makes an pressing or hitting movement and reaches the adequate place 4 out of 4 times.

Instruction for the professional

If the student is using an switch, make sure that the switch is placed where he can reach it in an efficient way. Ask the student to press the switch. Give the student some time to react at the instruction.

If the student is using an touchscreen / tablet, make sure that the touchscreen is placed in an way that the student can look at it with his head straight up and touch it with his hand in an efficient way. Ask the student to press the touchscreen. Give the student some time to react at the instruction.

If the student shows no respond to your instruction, he may practice an few times. Start by giving him an verbal and visual instruction so the student can see and / or hear what happens when you press the switch or hit the touchscreen. You can guide his hand and do this once or twice together, so he feels the movement. Make an practicing mark on the score sheet if you did this. At this point the student must do this independently. You can give verbal support, in that case make a verbal mark.

Respond

The student must make an movement towards the switch or touchscreen and touch it. Besides touching, he also has to press downwards to activate the switch and make an real pressing movement. For this item, it is all right if the student will use another body part to activate. Make an note if the student does this and managed to press or touch at the adequate place.

C. Press and Release		
2. Press a switch or hit the touchscreen and hold it.		
Instruction for the student	Press the switch or hit the touchscreen and hold this..	
Frequency	4x	To make sure the reaction is no coincidence we repeat this item 4 times for the student.
Score	0	Reacts to the stimulus and presses or hits very briefly for less than 1 second.
	1	Reacts to the stimulus and presses for 1 second.
	2	Reacts to the stimulus and presses for 1 - 3 seconds.
	3	Reacts to the stimulus and presses for more than 3 seconds in 4 out of 4 times.
Instruction for the professional	<p>Follow the same instructions as in item 7.</p> <p>If the student doesn't understand why he has to hold the switch or touchscreen to let the activity go on, he may practice a few times as described under item 7. Now the student must do it independently. You can give verbal support for example "hold the switch down" or "hold your hand on the touchscreen". If you do, make a verbal mark.</p>	
Respond	<p>The student must make a movement towards the switch or touchscreen, press it down or touch it and hold the position to keep the activation going on in the program.</p> <p>For this item, it is all right if the student will use another body part to activate. Make a note if the student does this and managed to press or touch at the adequate place.</p>	

C. Press and Release

3. Press a switch or hit the touchscreen and release it.

Instruction for the student

Press the switch / screen and release it. See what happens.

Frequency

4x

To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score

0

Leaves the hand on the switch or does not press the switch or hit the touchscreen at all.

1

Releases successfully 1 out of 4 times.

2

Releases successfully 2-3 out of 4 times.

3

Releases successfully 4 out of 4 times.

Instruction for the professional

Follow the same instructions for item 7.

Ask the student to press the switch or hit the touchscreen. When the student does, you ask him to release the switch or touchscreen. After he releases, the activity in the program will start.

If the student doesn't understand that he has to release the pressure and keeps his hand / body part resting on the device you can let him practice a few times as described under item 7. Guide him by lifting his hand so he will see and / or hear that the program will activate at the moment he releases the switch / screen. Now the student must do this independently. You can give verbal support, for example "release it". In this case make an verbal mark.

Respond

The student must touch the switch or touchscreen, press it downwards to activate the switch and release it so that the switch is deactivated or there is no physical contact anymore with the touchscreen. For this item, it is all right if the student will use another body part to activate. Make an note if the student does this and managed to press or touch at the adequate place.

D. Action and reaction

General instruction and respond for item D1 – D2.

Instruction
for the
professional

PC

Turn the sound off during item 10 to test only the respond on an visual stimulus and turn the sound on again in item 11 to test both the respond on an visual and auditory stimulus . Make sure the cursor is at the position of the visual cue on the screen in order to make the switch work properly. The student only has to activate the switch and doesn't have to move the cursor to the right place. Explain to the student that he has to wait until the visual (and auditory, in item 11) cue is given, then activate the switch. Run the program and watch the first pattern movie together and then the visual cue is given on the screen.

Tablet

Turn the sound off during item 10 to test only the respond on an visual stimulus and turn the sound on again in item 11 to test both the respond on an visual and auditory stimulus. Explain to the student that he has to wait until the visual (and auditory, in item 11) cue is given, then activate the screen. Start the program so the cue is given on the screen.

