



TRIADE 2.0

AGEING AND INTELLECTUAL
DISABILITY

MNAM PLATFORM: EDUCATORS GUIDELINES

How to get the most out of 64 exercises



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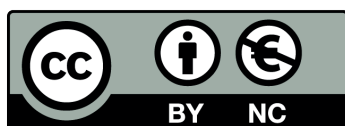
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SECTION 1. Introduction

TRIADE 2.0 is a project on "Cooperation for innovation and the exchange of good practices", developed under the key action of adult education of the Erasmus+ programme.

The strategic partnership is formed by 9 partners from Belgium, Bulgaria, Italy, Slovenia and Spain. TRIADE 2.0 tackles the challenge of improving the social inclusion and quality of life of a new segment of population: ageing adults with intellectual disabilities (hereafter AAWID).

In order to improve the competences of AAWID and the professionals providing support to them, TRIADE 2.0 has developed three sets of training materials:

- 1) "My new inclusive job": training toolkit for educators of AAWID.
- 2) MNAM Interactive Training Platform (<https://triade.webs.upv.es/t20/>)
formed by 2 complementary outputs:
 - a. 64 inspiring exercises and a set of resources to get the most out of the exercises.
 - b. EDUCATORS MNAM PLATFORM GUIDELINES (presented in this document)**
- 3) Training plan: TRIADE 2.0 master plan where it is explained the "what, where, when and how" details of the project training and learning activities.

The objective of this guide is to help educators and educational content developers: a) to get the most out of the 64 exercises included in the MNAM platform; and b) to learn how to produce and validate new pedagogical exercises.

Besides the introduction, this document is formed by 5 sections:

- Section 2: how to pedagogically use the MNAM platform: exercises characteristics and recommendations for their implementation.
- Section 3: the validation methodology: process followed and assessment tools developed by the project to design and validate the exercises; and to obtain the pedagogical conclusions.
- Section 4: How to develop new digital accessible content for the platform.
- Section 5: Implementation, generalization and transfer of acquired competences to the real life situations of AAWID.
- Section 6. Annex 1: validation tools.

Finally, additional information about all the sections included in this guide and all TRIADE 2.0 intellectual outputs can be found on the TRIADE 2.0 website (<https://www.ivass.gva.es/es/Triade2.html>) and in the section "resources for educators" on the MNAM platform (<https://triade.webs.upv.es/t20/resources-for-educators/>)

SECTION 2. How to pedagogically use the platform

The MNAM Platform provides 64 exercises in order to help educators to improve the Social Inclusion and the Quality of Life of ageing adults with intellectual disabilities (AAWID).

The 64 exercises are grouped within 14 didactic units (topics). The didactic units are clustered around the 3 factors of Quality of Life: Well-being, Social participation and Independence. Each didactic unit addresses a specific topic related to ageing (abuse, budget management, life goals, use of social media, rights, etc.) and is formed by:

- a) A theoretical introduction of the topic and the unit;
- b) The learning outcomes (knowledge and skills) expected to be achieved when completing the exercises;
- c) The instructions of each exercise;
- d) The exercises, activities and materials (working sheets, templates, cardboards, etc.) to be downloaded from the platform (Word and PDF format).

They have different formats (games, videos, quizzes, puzzles, role playing, group discussions, etc.), and are always enriched with photos and pictograms and have different length (from 5 minutes to 1 hour). The exercises can be implemented by using digital screens (blackboards, PCs or tablets), but also downloading the diverse pedagogical materials and printing them.

The exercises usually introduce a real life story with one or several ageing or dependent characters (Isabel, Maria, George, etc.) who has been designed in a way to be familiar to AAWID and to help them to identify the topic and understand the tasks to be completed. For example, the exercise 1 of the unit 8 (retirement) shows the Isabel's story; the ups and downs of a woman on her late fifties who is thinking of retiring. Once the AAWID has become familiar with the topic and the story, the exercise proposes a number of activities/tasks

related to the story and the topic. They have been designed with the ultimate goal to promote the development in AAWID of the reflection processes.

Figure 1.1. Exercise 8.1.: Isabel's story.

Understanding the concept of retirement

Start the first Exercise with the story about Isabel (part I), while showing the pictures (see also annex 1 on the platform), or let them read the story by themselves.

You may add other materials/films that explore a situation of people going into retirement. It is always most useful to show films of local people if possible.

The story of Isabel

Isabel going to work



This is Isabel. For more than 20 years she went to her job at a sheltered workplace, driving her motorbike.

Isabel having a stroke

But two years ago, when Isabel was 58, she had a stroke and ended up in the hospital. For a while she was very sick.



After leaving the hospital, Isabel was no longer herself. She felt extremely tired and was easily irritated, especially after a day at work.



Isabel cutting down on work

Together with her support workers, Isabel decided to cut down on work. Instead of going to her job four days a week, she then went two days a week.



Figure 1.2. Exercise 8.1.: activities 2 and 3.

Activity 2: Why do people retire? (Annex 2 - 30 minutes)

Begin by telling the group the activity is to get them thinking about reasons why people want to retire.

Give each group a sheet of flipchart paper divided into two zones, one green and one red.



Give the group a pack of pictures (see annex 2 on platform) and tell them to take one picture at a time, discuss what it says and decide as a group whether it is a reason why people retire (green) or not (red).

Then ask them to place the card in the appropriate zone of the flipchart.

Encourage the group to discuss and debate why it is a reason for retirement and why not.

The game is complete when the group discussed and placed all the cards on the chart.

Note that most of the cards can be placed in the green zone. It all depends on their interpretations. For instance, most people keep working because they need the money. But some might have enough savings and decide to retire early.

Activity 3: What is the most frequent reason for retirement? (10 minutes)

Tell the group to take the cards they have put on the green column in activity 1. Ask them to decide which 3 cards represent the most frequent reasons why people go into retirement.

Give a new flipchart paper and draw three steps (see below).

If possible, let them rank these 3 cards.

- 1 = most frequent reason
- 2 = 2nd most frequent reason
- 3 = 3rd most frequent reason



Studies have shown that health issues or illness is the most common reason for AAWID to retire, followed by tiredness and wanting to take it more easy.

Note that not all participants will be able to rank cards. Use this exercise to discuss about those issues that match their own situation.

The exercises have to be implemented with the help of an educator who should be present in the learning activity, guiding the whole process and activities, although those AAWID with higher autonomy might use them by themselves.

To start to implement the exercises, it is recommended to have an interview with the AAWID by using the validation questionnaire 1 (see next section) in order to assess their needs and preferences and choose the appropriate exercises for each person or group. To help with this exercise selection, the MNAM Platform allows educators to find an specific exercise by searching by four key criteria:

1. Quality of Life dimension
2. Type of learning (individually or by group)
3. Estimated length
4. Format of exercises (Pdf, video, etc.)

Figure 1.3. Searching exercises by 4 criteria.

The screenshot shows the MNAM Platform interface. At the top, there is a navigation bar with the Iriade logo, the text 'MNAM Platform from Iriade 2.0 project', the Erasmus+ logo, and a menu with 'FACTORS', 'UNITS', 'EXERCISES' (highlighted with a red dashed box), 'HOW TO EDUCATE USING MNAM', 'RESOURCES FOR EDUCATORS', and 'CONTACT'. Below the navigation bar, a message states 'We already have 64 exercises available'. The main content area displays a grid of exercise cards. On the right side, there are four filter sections: 'QoL dimension' with checkboxes for Emotional well-being, Interpersonal relations, Material well-being, Personal development, Physical Well-being, Rights, Self-determination, and Social inclusion; 'Type of Learning' with radio buttons for 'Individually' and 'In group'; 'Estimated length' with radio buttons for 'Up to 15 minutes', 'From 15 up to 30 minutes', and 'More than 30 minutes'; and 'Format of exercises' with checkboxes for 'Off line', 'On line', 'presentations (powerpoints, PDF, docs ...)', 'video / audio', and 'Portable material cards, pictures ...'. At the bottom right of the filter section is an 'Apply filters' button. A red dashed arrow points from the 'EXERCISES' tab in the navigation bar to this 'Apply filters' button.

1.1 -Moving to another place	1.2 -What should we take into account when deciding where we will live when we are older?
1.3 -What are the advantages of each of the different residential options?	1.4 -Which residential option suits my interests and needs best? (My future resident)
1.5 -Adapting my home. What is the best option?	2.1 -Difficulties in the activities of the daily living
2.2 -The adapted environments	2.3 -My support products (walker, hearing aid, ...)
2.4 -Helping Maria to choose her support products	2.5 -Matching assistive technology with its usefulness
2.6 -True/False questions about adaptation, support products and assistive technology	3.1 -What new needs older people have?
3.2 -What concern me about money?	3.3 -Identifying my income
3.4 -Identifying my expenses	3.5 -Identifying my balance
3.6 -Identifying my debts	3.7 -Reducing my expenses

But professionals and educators can freely use the exercises in the best way that matches their clients' needs. They might decide to use all the exercises

included on the platform, giving the lessons in the same sequence in which they are numbered on the platform. Or they might use one exercise -or a set of them- independently, to implement it individually or by groups, to use it as a part of other clients individual support or pedagogical methodologies.

In addition, educators taking part in the validation methodology have stated the convenience for some exercises to be adapted to the specific learners capacities and environment. Accordingly, exercises can be downloaded on Word format in order to facilitate this adaptation.

Although the exercises have different degree of difficulty, it might be stated that the average learners target group is:

**Ageing adults with mild intellectual disability, having
some autonomy in the activities of the daily life.**

According to the QoL model, they are AAWID who need intermittent supports to fully live in the community. In addition, some level of comprehensive and expressive language is convenient to understand the exercises, take part in the activities or answer the questions.

Finally, the platform does not include any specific tool to evaluate the learning outcomes acquisition by AAWID, but educators, to assess the learning process, might use or adapt the indicators and tools developed by the project to validate the methodology and exercises which are explained in the following section of this document.

SECTION 3. Validation methodology and conclusions

3.1. Introduction

This document addresses the validation methodology of the MNAM digital platform exercises. The main objective of the digital platform MNAM is to support the social learning and training process of AAWID. The learning outcomes of the training are:

- AAWID to have more opportunities after the training to access public goods and services (e.g. public transportation, retirement clubs, evening classes, community associations and services, etc.).
- AAWID to have more opportunities to improve their social network with people who are not staff, family members or other people with ID.