If the student doesn't understand that he has to wait you can let him practice an few times as described under item 7. From this point the student must do it independently. When necessary you may give verbal support by saying "wait" till the cue to appear and then say "press / hit now". In this case make an verbal mark.

Respond

The student should only press or hit after the cue is given by the program. It is accepted if the student will do that once or twice to quickly. He does not get an score if he will keep pressing or hitting repeatedly or let his hand rest on the switch or screen when the animation is already playing. For this item, it is all right if the student will use another body part to activate. Make an note if the student does this and managed to press or touch at the adequate place.

D. Action and reaction

1. Respond to an visual instruction and knows when to proceed.



Instruction for the student

Wait until you see something on the screen, then press the switch / hit the screen.

Frequency

4x

To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score

0

Not able to wait to the visual instruction or doesn't respond to the instruction at all.

1

Respond to the visual instruction with the right action in 1 out of 4 times.

2

Respond to the visual instruction with the right action in 2-3 out of 4 times.

3

Respond to the visual instruction with the right action in 4 out of 4 times.

D. Action and reaction

2. Respond to a visual and auditory instruction and knows when to proceed.
(don't forget to turn the sound on again)

Instruction for the student

Wait until you see or hear something on the screen, then press the switch / hit the screen and see what happens.

Frequency

4x

To make sure the reaction is no coincidence we repeat this item 4 times for the student.

Score

0

Not able to wait to the visual and auditory instruction or doesn't respond to the instruction at all.

1

Responds to the visual and auditory instruction with the right action in 1 out of 4 times.

2

Responds to the visual and auditory instruction with the right action in 2-3 out of 4 times.

3

Responds to the visual and auditory instruction with the right action in 4 out of 4 times

E. Operation

General instruction for item E3 – E4
Items E3 – E4 are evaluated at once.

Instruction for
the
professional

Give an mouse, an (adapted) keyboard, multiple direction switches or other adapted devices that allows cursor movements to the student. Show the student the cursor on the screen by pointing. Ask if the student can move the cursor to an object on the screen with the device.

The items are tested with an visual object on the screen size 5x5 cm. If the student succeeds twice in reaching the object in this size, the visual object is changed to 2x2 cm and again tested twice. If the student is not able to succeed the 5x5 cm object both first times, he will be tested with the object in 5x5 cm all 4 times.

If you are not sure about which device the student can handle, start with an mouse. If that is physically too difficult try other choices. Make an note of which one is suiting the student and use this device for the remaining items tested under E. Operation.

If the student has no experience with moving an cursor on the screen, you can show him once or twice visual and / or auditory. You can also ask for his hand and guide the movement. Make an practicing mark if you do. From this point the student must do it independently. When necessary you can give him verbal support. Then make an verbal mark.

E. Operation		
1. Grab an mouse, switch or other device that allows cursor movements		
Instruction for the student	Try to bring the cursor to the object. Stop when you reach the object.	
Frequency	4x	To make sure the reaction is no coincidence we repeat this item (together with item 13) 4 times for the student.
Score	0	Not able to grab or place the hand on the device.
	1	Able to grab or place the hand on or near the device without a correct action.
	2	Able to grab or place the hand on the device with a moderate action.
	3	Able to grab or place the hand on the device with a perfect action.
Respond	Mouse or other adapted devices	<p>The student is able to move his arm in the direction of the device, without pushing it away. The score will look as follow for the mouse placement:</p> <ol style="list-style-type: none"> 1. Able to grab the device, but is pinching in the device with high muscle tense instead of an relax position 2. Able to grab the device, but has difficulties with his fine motor skills. 3. Able to grab the device with an relaxing muscle tense and adequate fine motor skills.
	Switches	<p>The student is able to move in the direction of the switch. He is able to press the switch with an part of his body. The amount of tension during hitting must be enough to activate the switch. The score will look as follow for the switch placement:</p> <ol style="list-style-type: none"> 1. Able to start the movement towards the switch, but he is missing the switch during hitting. 2. Able to touch the switch during hitting, but has difficulties adjusting his muscle tension. 3. Able to activate the switch with relaxed muscle tense.