To reach these goals, the interactive learning platform MNAM includes exercises and activities pursuing 2 types of learning outcomes:

- Knowledge improvement on the concepts of ageing: i.e. healthy ageing, active ageing, roles of AAWID, healthy diets, living independently and leisure time.
- Skills improvement: Using the 8 dimension of QoL (giving maximum importance to the social inclusion dimension) the exercises will be oriented to improve the interpersonal skills of AAWID.

To optimise the training outcomes of the MNAM learning platform for AAWID, TRIADE 2.0 developed a conceptual framework for a design and sustainable development of the MNAM exercises (see annex 1). This framework helped partners to:

- ✓ reach consensus about the conditions, context, content factors, and training concept of the MNAM digital platform.



- ✓ facilitate the brainstorm among the partners to define the specific content of the unit exercises.
- ✓ describe the different QoL factors, MNAM units and respective learning outcomes.
- ✓ follow the guidelines that were used as building stones for the creation of MNAM exercises.
- ✓ review and revise the MNAM exercises.
- ✓ to assess and evaluate the MNAM exercises.

As it can be seen in figure 3.1., the framework that enabled the development of the MNAM digital platform content will be described in the next 8 sections. The pilot study in which we evaluate the use of the MNAM exercises is described in section 7. In section 8, it will be summarized the results from this study and formulate some recommendations.

Figure 3.1. Validation methodology steps.



3. 2. MNAM Validation Methodology: An outcome-oriented and durable approach.

1. Creating the conditions, content and concept of the MNAM digital training platform.

01 – Analyse the context and the conditions

02 – Determine the MNAM content

Initially the proposal of TRIADE 2.0 was to develop a validation methodology that would guarantee the acquisition of the learning outcomes and the transfer capacity of the MNAM digital platform, i.e. insure that AAWID make the transfer of what they have learned on the digital MNAM platform to the daily life situations. The validation methodology that was proposed by HOGENT was a within-subjects quasi-experimental research design.



01 – Analyse the context and the conditions

After numerous discussions about the purpose and objectives of the MNAM digital platform, and consequently the content of the validation methodology, it was decided to shift the focus of the MNAM platform from ‘promoting transfer of skills’ to ‘supporting the social learning process in order to improve the overall QoL of AAWID’. In the following, the context and conditions by which this decision was made will be explained.

First, after finishing the TRIADE 2.0 workbook for trainers (IO1) all partners agreed that the content of the MNAM training programme should align with the workbook content. Secondly, instead of training AAWID in completing a total of 64 exercises on the digital platform in order to achieve an increase of digital competences (use of table or PC) and interpersonal and transfer skills, the focus of the training was redirected to improve the overall QoL by targeting only those learning outcomes that best suited AAWID’s specific support needs. Not only was this choice more congruent with the frame of reference of the workbook, it was doable within the time frame of the pilot study, which was set at 5 months.

Furthermore, the partners realized that the MNAM exercises could not be designed as ‘one-size-fits-all’ but should allow for customization. Despite the partners beliefs on the change, modifiability and plasticity of AAWID, training new knowledge and skills in a controlled environment (i.e. MNAM platform) doesn’t guarantee implementation of what has been taught. Regardless of age and severity of the intellectual disability, making the transfer to real life situations is a rather complex endeavour that goes beyond performing a learned skill and content but requires the availability of certain conditions. These conditions are at the level of the client (e.g. self efficacy, intrinsic

motivation, etc.) and at the level of the environment (is the environment 'expecting' performance, 'inviting', 'stimulating', etc.).

Based on these reflection it was agreed by the partners to develop:

1. A digital learning platform MNAM that would mainly be used by trainers in order to teach AAWID specific knowledge about ageing and help them improve their skills in order to increase the overall quality of life.
2. To develop, at least, 50 exercises that address the support needs that are specific for a good QoL of AAWID - as described in the scientific literature. Finally, 64 exercises were developed.
3. A theoretical framework with practical strategies for successful transfer and implementation of the MNAM training exercises (see section 5 of this document); and a framework to help educators to develop accessible content (see section 4 of this document)



02 – Determine the MNAM content

A second step was to determine the concrete content of the MNAM learning platform. The TRIADE 2.0 partners agreed to use the conceptual framework on QoL as described in the workbook for trainers (IO1) and shown in the table 3.1.

Table 3.1. Quality of Life Conceptual Framework.

QoL Factor	QoL Domain	QoL indicator
Independence	Personal development	Education status, personal competences
	Self-determination	Choices, personal control, decisions
Social participation	Interpersonal relations	Social network friendships, family relations
	Social inclusion	Community integration, social roles
	Rights	Human and legal
Well-being	Emotional well-being	Contentment, lack of stress
	Physical well-being	Health and nutritional status
	Material well-being	Financial status, employment, possessions
	Spirituality/existentialism	Religion or spirituality, existential questions

Starting from the three QoL factors ‘Independence’, ‘Social Participation’ and ‘Well-being’ and the scientific literature on the support needs of AAWID (integrated within Modules 2 and 3 of the IO1: TRIADE 2.0 Workbook for trainers and educators), the partners subsequently determined the learning outcomes. An example of such a learning outcomes for the factor ‘Social Participation’ are:

- AAWID knows how to continue or (re-)discover working activities and/or leisure activities in the community after retirement.



- AAWID selects working activities/leisure activities that match with his/her expectations and desires for engaging in the community life after retirement.



2. Creating the MNAM pedagogical content while keeping the learning outcomes in mind.

*03 – Defining the MNAM FACTOR
UNITS*

*04 – Develop minimum standards
& prototypes*



03 – Defining the MNAM FACTOR UNITS

Based on the learning outcomes, the TRIADE partners then defined the MNAM Factor units, 14 in total. These learning outcomes and proposed units were revised by IVASS, coordinator of the TRIADE 2.0.

Table 3.2. QoL factors and units contents.

QOL-FACTOR	UNIT	UNIT CONTENT
1. 2. Well-being	Unit 1	Getting ready to adapt your home. Move to another place
	Unit 2	Adapting equipment and assistive technology
	Unit 3	Budget management: less income, new priorities
	Unit 4	Optimizing health: physical activity and a healthy lifestyle
	Unit 5	Being aware of the changes related to ageing
	Unit 6	Safety: prevention of abuse
Social Participation	Unit 7	Social connectedness: keeping in touch with family and friends
	Unit 8	Active ageing: Postretirement working – or leisure activities in the community
	Unit 9	Social engagement: helping others and contributing to society
	Unit 10	Social Media
Independence	Unit 11	Learning about your rights
	Unit 12	Who are the persons important to me?
	Unit 13	Choosing appropriate life goals and choosing activities important to me
	Unit 14	Choosing end life care and palliative care

For each unit a template was created incorporating the following aspects:

1. Introduction of the unit's content by highlighting how the exercises impact the QoL of AAWID.
2. Further concretisation of AAWID's expected knowledge and skills (learning outcomes).

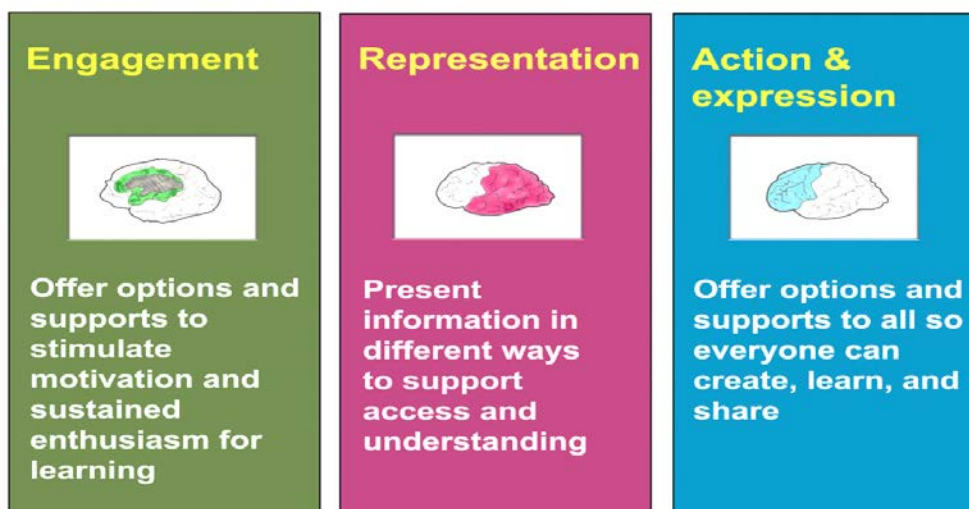


04 – Develop minimum standards & prototypes

As each partner was responsible for the creation of MNAM training exercises within a particular QoL factor (e.g. IVASS – ‘Well-being’, Flemish partners – ‘Social Participation’, Narhu - ‘Independence’), the third step was to set forward some **minimum standards** for the design of the MNAM exercises as well as to create the exercises prototypes.

HOGENT searched the international literature for a pedagogical framework that would enable the creation of durable exercises for people with an intellectual disability. While literature provides several pedagogical frameworks for the general population, only the **Universal Design for Learning (UDL)** was found to be eligible for the target group. This model provides a vision for breaking with the “one-size-fits-all” idea and therefore expands the opportunities for learning for all individuals with learning differences (Meyer, Rose & Gordon, 2017). The core motivation for TRIADE 2.0 to use the UDL principles is that it recognizes the diversity of AAWID.

Figure 3.2. Universal design for learning



Universal Design for Learning: 3 principles

Picture retrieved from <https://www.inclusive.tki.org.nz/guides/universal-design-for-learning/udl-framework>

Meyer, A., Rose, D.H., & Gordon, D. (2017). *Universal Design for Learning: Theory and practice*. Cast Professional Publishing.

Keeping the UDL principles in mind, the following set of minimum standards were created intended for the systematic development of quality exercises that promote accessibility and effectiveness of the MNAM digital training platform.