E. Operation		
2. Make targeted movements with an chosen device and moves the cursor across an object on the screen.		
Instruction for the student	Try to bring the cursor to the object. Stop when you reach the object.	
Frequency	4x	2 times to an object of 5x5 cm, when succeed then also 2 times to an object of 2x2 cm. Otherwise 4 times to an object of 5x5 cm.
Score	0	Not able to move the cursor.
	1	Moves the cursor, aiming in the wrong direction of the object on the screen of 5 x 5, or moves the cursor in the right direction but misses the object.
	2	Moves the cursor to the object of 5x5 on the screen and stops in time.
	3	Moves the cursor to the object of 2x2 on the screen and stops in time.
Respond	Mouse or other adapted devices	The student is able to operate the device and move the cursor to the object on the screen. The movement does not have to be an straight line to reach the object but random movements on the screen are not acceptable.
	Switches	The student will use the correct switches to move the cursor in the direction of the object on the screen. The movement does not have to be an straight line to reach the object but random movements on the screen are not acceptable.

E. Operation		
3. Complete an left-mouse-click action or activates an object on the touchscreen by an single tap.		
Instruction for the student	Try to bring the cursor to the object. Then click the button / push the switch / touch the screen.	
Frequency	4x	To make sure the reaction is no coincidence we offer this item 4 times for the student.
Score	0	There is no movement towards pressing the button, switch or tapping on an object on the touchscreen.
	1	Presses the button / switch down but not far enough to get a reaction (or hitting to hard) / the device shoot away during pressing or makes a tap movement on the touchscreen but the finger swipes away.
	2	Completes the left-mouse-click action or activates an object on the touchscreen by a single tap in 1-3 out of 4 times.
	3	Completes the left-mouse-click action or activates an object on the touchscreen by a single tap in 4 out of 4 times.
Instruction for the professional	<p>Use the same device as in item E1 and E2. If the student can manage more than 1 device, choose the most difficult one. Make an note on the score sheet.</p> <p>The student must reach the object with the cursor or his finger. Instruct the student to activate the object with an left-mouse-click action on the chosen device.</p> <p>If the student has no experience with an left-mouse-click action, you can guide his hand and do this once or twice together, so he can feel the movement. Make an practicing mark on the score sheet. From this point the student must do this independently. You can give verbal support, then make an verbal support mark.</p>	
Respond	Mouse or other adapted devices	The student is able to activate an object with a left-mouse-click action (this could be done by pushing the left button on the mouse) so that the mouse cursor isn't moving away from the object. After activating, the student is also capable of relaxing the finger and releasing the button.
	Switches	The student is able to activate an left-mouse-click action by pushing an switch that is replacing the left mouse button. Without pushing one of the other switches at the same time. After activating, he is also capable of relaxing and / or lifting the finger or hand to release the switch.
	Touch screen	The student is able to move his finger and reach the object on the touchscreen (without touching the screen on his path) and he can activate the object on the screen with one tap without shooting away with his finger and making an swipe movement.

E. Operation		
4. Drag and drop with a chosen device or with the touchscreen.		
Instruction for the student	Try to move the object to the target on the screen.	
Frequency	4x	To make sure the reaction is no coincidence we offer this item 4 times to the student.
Score	0	Not able to select the object and / or moving it on the screen.
	1	Can select the object and moves it over the screen, but is not able to move it more than 50% in the direction of the target.
	2	Can select the object and moves it over the screen to the target and drops the object at the right place in 2 out of 4 times.
	3	Can select the object and moves it over the screen to the target and drops the object at the right place in 3 out of 4 times.
Instruction for the professional	<p>Use the same device you have tested in items E1+ E2 + E3. If the student can manage more than 1 device, choose the most difficult one. Make an note on the score sheet.</p> <p>Explain the student that he have to select an specific object on the screen, move it to the target and drop it there.</p> <p>If the student has never worked with drag and drop, you can show him. You can guide his hand and do this once or twice together, so he can feel the movement. Make an practicing mark on the score sheet when you do. From this point the student must do this independently. You can give verbal support, then make an verbal mark.</p>	
Respond	Mouse or other adapted devices	The student must be able to select the object with the button and hold this. While holding the button down he can move the object to the target. There he must be able to release the button and drop the object on the target.
	Switches	The student must be able to select the object with the fifth (enter) switch and hold this. While holding this switch down he can move the object with the other (arrow) switch to the target. He must hold the selection until he has moved the object above the target on the screen. There he must be able to release the fifth switch and drop the object on the target.
	Touch screen	The student must be able to select the object on the screen by touching it with an finger and move the object with his finger over the screen above the target (without touching the screen with other fingers or parts of his hand) and drop the object on the target.