Minimum Standards for the development of the MNAM UNIT exercises

1. All exercises should be linked to an overarching objective derived from the TRIADE 2.0 workbook. TRIADE 2.0 objectives focus on augmenting or maintaining the QoL of ageing adults with ID.

For example, the overarching objective of the unit 'Social connectedness' is to build or maintain relationships with family-members and friends. As shown in the workbook, AAWID are particularly vulnerable when it comes to having or maintaining contact with family and friends. Mostly of them have a very small network and are more prone than other people to lose contacts as they get older.

2. Each unit should strive for exercises that lead to behavioural change. This means that some exercises may be on the level of knowledge 'knows', while other exercises request insight or reflection by the participants. Finally, at least one exercise should help AAWID make the transfer from what he/she has learned to real life situations (doing and/or integrating in daily life situations)
3. Brake down the overarching objective into smaller sub goals.
4. Decide if the exercise can be made individually and/or in group.
5. Develop exercises for AAWID who are able to communicate verbally and understand simple instructions.

6. Introduce the exercise through a story, role play or film. Make sure that you keep the older cohort of individuals with ID in mind. It does not have to be a very substantive story, but must enable a reflection or discussion on that particular topic. Try to choose an example that is as appealing and positive as possible. The more appealing the example for the participants, the greater the chance that they will positively identify with it and realize themselves that they get older.

When using films, make sure that all partner countries can use it as well. For instance, the film is without text and/or is short enough to be subtitled.

7. Think about how the exercise might be adapted. Can it be broken down in smaller sessions if needed? Some exercises might be too simple for some clients, what could be a more attractive exercise dealing with the same topic?

Extra tips when creating the exercises:

When writing handouts for AAWID, ensure that they:

- Contain only essential info;
- Are short;
- Are straight forward;
- Spaced over the whole page, not cluttered;
- Highlight important words/ concepts e.g. bold italics, change fonts, change colour;
- Add pictures if they add clarity - for some students pictures are not helpful. The person taking the picture knows what it represents but the student does not necessarily understand it.

To ensure educators use the UDL principles, each exercise starts with a note.

For example:

Note

The unit exercises and activities are developed for AAWID who are able to communicate verbally and understand simple instructions. Some are created as group sessions however, they could be tailored for use with individuals if necessary. The exercises may need to be adapted for individuals with more complex learning needs by using more visual or live props and role plays.

To adapt, also think about the following questions:

- *What is their current framework/background of knowledge?*
- *What do they understand about what is happening in their life right now? What do they understand about the future?*
- *How much more could they be helped to understand? What 'knowledge chunks' could, and should, be added to their current framework of knowledge?*

MNAM exercises prototypes

In order to inspire the partners and to help them with the creation of eligible unit exercises, HOGENT Belgium developed prototypes for unit 7 and unit 8 (see MNAM digital platform).



Taking into account the minimum standards and prototypes, the TRIADE2.0 partners went on to develop the MNAM exercises (n = 64).

All 14 UNITS contained several exercises (minimum 3 and maximum 6) divided into smaller exercise activities (minimum 1 and maximum 7). All exercises/activities are explained in a short manual. The annex's gather some extra templates, worksheets, pictures, ... needed to complete the exercises/activities.

The exercises have been designed to be run in the specified order, but can be delivered in any way that you see fit. Each exercise is designed to last approximately one hour but this will vary, depending on the circumstances and the group. It's useful to have a recap at the beginning of each exercise and ask the participants what they can remember about the previous one, and to finish each exercise with a discussion as this helps build on what they have learned.



3. Quality development: review and revise MNAM content.

***05 – Review of MNAM
exercises***

***06 – Revise the MNAM
exercises***



05 – Review of MNAM exercises

The objective of step 5 was to further optimize the quality of the MNAM exercises. For this purpose, HOGENT developed a brief tool (annex 1) for assessing the quality of the MNAM exercises. The 29 item MNAM Exercise Rating Scale (MERS) contains 7 indicators:

1. Information to be published on the MNAM digital platform (i.e. Description about the unit content, learning outcomes and instructions for trainers).
2. Adherence with the minimum standards and/or prototypes.
3. Engagement (i.e. triggers AAWID because exercises are interesting, interactive, customizable, appropriate).
4. Functionality (i.e. only essential info, text is spaced, short, straight forward)
5. Aesthetics (i.e. layout, graphics, visual appeal).
6. Information (i.e. quality and quantity of information).
7. Overall quality of the exercise.

The TRIADE 2.0 partners were asked to rate each individual exercise with the MERS. For each indicator, they could provide comments and add suggestions on how to further optimise the exercise (see annex 1). In order to remain objective, the partners only rated the exercises developed by the other partners.



06 – Revise the MNAM exercises

The completed MERS were sent to HOGENT who made a summary of the qualitative and quantitative information per QOL factor. This summary was then forwarded to the partners who initially developed the exercises. If found eligible by the TRIADE 2.0 partners, the qualitative comments were used to further adapt or further optimize the exercises.

Overall the partners were positive and scored the exercises relatively high on all items. Some remarks about the content of the unit template were made. For example, some of the unit descriptions and the learning outcomes were unclear or needed more refinement. The instructions for the trainers were incomplete or missing.

Other remarks focussed on the exercises themselves, such as:

- Need to adapt the visual aids (picto's or pictures) to the local situation of the country (e.g. logo's from social services in Spain differ from those in other countries);
- Refrain from using technologies that are not on the market in e.g. Eastern-Europe.
- Always add reflective questions to the exercises.
- Less focus on deficits and more attention for positive aspects of ageing (e.g. Exercises about specific assertions of ageing might give the idea that ageing is a bad thing. Maybe you could add a sentence stating that the discussion could also highlight that some ageing people are still able to ride a bicycle, or go for hiking, are still able to learn things. So the focus is not only on the deficits.)



- Add an extra sentence to the instructions for trainers, indicating that the exercise needs a particular level of understanding by the person with ID. Some activities require understanding of complex (e.g. this exercise requires that the person understands the value of money or is able to deal with financial matters).
- Or add an extra sentence when exercises might trigger negative responses by AAWID (e.g. This unit might be difficult/not advisable for persons with experiences of abuse).
- To promote social inclusion and self-determination, add reflective questions about who or which service might help or support AAWID if needed (e.g. help with administration; going to the doctor, using the internet,...).
- Exercises from one QoL factor overlap with exercises from another QoL factor. Suggestions were made to integrate them into one QoL factor.
- Add some pictures or pictograms to support the casus stories.

4. Pilot study: Evaluation, conclusions and recommendations.

***07 – Pilot-study - evaluating
the MNAM exercises***

***08 – Conclusions and
recommendations***

07 –Pilot-study - evaluating the MNAM exercises

Step 7 of the validation methodology was to conduct a pilot-study. With this pilot-study we try to find out if the objective of the digital learning platform MNAM, i.e. to teach AAWID specific knowledge about ageing and help them improve their skills in order to increase the overall quality of life, was reached.

We put forward the following research questions:

1. Which are the MNAM exercises selected by the participants during training?
2. How do the participants experience the use of the MNAM exercises?
3. How does the training affect the learning process of AAWID?

In the following pages, we will describe the methodology, results and conclusions of the pilot-study.

4.1. Methodology.

Instruments

HOGENT developed four assessment tools:

- **1. QoL-AAWID** – interview with AAWID about QoL (not mandatory, but recommended) (Annex 2)
- **2. Pre- and post-assessment** of the knowledge and skills of AAWID (Annex 3)
- **3. Implementation process** of the MNAM exercises/activities for AAWID. (Annex 4)
- **4. Trainers user satisfaction** of the MNAM exercises/activities in general. (Annex 5)

QoL-AAWID (Annex 2)

The Quality of Life – Ageing Adults with Intellectual Disabilities (QoL-AAWID) questionnaire was developed within the TRIADE 2.0 project (see annex) to assess the current QoL of AAWID and discover how AAWID might benefit from the MNAM exercises. The Questionnaire includes 18 items, divided into 9 domains containing 2 items. Each item is evaluated on a 3-point Likert scale assessing the QoL under two conditions: the objective condition (based on life-events and circumstances) and the subjective condition (based on self-appraisal). The scores are determined by means of an open-ended interview between the trainer and the AAWID. The final score of the two items are calculated for each domain shown within a spider chart.

It should be noted that the QoL-AAWID is not a validated instrument. The items and open-ended questions are derived from scientific literature that investigate the QoL of AAWID and on the 'Personal Outcomes Scale' (POS) (Claes, Van Hove, van Loon, Vandeveld, & Schalock, 2009; Van Loon, Van Hove, Schalock, & Claes, 2008), a validated instrument that assess the QoL related personal outcomes of people with ID in general.

Note! As the entire QoL-AAWID interview can easily take-up to 2 hours, the QoL-AAWID questionnaire was not mandatory for the TRIADE 2.0 pilot study. Ideally, the questionnaire should be completed before the selection of the exercises on the MNAM digital platform as the interview can help trainers to gain new knowledge about the wishes and desires of their ageing clients. It will also help the trainer to determine possible knowledge gaps and/or missing skills of their clients. Matching the MNAM exercises with the knowledge gaps and QoL wishes is recommended for a successful training outcome.

Pre-Post Assessment of AAWID knowledge and skills (Annex 3).

Data was collected on the knowledge and skills (i.e. the learning outcomes related to the unit exercises) of the participants at two point in time: before and after the training.

The objective was to assess to what extent the exercises, published on the MNAM e-learning platform, supported the social learning and training process of AAWID. More concretely, did these exercises improve AAWID's knowledge and skills on aspects that are specifically related to the domains of Quality of Life. For each client, we asked to trainer the following:

"On the next few pages, you will find per UNIT an overview of the learning outcomes (knowledge and skills to be reached through the exercises). For the unit exercises that will be used in the training, first assess the current level of knowledge and skills of your client. After the training, assess them again. The level of control is assessed on a five point Likert scale from 'not at all' to 'completely'."

Implementation of MNAM exercises (Annex 4).

To validate the implementation of the MNAM exercises, a 10 items closed-ended survey questionnaire was developed. Each item was provided with either an ordinal or interval rating scale. The items addressed topics such as 'the need to adapt exercises to match with the support needs of the client, the time needed to complete the exercises, the level of enjoyment or difficulty, whether the client would be able to transfer what has been learned, if the exercises might have an impact on the QoL and social inclusion of the client, if the exercises were appealing and recognisable for the client, etc. The trainers were asked to rate the 10 items for each completed exercise (or activity).