SCORE SHEET LOW VISION

Name		Developmental age	
Date		Date of birth	
Eye-Screen distance			
Tester / Co-Tester			

Item		Score				Marks ¹		Device ²	Operation ³
		0	1	2	3	V	P		
A	Focussing attention								
A1	Visual stimulus								
A2	Visual + auditory stimulus								
B	Follow								
B1	right → left								
B2	left → right								
B3	top → down								
B4	down → top								
C	Press and release								
C1	Press								
C2	Hold								
C3	Release								
D	Action and Reaction								
D2	Visual instruction								
D3	Visual + auditory instruction								
E	Operation								
E1	Grab								
E2	Move cursor								
E3	Activate object								
E4	Drag and drop								
	Total score								

¹ V= Verbal mark, P = Practice mark² iPad or PC³ Switch, touchscreen, mouse or keyboard

ANNEX 7.3 Manual creating and using ICT plan in the software

iExpress II

KA2 Strategic Partnership Project

2018-1-NL01-KA201-038955

Output 3

Activity 5.

Instructions Individual ICT Plan

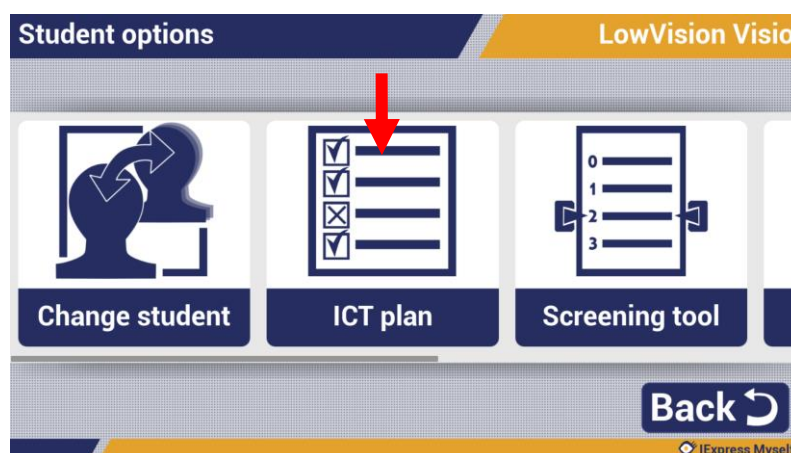
Output Leader: Visio



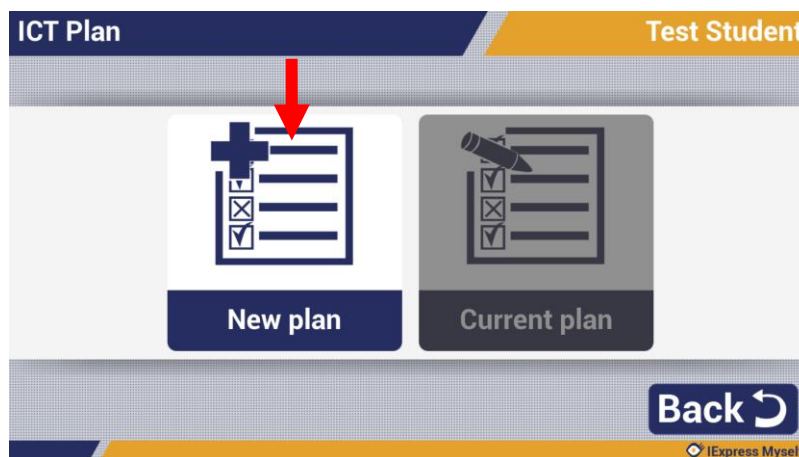
Manual creating and using ICT plan and ICT screening in iExpress software

After you have created a profile for the student under your own account you have to select it on the deployable list. Then, you will see the main practice window. At the right-top corner, you will see the name of the student. You can click on it and then the "Student Options" windows will be shown. Then, follow the next steps.