MNAM-exercises User Satisfaction questionnaire (Annex 5).

The User Satisfaction Questionnaire is formed by 10 items measuring global satisfaction of the trainers about the usability of the MNAM-exercises. The trainers rate each of the items on a 5-point Likert-type scale, with response categories ranging from 0 = strongly disagree to 4 = strongly agree. Five items are scored in inverse to minimize stereotypic response sets.

4.2. Procedure.

The participating trainers received instructions describing the 4 validation questionnaires and how to use them. The trainers were asked to try-out a minimum of 3 different exercises or activities. However, depending on the time needed to complete the exercises/activities (a maximum of 2 hours was suggested), or the degree by which AAWID was able to complete the exercises, trainers could decide to do fewer exercises. The exercises could be done either individually or in group.

4.3. Analyses.

Descriptive statistics are used to analyse the data, i.e. means and percentages are presented. The results from bivariate or multivariate analysis are reported as well. Associations are controlled for the following six categorical demographic variables: 'age AAWID', 'gender AAWID', 'country of participant', 'age trainer' 'Years of experience' (1 = 1 year, 2 =2-5 years, 3 = 6-10 years, 4 = 11 years and more), and 'profession of trainer'. The correlation between variables is only described if it is at least 95% certain that the correlation cannot be attributed to chance.

4.4. Results.

Participant demographics

- AAWID

The pilot study comprised a total of 91 AAWID. The group of participants consisted of 44 men and 47 women. The mean age of the participants was 59 years old (SD = 9, 78) with the youngest being 28 and the oldest 78 years of age. The table 3.3. shows the number of participants per country.

Table 3.3. Number of participants per country.

	Frequency	Percent
Spain	14	15,4
Bulgaria	21	23,1
Belgium	41	45,1
Slovenia	15	16,5
Total	91	100,0

The 14 *Spanish respondents* were questioned in the occupational centres of IVASS where they are doing workshops (e.g. gardening, furniture, pottery,...) from Monday till Friday. All clients still live with their families.

About 50% of the *Bulgarian participants* were living in sheltered houses/ family-type centres for individuals with intellectual disabilities. As a result of the support received in this type of social services, they have some level of independence. For example, being able to live in the room individually or with a roommate or go shopping and work in the specialized sheltered workshops. The remaining percentage of Bulgarian participants lived at home together with their family members, mostly with their parents or brothers/sisters. Only 2 participants were employed, part time. The level of functioning is different; however they have basic independence and skills to perform tasks like housekeeping, managing their own time as well as some professional skills, which allow them to have small income.

About 50% of Belgian participants lived in a family-type group home or elderly care home, all receiving 24 hours care. Only one participant lived with his parents while the remaining participants lived alone or with a friend or spouse, receiving ambulant care.

In *Slovenia* most of the participants were attendants of Želva, which is an organization for training and employment of disabled people. Only one of the participants (47 years old) lives on his own, his mother helps him with monthly payments, but he manages to reach high independence level and used to be employed in the past. Remaining participants live mostly in their family homes with parents or other family members supporting and taking care of them. Four participants live in a protection and work centre, which is a public social institution. They are mostly not independent and require assistance because of their disabilities.

- **Trainers**

During the exercises, the AAWID were supported by trainers, in total 69. The results indicate large differences in age and professional experience. The mean age of the trainers was 37 years of age (SD = 10,9) with the youngest being 20 and the oldest 59. On average, the trainers had 7 to 8 years of experience (SD = 7,01) in working with people with ID. Of the total group of trainers, ¼ reported to have worked with ID for one year or less while 50% reported more than 5 years of experience. If adding the Bachelor student-educators to the percentages, most trainers (53,7%) had a professional background that can be situated within the educational qualifications level 6, e.g. educator, social worker, occupational therapist, Eighteen percent of the trainers were working as a "special education" coach or psychologist (EQF level 7). The remaining group of trainers were either working as caregivers/assistant (level 4 or 5 (7,5%) or as directors or coordinators of a particular unit (21%).

Table 3.4. Profession of trainers.

	Frequency	Valid Percent
Caregiver - assistant	5	7,5
Student educator	14	20,9
(Student) Educator - social worker – occupational therapist – nutritionist - supported employment consultant	22	32,8
Special education coach - psychologist	12	17,9
director - coordinator	14	20,9
Total	67	100

Implementation process.

In this section the results from the 10 items closed-ended survey on the implementation of the MNAM exercises will be addressed.

First, we will answer the question as to what type of exercises the participants selected for training. As mentioned earlier, the participants were asked to select - on the MNAM digital platform - a minimum of 3 exercises for training during the pilot study. Besides our recommendation to use exercises that match the support needs of the client, they were free to choose from the 64 exercises. This meant that the participants (i.e. the client together with the trainer) could select exercises from either the same or different QoL factors or within the same or different MNAM units (see table 3.5. for an overview of the units' content).

Table 3.5. Overview of the MNAM unit content.

QOL-FACTOR	UNIT	UNIT CONTENT
3. 4. Well-being	Unit 1	Getting ready to adapt your home. Move to another place
	Unit 2	Adapting equipment and assistive technology
	Unit 3	Budget management: less income, new priorities
	Unit 4	Optimizing health: physical activity and a healthy lifestyle
	Unit 5	Being aware of the changes related to ageing
	Unit 6	Safety: prevention of abuse
1.1.3 Social Participation	Unit 7	Social connectedness: keeping in touch with family and friends
	Unit 8	Active ageing: Postretirement working – or leisure activities in the community
	Unit 9	Social engagement: helping others and contributing to society
	Unit 10	Social Media
1.1.4 Independence	Unit 11	Learning about your rights
	Unit 12	Who are the persons important to me?
	Unit 13	Choosing appropriate life goals and choosing activities important to me
	Unit 14	Choosing end life care and palliative care

Secondly, we investigate the quality of the exercises. We give answers to questions such as: How generic are the exercises? How much time is needed to complete the exercises? Are the exercises enjoyable or rather difficult to complete by AAWID? These were only some of the major quality issues discussed by the TRIADE partners in Step 6.

Finally, we also address the potential outcome of the exercises, i.e. whether the exercises have the potential to support the learning process of AAWID, improve social inclusion and the overall QoL.

MNAM exercises related to the QoL factors and MNAM units.

The next few paragraphs show the type and number of exercises that have been selected by the TRIADE 2.0 partner countries during this pilot study. We are looking at the level of the QoL factors and MNAM units.

QoL factors.

Tables 3.6, 3.7 and 3.8 are cross-tables showing the frequencies and percentages of participants per country and per number of selected exercises within respectively the three QoL factors.

In general, looking at the 3 cross-tables, the results indicate that most of the participants selected unit exercises that are situated within the QoL Factor 'Well-being' (59%) followed by the QoL Factor 'Social Participation' (49,5%) and 'Independence' (38,5%).

Table 3.6. % selected exercises within country*QoL Factor Well-being

			Number of Units within QoL Factor Well-being				Total
			,00	1,00	2,00	3,00	
country	Spain	Count	2	9	3	0	14
		% within country	14,3%	64,3%	21,4%	0,0%	100,0%
	Bulgaria	Count	5	10	5	1	21
		% within country	23,8%	47,6%	23,8%	4,8%	100,0%
	Belgium	Count	19	14	7	0	40
		% within country	47,5%	35,0%	17,5%	0,0%	100,0%
	Slovenia	Count	10	5	0	0	15
		% within country	66,7%	33,3%	0,0%	0,0%	100,0%
	Total	Count	36	38	15	1	90
		% within country	40,0%	42,2%	16,7%	1,1%	100,0%

Of the total amount of participants that selected unit exercises from the QoL Factor 'Well-being' (n = 54), most of them (n = 38) did exercises within one of the six 'Well-being' units , 15 participants selected exercises from two of the 'Well-being' units and 1 participant did exercises from three 'Well-being' units (Table 3.6).

From the 45 participants that choose unit exercises within the QoL Factor 'Social Participation', 42 of them did exercises within one of the four 'social participation' units, 2 participants choose exercises from two units and 1 participant did exercises from three units (Table 3.7.).

Table 3.7. % selected exercises within country*QoL Factor Social Participation

			Number of units within Social participation				Total
			,00	1,00	2,00	3,00	
country	Spain	Count	13	1	0	0	14
		% within country	92,9%	7,1%	0,0%	0,0%	100,0%
	Bulgaria	Count	12	8	0	1	21
		% within country	57,1%	38,1%	0,0%	4,8%	100,0%
	Belgium	Count	13	26	2	0	41
		% within country	31,7%	63,4%	4,9%	0,0%	100,0%
	Slovenia	Count	8	7	0	0	15
		% within country	53,3%	46,7%	0,0%	0,0%	100,0%
Total	Count	46	42	2	1	91	
	% within country	50,5%	46,2%	2,2%	1,1%	100,0%	

Finally, the participants that selected exercises within the QoL Factor 'Independence' (n = 35), all of them did exercises within one of the four Factor units (Table 3.8).

Table 3.8. % selected exercises within country*QoL Factor Independence

			QoL factor	Independence	
			,00	1,00	Total
country	Spain	Count	3	11	14
		% within country	21,4%	78,6%	100,0%
	Bulgaria	Count	12	9	21
		% within country	57,1%	42,9%	100,0%
	Belgium	Count	29	12	41
		% within country	70,7%	29,3%	100,0%
	Slovenia	Count	12	3	15
		% within country	80,0%	20,0%	100,0%
Total	Count	56	35	91	
	% within countrv	61.5%	38,5%	100.0%	

Crosstab calculations indicate a relationship between country of the participant and the unit exercises they selected. As shown in table 3.8., most of the Spanish and Bulgarian participants selected unit exercises that were mainly linked to the QoL factor Well-being and Independence, whilst the Belgian and Slovenian participants preferred unit exercises within the QoL factor Social Participation.

MNAM units.

Table 3.9. shows the number of unit exercises that have been selected by the participants (i.e. AAWID and/or their trainer) 'per country'.

Table 3.9. Number of selected exercises per unit and country

	Spain	Bulgaria	Belgium	Slovenia	TOTAL
Unit 1	0	4	6	0	10
Unit 2	1	3	3	0	7
Unit 3	0	4	6	2	12
Unit 4	10	7	7	3	27
Unit 5	4	2	5	0	11
Unit 6	0	3	2	0	5
Unit 7	1	3	8	7	19
Unit 8	0	2	5	0	7
Unit 9	0	2	16	0	18
Unit 10	0	3	2	0	5
Unit 11	10	1	5	0	16
Unit 12	0	3	4	3	10
Unit 13	1	3	1	0	5
Unit 14	0	2	2	0	4
TOTAL	27	42	72	15	156

The most implemented units were 4, 7 and 9. Twenty-seven participants selected exercises and activities from unit 4. These exercises and activities focus on 'optimizing health', e.g. physical activities and a healthy lifestyle. Unit 7 incorporates exercises and activities related to social connectedness and was chosen by 19 participants. Unit 9, that had been selected by 18 participants, address exercises that focus on 'social engagement'.

The unit exercises that appeared to be the least popular were those from units 6, 10, 13 and 14. Except for unit 14, which was chosen by only 4 participants, all unit exercises were selected by 5 participants. Unit 6 incorporates exercises on safety and prevention of abuse. Unit 10 is about (safety) using social media and the internet. Unit 13 addresses exercises that help AAWID in choosing appropriate life goals and activities that are important to them, whilst unit 14 incorporates exercises and activities on end-of-life-care and palliative care.

The selection of the unit exercises did not appear to be associated with demographic characteristics of the trainer, such as their age, gender, professional background or years of experience. However, we did find a significant association of AAWID gender with unit 7 and unit 9. Apparently men were more likely than women to select exercises from unit 7 ($X^2(1, N = 91) = 6.2, p < .05$), whilst women were more likely than men to choose exercises from unit 9 ($X^2(1, N = 91) = 9.1, p < .01$).

Quality of the exercises

➤ ***Customizing the exercises to the support needs of the client (n = 156)***

For most of the participants, the exercises needed small to no adaptations to match with their cognitive and/or communicative competences. About 36% (n= 55) of the exercises were used exactly as they were presented on the MNAM platform whilst 42% (n =64) needed only small adaptation (e.g.: change of a photo or the name of a person; minor changes in the stories, changes in the order of activities, braking-down some of the exercise/activities into knowledge chunks, changing names of organization such as the national employment office, etc.). Medium adaptations (e.g.: change of materials supports which are not accessible or meaningful in a country; breaking down most of the materials into smaller units, etc.) were necessary for about 17% of the exercises (n= 25). For some participants (4%, n = 6), the exercises needed more extensive adaptations, e.g. some parts of the exercise had to be eliminated and for one exercise (unit 2), the entire exercise needed to be changed. Cross-tables analysis revealed that medium and extensive adaptations are related to exercises from units 4, 7 and 9, i.e. the exercises that were selected the most by the participants. Qualitative information given by the trainers revealed that the need for medium to more extensive adaptations depended on the support needs of the participant and were not necessarily related to a particular unit exercise.

➤ ***Time needed to complete the exercises (n = 152)***

The mean time for AAWID to complete the unit exercises was 66 minutes ($SD = 39,73$) with a minimum time of 10 minutes per unit and a maximum time of 185 minutes per unit. The large differences in time needed to fulfil the exercises depended on the following three issues:

1. The nature of the exercises or activities (e.g. introducing new concepts such as retirement, voluntary work, end-of-life care, etc.).
2. Whether the participant needed more time to understand and/or perform the exercise/activity.
3. The amount of exercises and/or activities selected within a unit.

➤ **Enjoying the exercises (n = 151)**

As shown in Figure 3.3., AAWID enjoyed doing most of the exercises they and/or their trainer had selected for training (70%). Yet, this also means that 30% of the exercises were a little to not at all enjoyable for AAWID. Despite customization of the exercises, only 50% of them was rated 'not too difficult' to complete (Figure 3.4.). Cross-tabulations gave no indication to suggest that a negative score might be related to one or more specific unit exercises.

Figure 3.3. Number of exercises enjoyed by AAWID.

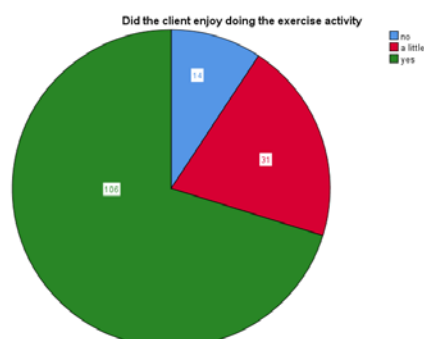
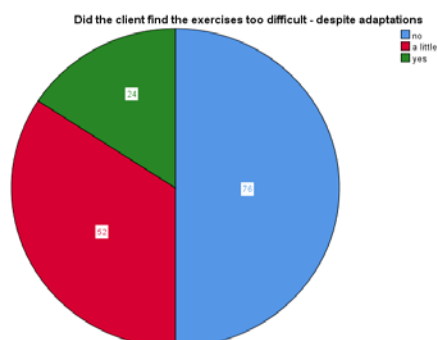


Figure 3.4. Number of exercises perceived as difficult.





When questioning the participants about what makes an exercise too difficult, we found out that AAWID sometimes had difficulties with particular aspects of an exercise/activity. Also AAWID's trouble to understand new concepts was a reason for a lower score, as shown in the following citations:

- *"He does not understand the point of preparing a menu, but he knows what have to be eaten in more or less quantity".*
- *"The person does not understand the concept "true/false". We changed into if it is good or not.*
- *"It was not possible to have a discussion on how age has an impact on his health."*
- *"It was hard for him to understand the food pyramid, where to place all the food. But when you speak to him about general features, it is better understood."*
- *"It is hard for him to understand the concept of healthy ageing (True/false)"*
- *"He does not understand the proportion related of which food must be eaten more or less."*
- *"We believed it would be important to work the self-determination and social inclusion, so we decided to have a look at the unit 13: choosing appropriate life goals and activities important to me", but we realized the person would not understand any of the exercises. For this person, we selected the activities that could be appropriate for the objectives we*



wanted to work; not always chose the objective and the activities are appropriate. It depends on the person and their limitation”

Chi Square test suggests that there is enough evidence to suggest an association between age of AAWID and the degree to which they find the exercises too difficult to perform ($\chi^2(2)=7,79$; $p < .05$). AAWID that are younger than 60 years old are more likely to find the exercises too difficult to complete compared to AAWID who are 60 or older (42% versus 20%).

Outcome of the exercises for AAWID.

To further validate the MNAM unit exercises, it was formulated six statements that could be rated on a 5 point Likert scale (see Figure 3.5).

The first two statements (shown in the Figure below) intended to assess the value of using real life stories to either introduce a new difficult concept or to help AAWID understand the content of the exercises. 53% of the trainers reported that for the exercises they selected, the client was able to identify him-/herself with the stories. In 67% of the cases, the stories stimulated their clients to reflect on their own situation. Nevertheless, some trainers were less optimistic. Concerning the statement that the stories are recognisable for AAWID, 32% of the trainers rated the exercises they did with their client as neutral and 15% rated them negatively (disagree to completely disagree). Contrarily, only 9% of the trainers disagreed to completely disagreed with the notion that the stories elicited self-reflection by AAWID. This also suggests that a large group of participants (26%) rated the exercises they selected (for or with their clients) as neutral.

The third statement examines the appeal of the exercises for AAWID. Approximately 72% of the trainers agreed to completely agreed that the exercises they did with their clients were appealing, while only 4% did not agree. Again, 24% of trainers was more ambivalent about the appeal of the exercises they selected for training their client.

The fourth statement investigated the extent to which the trainer agreed that the exercises might lead to more social inclusion of their client. About 13% of the trainers disagreed to completely disagreed with this statement, 26% remained neutral and 62% agreed to completely agreed.

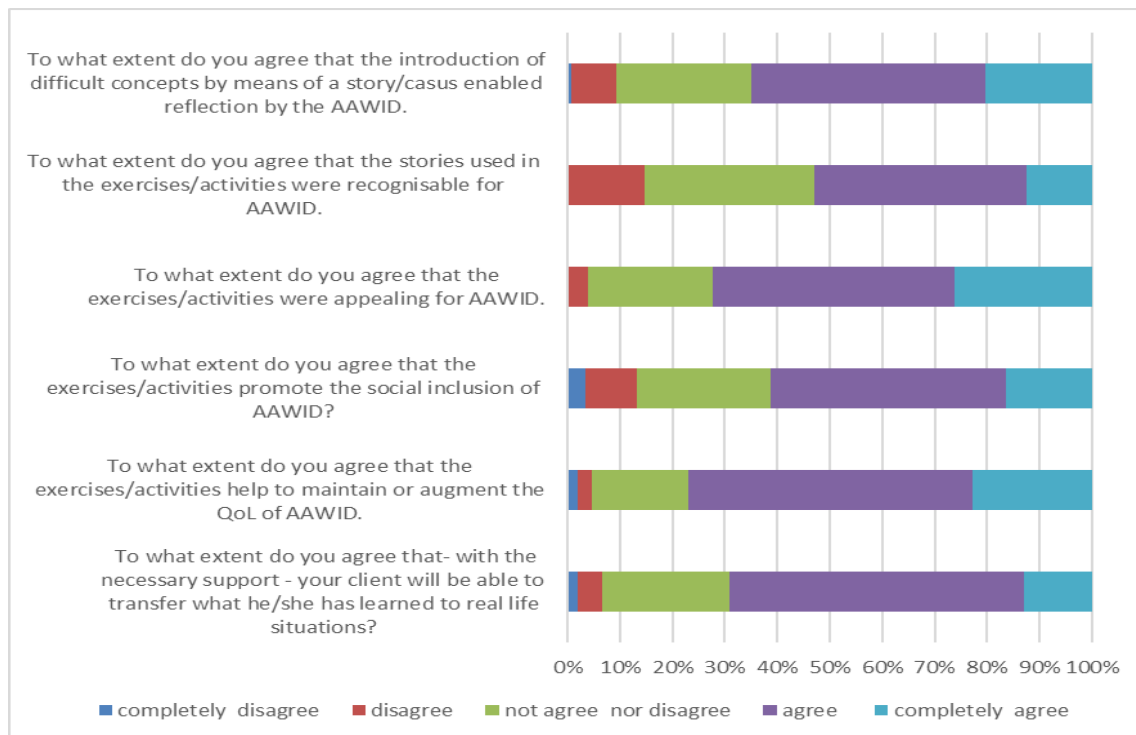
The fifth statement examines if the exercises have an impact on the QoL of AAWID. This statement elicited quite positive responses. About 77% of the trainers agreed to completely agreed that the exercises they used during the

training helped to maintain or even augment the QoL of their clients. For only 5% trainers, the exercises did not reach this goal and 18% had a neutral opinion about it.