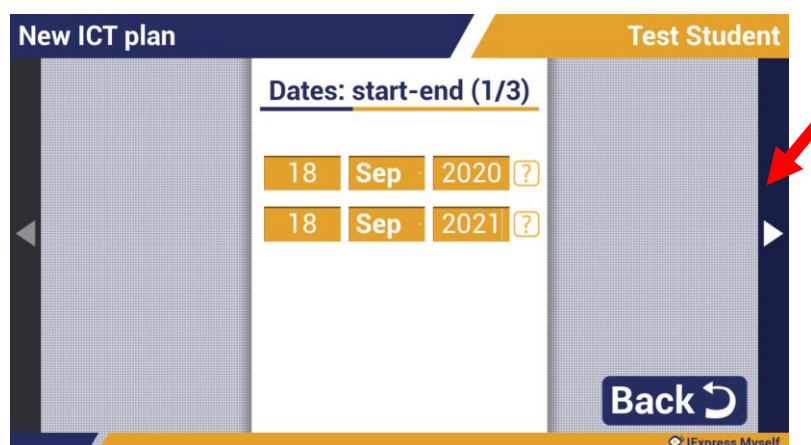
1. Go to "ICT plan"



2. Create a "New Plan" (if a student was tested before, the "New Plan" button will be disabled and the Current Plan button enabled, but if this is your first time using iExpress, there shouldn't be any current ICT plan). If there is an already created ICT Plan, but its end date belongs to the past, you will see both buttons active to check the current plan by selecting "Current plan" (the one which has already ended) and the possibility of creating a new one.



- Once pressed on "New plan", the application will lead to a new window composed by 3 screens. You are now in the 1st out of 3 screens for the creation of a new ICT Plan. A plan will probably last for 1 or 2 years (depending on the developmental level of the child). The first line corresponds to the start date for the ICT Plan. Make sure you introduce a valid end date (second line) with enough time to perform the full ICT plan. Fill in the dates and consider you are not inputting a start date from the past. When you have done so, to scroll to the next screen, you can press the white triangle on the blue right border of the screen or you can do a swapping - drag and drop-, both with the mouse or with the finger, for those using a touch screen, from right to left to navigate to the following screens.



The screenshot shows the 'New ICT plan' screen (1/3) with a title bar 'New ICT plan' and 'Test Student'. The main content area is titled 'Dates: start-end (1/3)'. It contains two rows of date selection: '18 Sep 2020' and '18 Sep 2021'. A red arrow points to the right side of the screen, indicating the navigation area. A 'Back' button is visible at the bottom right. The footer shows 'iExpress Myself'.

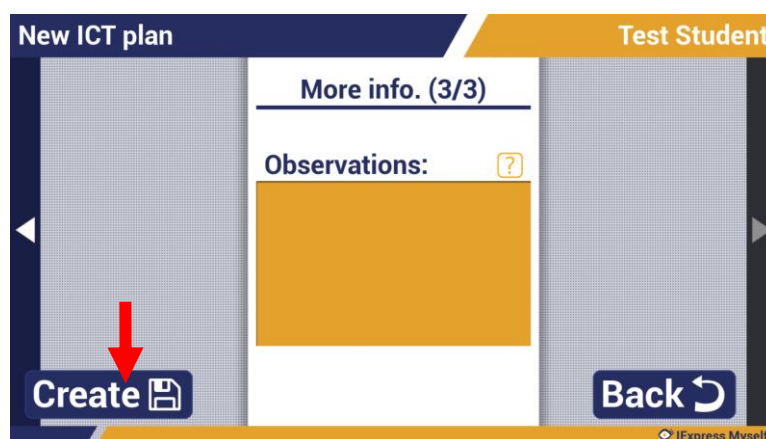
- On the next screen, every exercise in the plan is by default checked. You can uncheck these boxes related to the items you are sure you are not going to test. Remember you do not need to finish a screening in only one session, but you can start it and end it in forthcoming days. It does not have any relation with the checked boxes, as they only define what tests you will screen along the ICT Plan. When you are done with this screen, you can swap or click to the next one as described in the previous section.