The sixth and final statement asks if, with the necessary support, AAWID would be able to transfer the knowledge to in-vivo situations. Most the trainers (68%) agreed to completely agreed with the statement. For 7% of the trainers, the client would not be able to transfer what was learned whilst for 24% the answer was neutral.

Kruskal-Wallis test showed that the number of years trainers are working with people with ID might be related to their opinion about 'transferability' ($H(3)=16,5$; $p < .001$) and 'social inclusion' ($H(3)=13,5$; $p < .01$). Mann-Whitney U test reveal that trainers with 1 year of experience disagreed significantly more than trainers with 2 to 5 years of experience, that the exercises promoted social inclusion ($Z=-2,69$; $p < .01$) and that AAWID would be able to transfer the knowledge learned to in-vivo situations ($z = -3,22$; $p < .001$).

Figure 3.5. Statements about potential outcomes of the exercises for AAWID.



Did AAWID learn new knowledge and skills?

In this section we will present the results from the pre- & post assessment of the learning outcomes for AAWID. We answer the question as to what extent the AAWID has gained new knowledge and skills by doing the MNAM exercises. The descriptive statistics from paired samples analyses will be showed per QoL factor. The Wilcoxon signed-rank test is used as well, only for those units with sample size > 5 . The Wilcoxon signed-rank test is a non-parametric statistical hypothesis test used to compare two related samples, matched samples, or repeated measurements on a single sample to assess whether their population mean ranks differ (i.e., it is a paired difference test).

QoL Factor well-being: AAWID Pre- & post-test knowledge and skills

Table 3.10. shows the descriptive statistics of pre- & post-tests of AAWID's knowledge and skills for the six units related to the QoL Factor Well-being. The mean scores indicate that after the training the participants reported on average an increase in the knowledge and skills for AAWID.

For example, when looking at the mean scores of unit 4, we notice an increase of 1.2448 from pre-test to post-test. However, a standard deviation of 1,10 also indicates that there are some outliers, indicating extremely low or high scores.

Table 3.10. Factor Well-being - Descriptive statistics, unit 1 – 6 pre- & post-test.

	Mean	N	Std. Deviation
Unit 1_pre-test	1,5714	10	,59476
Unit 1_post-test	2,3571	10	,39983
Unit 2_pre-test	1,0625	6	,54629
Unit 2_post-test	1,7292	6	,80007
Unit 3_pre-test	1,6267	10	,39151
Unit 3_post-test	2,2733	10	,62574
Unit 4_pre-test	1,2656	24	,59927
Unit 4_post-test	2,5104	24	1,10392
Unit 5_pre-test	1,6190	9	,53927
Unit 5_post-test	2,2698	9	,54606
Unit 6_pre-test	1,3125	4	1,14337
Unit 6_post-test	2,3750	4	,47871

Wilcoxon signed-rank tests (see table 3.11.) showed that, all other units exercises/activities elicited a statistically significant change ($p < .05$) in AAWID's knowledge and skills after training.

Table 3.11. Test Statistics Wilcoxon Signed Ranks Test.

	Z	Asymp. Sig. (2-tailed)
Unit 1 pre-test – Unit 1 post-test	-2,807	.005*
Unit 2 pre-test – Unit 2 post-test	-2,060	.039*
Unit 3 pre-test – Unit 3 post-test	-2,805	.005*
Unit 4 pre-test – Unit 4 post-test	-4,296	.000*
Unit 5 pre-test – Unit 5 post-test	-2,530	.011*

* $p > .05$ - ** $p < 0.001$

QoL Factor Social Participation: AAWID Pre- & post-training knowledge and skills.

Table 3.12. shows the descriptive statistics of pre- & post-test of AAWIDs knowledge and skills for the four units related to the QoL Factor Social Participation. The mean scores indicate that after training the participants reported on average an increase in the knowledge and skills for all units.

Table 3.12. Social Participation - Descriptive statistics, unit 7 – 10 pre- & post-test.

	Mean	N	Std. Deviation
Unit 7_pre-test	1,8730	18	,55844
Unit 7_post-test	3,0556	18	1,17511
Unit 8_pre-test	1,1222	6	,70480
Unit 8_post-test	1,9667	6	,98680
Unit 9_pre-test	2,2833	15	,89825
Unit 9_post-test	2,8000	15	,70204
Unit 10_pre-test	1,1389	4	,61111
Unit 10_post-test	1,9167	4	,38889

Wilcoxon signed-rank tests showed that for units 7, 8 and 9 the changes in knowledge and skills were significant (see Table 3.13.).

Table 3.13. Test Statistics Wilcoxon Signed Ranks Test.

	Z	Asymp. Sig. (2-tailed)
Unit 7 pre-test – Unit 7 post-test	-3,731	.000***
Unit 8 pre-test – Unit 8 post-test	-2,023	.043*
Unit 9 pre-test – Unit 9 post-test	-3,349	.001**

*p>.05 - **p< .01, ***p<0.001

QoL Factor Independence: AAWID Pre- & post-training knowledge and skills.

Table 3.14. shows the descriptive statistics of pre- & post-test of AAWIDs knowledge and skills for the four units related to the QoL Factor Independence. The mean scores indicate that after training the participants reported on average an increase in the knowledge and skills for all units.

Table 3.14. Independence - Descriptive statistics, unit 7 – 10 pre- & post-test.

	Mean	N	Std. Deviation
Unit 11_pre-test	,7500	2	,35355
Unit 11_post-test	1,5000	2	,70711
Unit 12_pre-test	1,9375	8	,51128
Unit 12_post-test	2,4375	8	,66031
Unit 13_pre-test	1,1333	5	,50553
Unit 13_post-test	1,9000	5	,43461
Unit 14_pre-test	,7143	3	,62270
Unit 14_post-test	2,0476	3	,50170

Wilcoxon signed-rank tests showed that the training of exercises within units 12 elicited a slight significant change in the knowledge and skills of the participants (unit 12: $Z = -2,207$, $p = .027$).

Trainer User satisfaction of the MNAM exercises and activities.

The next few paragraphs focus on the trainers' overall satisfaction about the usability of the MNAM exercises and activities. Based on the activities they did with their client, the participants were asked to rate 10 statements on a 5 point Likert Scale (0 = strongly disagree – 4 =strongly agree). As their response might differ depending on the exercises they did during the pilot-study, we gave an indication as to how to interpret the 5 response categories:

1. Select *strongly agree* when you feel the statement is correct for about 80% to 100% of the exercises.
2. Select *agree* when you think that the statement is correct for about 60% to 80% of the exercises.
3. Select '*don't agree nor disagree*' when you think that the statement is correct for about 40% to 60% of the exercises.
4. Select *disagree* when you think that the statement is correct for about 20% to 40% of the exercises.
5. Select *strongly disagree* when you feel the statement is correct for about 0% to 20% of the exercises.

Note that the statements 2,4, 5, 8 and 9 were formulated negatively (see figure 3.6.).

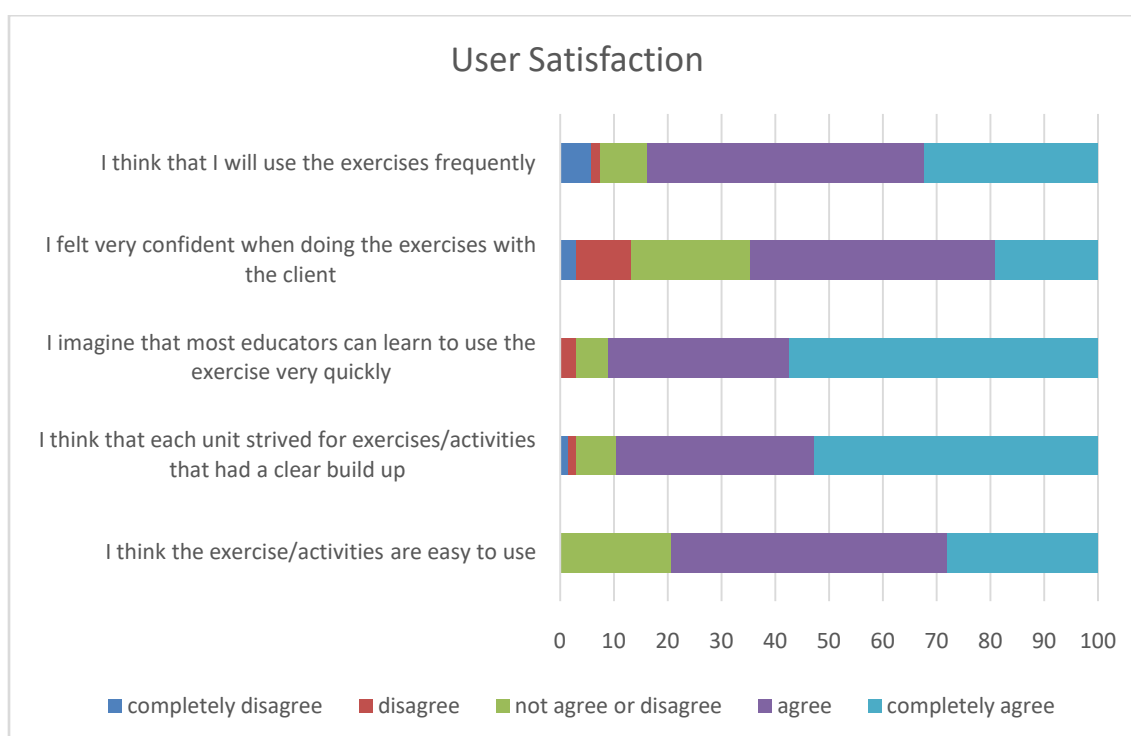
The overall mean score (i.e. summary score of the user satisfaction scale) is 3,15 (sd = 0.49) shows that on average, the participants had a fairly positive opinion about the usability of the MNAM exercises for at least 60% of all exercises they had used during the pilot-study.

From the total group of participants (n =64) most of the participants agreed to completely agreed that 60 to 100% of the exercises *were easy to use* (n = 54) and that *other professionals could easily learn to use them* (n = 62). Some participants didn't really agree nor disagree with these statements (n = 14 and

n = 4 respectively) but felt that this was only valid for about 40 to 60 percent of the exercises. Two participants reported that only 20 to 40 percent of the exercises will be easy to learn by other professionals.

About whether or not they would *frequently use the exercises in the future*, 57 participants agreed to completely agreed that they would do this for 60 to 100 percent of the exercises. Six participants would use about 40 to 60 percent of the exercises, one person is thinking about 20 to 40 percent and 4 other participants reported less than 20 percent.

Figure 3.6. Statements user satisfaction of MNAM exercises.

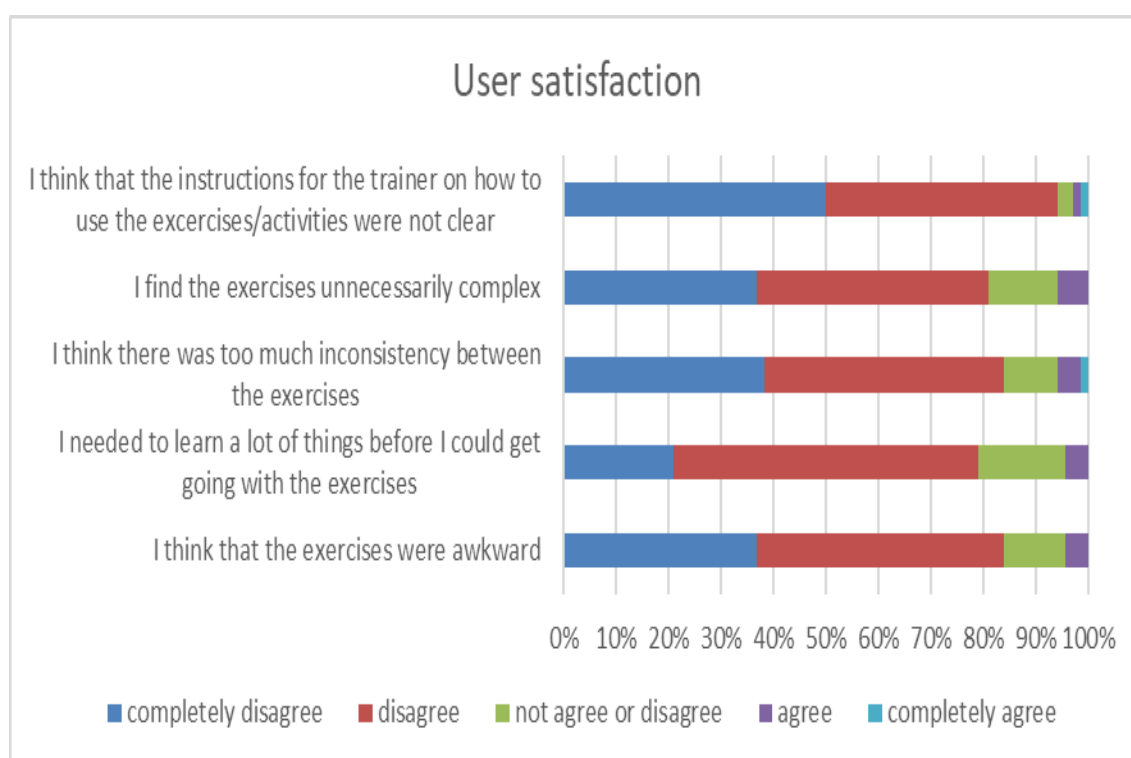


The results show that 50% of the total group of participants (n = 34) completely disagreed with the negatively worded statement '*I think that the instructions for the trainers on how to use the exercises/activities were not clear*' for 80 to 100 percent of the exercises. A large number of participants (n = 30) felt that this statement was wrong for about 60 to 80 percent of the exercises. Two participants selected the option 'not agree or disagree' indicating that for them the instructions were clear for 40 to 60 percent of the

exercises. The two remaining participants reported that for them, most of the exercises were unclear.

Similar results were observed for the statement 'I think that each unit strived for exercises/activities that had a clear build up. Two participants disagreed to completely disagreed with this statement indicating that for them this was not true for 60 to 100 percent of all exercises. On the other hand, respectively 36 and 25 participants agreed to completely agreed with the statement, and this for respectively more than 80 and 60 percent of the exercises. Five respondents reported that the build up was clear for about 40 to 60 percent of the exercises.

Figure 3.7. Statements user satisfaction of MNAM exercises (negatively worded).



A large number of participants (n = 57) disagreed to completely disagreed with the two statements '*I think that the exercises were awkward*' and '*I think there was too much inconsistency between the exercises*' for about 60 to 100

percent of the exercises. Respectively 8 and 7 participants felt this way about 40 to 60 percent of the exercises. Only a few participants ($n = 3$) reported that for them most of the exercises (more than 60 percent) were 'awkward' or 'inconsistent'. For 1 of the participants, 80 to 100 percent of the exercises showed inconsistencies.

Comparable responses can be observed for the statement '*I find the exercises unnecessarily complex*'. Only 4 participants agreed that this was the case for more than 60% of the exercises. Most of them ($n = 55$) however, felt the other way around and (completely) disagreed with the statement for about 60 to 100 percent of the exercises. Nine participants selected the option 'not agree nor disagree', indicating that for them 40 to 60 percent of the exercises were complex.

Larger variations in opinions of the participants are found for the statement '*I felt very confident doing the exercises with my client*'. Only 13 participants completely agreed and felt confident with 80 to 100 percent of the exercises. In total 31 participants felt confident doing 60 to 80 percent of the exercises and for 15 participants, this was the case for 40 to 60 percent of the exercises. Seven participants felt confident about 20 to 40 percent of the exercises while two participants felt uncomfortable for all exercises.

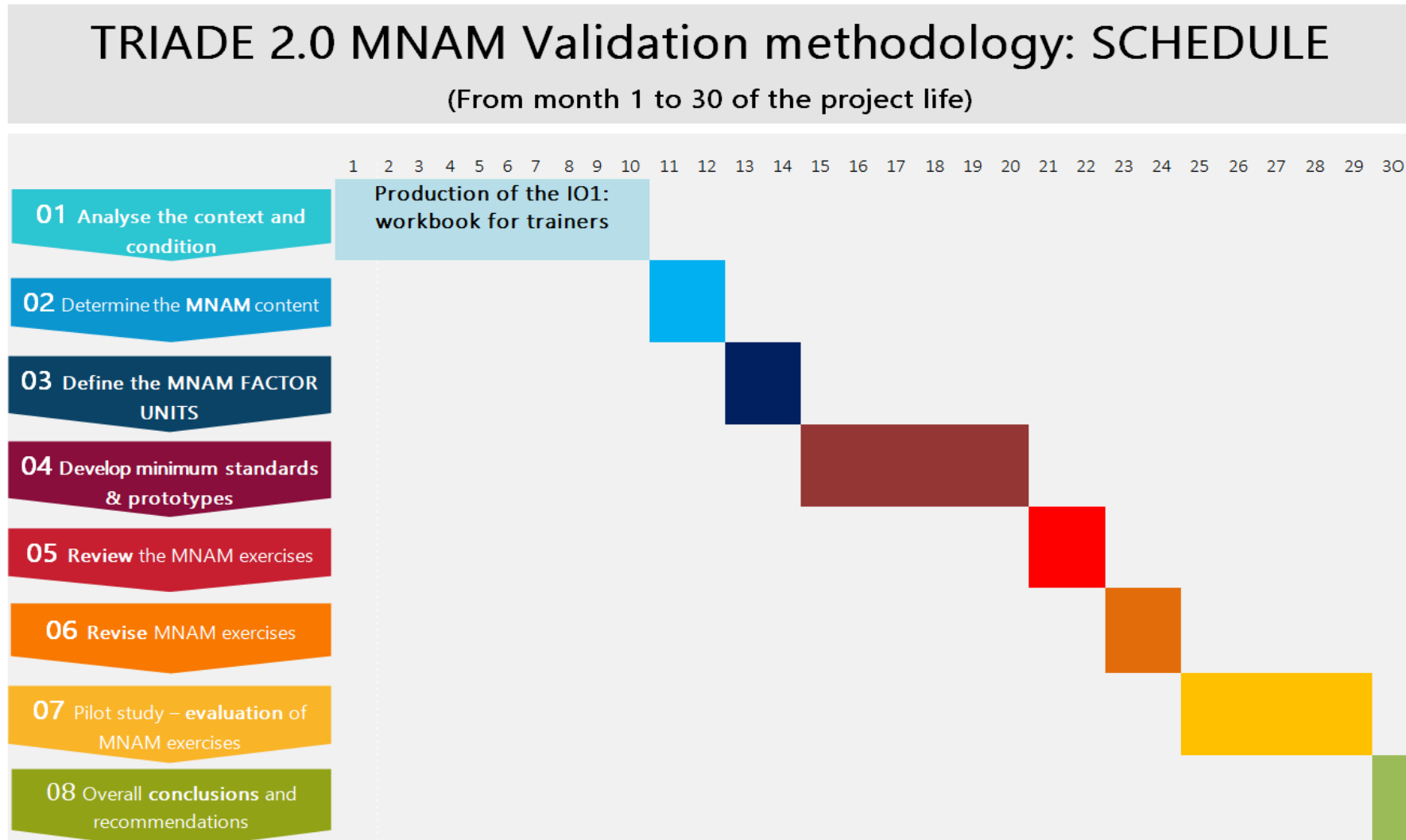
Yet, this finding doesn't necessarily indicate that the participants felt unprepared to do the exercises as only 3 participants reported that for more than 60% of the exercises they '*needed to learn a lot of things before they could get going with the exercises*'. Eleven participants felt that for 40 to 60 percent of the exercises they needed to learn more things. The remaining participants felt this was needed for less than 40% of the exercises.