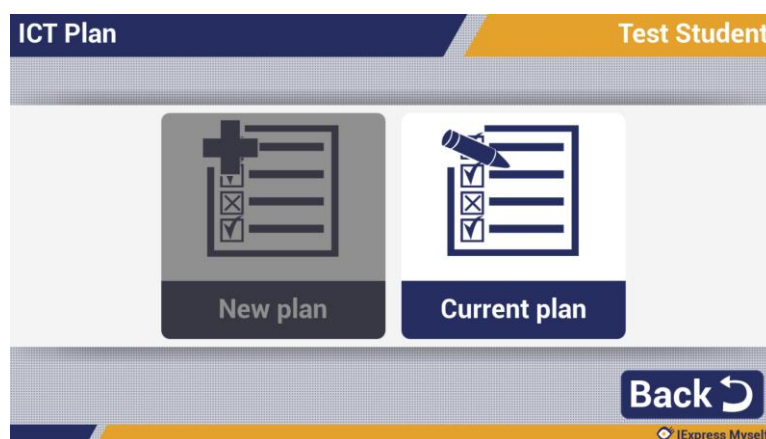
The screenshot shows the 'Plan (2/3)' screen with a title bar 'New ICT plan' and 'Test Student'. The main content area is titled 'Plan (2/3)'. It contains a table with columns labeled '- 1 2 3 4' and rows labeled A, B, C, D, E. Each cell in the table contains a checkbox. A red arrow points to the left side of the screen, indicating the navigation area. A 'Back' button is visible at the bottom right. The footer shows 'iExpress Myself'.

	-	1	2	3	4
A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5. On the last screen you can fill in some general comments, both giving some details or special needs of the student or also afterwards, when editing the current plan, about how the child has performed in general during the full training once the 3 screenings have been closed. You can edit the ICT Plan anytime. You will be able to make notes about the screening results after each screening item in the score section of that item. So you can fill in those observations or leave it for the future and just create a new ICT plan, by pushing on the "Create" button. If you change your mind and do not want to create a new ICT plan, you can just press on the "Back" button to cancel the addition of the new ICT Plan.



Once you have created the ICT plan, you can open and edit it again by clicking on "Current Plan". You can see what you have filled in or which items you have checked and edit them. Please, have in mind that if you change the exercises you are willing to test during your different screenings (check boxes), results won't be comparable in the end to see the evolution of the student at those exercises.



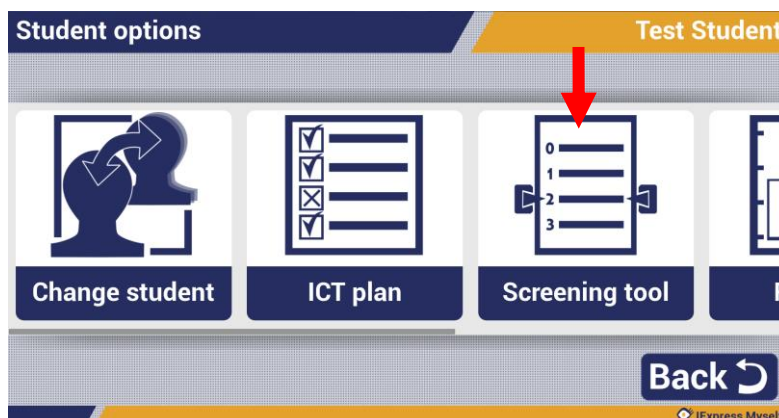
3 screening moments (slots) during the period of the ICT plan

In this current plan you can do a total of 3 screenings with the student. It is foreseen you assess the first screening at the beginning of the ICT plan period. A second one in the middle of the period, to see what is the student's progress. And the last one at the end of the ICT plan period to see what the progress is of the child at that time. Remember that for each screening you can assess along one or more days to test all the items you need to measure with a student. You do not have to do it all at once, but of course you should do it in a relatively short period of time for the consistency of the results. Make sure all your 3 screenings are closed before the end date of the ICT Plan. If ICT Plan's end date is over, you won't be able to add new Screenings and consequently unable to save your student's performance. It won't allow you to store exercises from the current Screening after the ICT Plan ending.

Before start screening

You need to open a screening if you want to save results and, as we mentioned before, you only have 3 slots per plan.

Go to the screening tool button:



On the top right of the screen you will see a "New" button and an "End" button. On the header of the screen you will see the indication (0/3), which means there is still no slot open or consumed.



Press the button "New" and the indication will transform in (1/3), which means you are in the first screening slot.

The screening process

The "New" and "End" buttons are meant to define when a screening starts and ends.

If there are no previous data, the "New" button will be available but the "End" button will be disabled, since you can't close a screening slot that has not been open yet. The same occurs in reverse, when you have a Screening open, the "New" button is disabled but the "End" button is active.

When you want to perform one of your three screenings, first you press the "New" button (the "New" button will be disabled and the "End" button will be enabled), then you do the exercises, save your results and, when all of them are collected, you can press the "End" button, which will turn the "New" button available again.

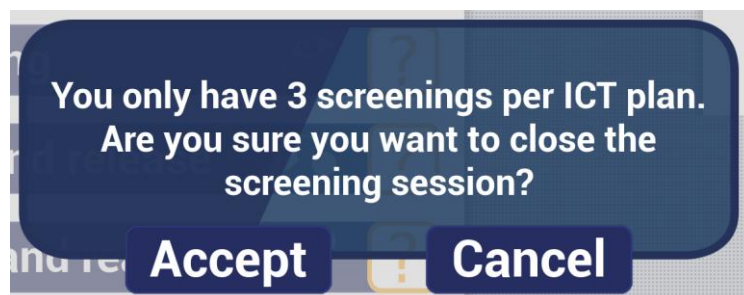


Screen all items all at once with the student

In the training we explained that you do not have to do the screening all at once with a student. If this student does not have a good day or the screening takes too long for the energy this student has, we recommend that you stop and proceed with the screening another time.

You do not have to do the full screening all at once but if you repeat an item in the same slot, the previous results will be overridden. You have to open and close each Screening slot manually with the "New" and "End" button from the Screening tool.

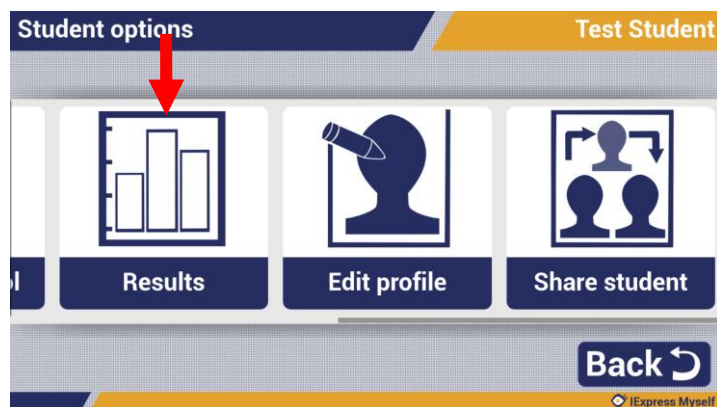
Make sure you have performed all the screening exercises you want to save before pressing the "End" button because this is an irreversible action and once you have closed a Screening, you will not be able to open it again and the screening slot will get consumed. If you want to end a Screening, a pop-up window will show informing about what are you about to do, to avoid you click on it accidentally.



Important: if you have done an item with the student and saved the score in the application, you cannot do the same item again. If you do so, you will overwrite the score you have saved earlier.

Looking back the score results

In the software you can go to Results in the menu of the student. There you can open each item one by one to see everything you have filled in there. If you want to see a total overview of the score, you can use the website. But this part of the website is still under construction. When this is ready, you will be able to get a total overview of all your students' scores at once instead of opening each item in your results part of the software to find back your score.



ANNEX 7.4 iExpress Output 3 Example ICT plan

ICT plan of enter first and last name here

Date of birth		Developmental age	
Mentor	<i>(Enter name of mentor)</i>	Group	<i>(Enter name of group)</i>
	Date	Screened by	Total score
Screening 1		<i>(Enter name and function)</i>	
Screening 2		<i>(Enter name and function)</i>	
Screening 3		<i>(Enter name and function)</i>	
ICT perspective (age 12 and 20 years)			

ICT goals			
Screening Component	Software	Hardware	Operation
<i>Enter the screening component that needs to be trained e.g. A1 or C2</i>	<i>Enter the name and settings of the software.</i>	<i>Enter the hardware device.</i>	<i>Enter operation.</i>
Instructions for support and supervision			
<p><i>Enter here all enabling conditions that are needed to acquire the ICT skills, such as</i></p> <ul style="list-style-type: none"> - extra support, - type of interventions - specific adjustments to hardware devices and software. - (class)room requirements - sound settings - table/chair settings - alertness level 			