Only significant differences were found for the grouping variable 'country of the participant'. Kruskal-Wallis H Test showed significant differences ($H(3) = 30,9$; $p < .000$) among the four categories of participants (Spain, Bulgaria, Belgium

and Slovenia). Mann-Whitney U test further indicated that particularly the Bulgarian participants were significantly more satisfied with the usability of the MNAM exercises compared to the Spanish ($z = -3,81$; $p < .000$), Belgian ($z = -5,92$; $p < .000$) and Slovenian ($z = -3,17$; $p = .002$) participants.



Figure 3.8. TRIADE 2.0 MNAM VALIDATION METHODOLOGY: SCHEDULE.



08 – Conclusions and recommendations

In this section, the most remarkable conclusions of the validation methodology and pilot study are presented. In doing so, we try to answer the research question “what is the impact of the MNAM exercises on the learning process and in the overall QoL of AAWID”.

We pursued three aims. The first aim was to identify which MNAM exercises would be selected by the participants (i.e. AAWID and/or together with trainer) for training. The second aim was to identify the experience of the participants (AAWID and/or their trainers) about the use of the MNAM exercises. The third aim was to identify whether the exercises stimulated a learning process and led to an improvement in knowledge and skills of the participants. In the following, we will highlight the main results, draw some conclusions and formulate recommendations for future endeavours.

Note that the conclusions from this pilot-study cannot be generalized. Here are some limitations of the study. First, we controlled for particular demographic characteristics of the participants (e.g. age and gender of AAWID, gender and years of expertise of the trainer, his/her profession), but we didn't register AAWID's level of communication, nor could we subtract who completed the four questionnaires (AAWID with or without his trainer). Although we gave clear instructions to the trainers to involve AAWID in completion of the questionnaires, we cannot consolidate this request. Second, analyses of the raw data also show that not all participants were able to complete 3 exercises, as requested. Whilst some participants did a training with exercises and activities from 3 different units, others could for example only do 2 unit exercises or even less, just 2 to 3 activities within 1 unit exercise. This is also reflected in the time needed to complete the exercises (e.g. minimum 10 minutes and maximum 180 minutes).

Third, we noticed large variations in the way the participants registered the information. Fourth, although our aim was to look for possible associations, the small sample size and limited number of exercises, made it particularly difficult to draw reliable conclusions. The results should hence be interpreted with caution.

But despite of this, we feel we have learned interesting things that may help educators to use the platform and improve the MNAM digital platform exercises in the future.

Selection of MNAM exercises.

The results show that participants completed exercises that mainly promoted a healthy lifestyle (i.e. physical health, healthy foods, etc.) (unit 4), social connectedness (unit 7 and 12) and social engagement (unit 9). This suggests that the professionals of the TRIADE 2.0 pilot study kept active ageing in mind and invested particularly in the physical well-being of their clients while recognizing the need of AAWID to connect with others in society. According to the World Health Organization (WHO) (2007), active ageing is the ‘process of optimising opportunities for health, participation and security in order to enhance quality of life as people age’ (p. 12). Healthy diet and exercise can help AAWID avoid more health problems, which opens up opportunities for social activities and eventually leads to a higher emotional wellbeing and QoL (World Health Organisation, 2002).

For AAWID, active ageing goes beyond physical activity and social participation. It also implies being empowered, learning new skills, having a sense of security and feeling of safety (Buys et al., 2008). However, these exercises have been chosen less by the participants in our pilot study, i.e. only a few participants selected exercises that focus on self-determination, such as choosing his/her own life goals and activities (unit 12), or what appears to be more delicate themes such as prevention of abuse (unit 6), safe use of the internet or social media, and choosing end-of-life care and palliative care (unit 14). This finding suggests that the

participants in our pilot study might have had a certain restrain to engage in topics that are still a taboo or less easy to broach.

We further found that the Spanish and Bulgarian participants more often selected exercises related to the QoL factor well-being while the Belgian and Slovenian participants favoured exercises related to the QoL factor Social Participation. This result could indicate that in Spain and Bulgaria, the support needs or knowledge gaps of AAWID are mainly within the area of well-being while in Belgium and Slovenia most of the AAWID lack knowledge on how to engage socially. However, according to the trainers, the results should be interpreted the other way around, i.e. the participants (trainer and/or the client) selected exercises that match AAWID's current knowledge and skills either to avoid unnecessary frustration or to motivate AAWID in doing the exercises. This way, AAWID could experience success rather than failure. Higher numbers are also related to whether or not the exercises were done in group or individually. Still, another reason for selecting particular exercises is linked to whether or not the exercises were created by the partners themselves. For example, the Belgian partners were responsible for the development of the exercises for the QoL Factor 'Social Participation' and thus might have chosen these exercises over the other exercises.

Notwithstanding previous motives for (not) selecting particular exercises, we feel that it is essential for trainers to be aware of these motives all the time. Especially, when it involves topics that are more difficult to tackle, such as choosing things to do after retirement, what happens when a close family members dies, how to handle existential questions and end-of-life care.... Do we avoid these topics to protect AAWID? Do we feel that he/she will not understand or be up for it? Or do we think that AAWID will not be motivated to do these exercises, which might take too much time? Nobody likes talking about issues that are difficult. We worry about how we will introduce these topics, how clients might react, and how we will deal with these reactions. People with ID already have a lot of experience in dealing with changes and losses, and some of them are very resilient. But there are also a lot of people with

ID who will need a considerable amount of support to handle these more difficult topics.

So how do we handle this? First, we need to listen to the voice of the client. What is his/her desire for learning? How much support will be needed? Do we involve more people (e.g. a family member, a friend...), how much time do we need (one day, a week, a month, a year or a few years)? How do we discover their voice about this particular topic?

Second, AAWID have the right to information. This is a fundamental human right. But does this mean that we always have to tell everything, even if a person is unable to understand the information or not ready to receive the information? We feel that everyone has the right to information that might have an impact on his/her future. However, people also have the right to denial. Not talking or thinking about sensitive topics might be an important coping mechanism. Never force information onto someone if he/she is not (yet) ready for it.

Thirdly, if we feel AAWID is up for it, we consider the 3 principles of the Universal Design for Learning model (UDL) when doing the exercises:

1. We look for exercises that stimulate motivation and sustained enthusiasm for learning;
2. We present the information in smaller knowledge chunks to support access and understanding;
3. We look for opportunities that AAWID can learn and share what has been learned with others.

How did the participants experience the use of the MNAM exercises?

Notwithstanding the initial concerns by TRIADE 2.0 partners about the level of difficulty, most of the exercises (78%) needed little or no adaptations, and were found not too difficult to complete by AAWID (50%). About 70% of the AAWID enjoyed doing the exercises. For those exercises that needed more extensive customization or that were rated as too difficult to complete, the qualitative and quantitative information given by the participants revealed that it might mainly be related to AAWID's level of supports needed.

The findings further suggest that most of the trainers were satisfied about the usability of the MNAM exercises; i.e. most of the exercises (60 to 100%) were found not to be unnecessarily complex (81%), nor awkward (74%) or inconsistent (84%). As a matter of fact, about 79% found these exercises easy to use, and agreed that other professionals could quickly learn to use them (91%). Furthermore, about 84% of the trainers reported that they would use 60 to 100% of the exercises frequently in the future.

In addition to the positive findings mentioned above, some other issues raised that might need specific attention in the future. First, about 35% of the trainers didn't feel very comfortable doing the exercises with their clients, although only 5% of the trainers reported that they needed to learn more things to get going with the exercises they selected. Second, about 47% of the trainers were little or not at all convinced, that the real life stories were recognizable for AAWID. Contrarily, most of the participants (73%) reported that the exercises were appealing for AAWID and for 67% of educators, exercises triggered self-reflection in AAWID.

Although we notice discrepancies in all findings, the latter issues provoked more contradictions in trainers responses. More in-depth qualitative research is needed to find out which aspects of the exercises feel uncomfortable and what is needed to help trainers overcome this uncomfortable feeling. Also, it would help us unravel why

particular stories didn't trigger identification by the AAWID. Was the story unrecognizable due to a different cultural background? Could the story not be adapted to match with the communicative/cognitive competences of AAWID? Was given to AAWID enough time to understand the story?

Does the training of MNAM exercises affect the learning process of AAWID?

Based on the changes in mean scores from pre- to post-test, we might carefully conclude that according to the participants (trainer and/or AAWID) the MNAM exercises stimulated the learning process in AAWID. For each MNAM unit, we found an increase in participants' knowledge and skills. For the units that were selected by more than five participants, the increases were found to be significant. Furthermore, most of the trainers agreed that the exercises supported or improved the QoL (77%) and promoted social inclusion (65%) of AAWID. The trainers (68%) also agreed that, with the necessary support, AAWID would be able to transfer the knowledge to their daily life situation.

But despite these positive outcomes, it must also be acknowledged that a large group of participants (18% to 26%) remained neutral about previously mentioned outcomes and some participants (4 to 15%) felt that even a smaller number of exercises endorsed their clients' learning process. We found some evidence to suggest that trainers with less than 1 year of experience were less optimistic than trainers with 2 to 5 years of experience about the potential of the exercises to promote social inclusion or stimulate transfer of knowledge. Younger employees might be more critical and consider that more will be needed to install a learning process in AAWID. Or they might have insufficient knowledge about their clients' competences and skills. Another plausible reason why some participants felt that the exercises did not stimulate the learning process of AAWID might be related to the type of exercises or activities they selected. Most of the unit exercises have been developed in accordance to a set of minimum standards, for example, two of the minimum standards were:

- All exercises should be linked to an overarching objective derived from the TRIADE 2.0 workbook. TRIADE 2.0 objectives focus on augmenting or maintaining the QoL of ageing adults with ID.
- Each unit should strive for exercises that lead to behavioural change. This means that some exercises may be on the level of knowledge 'knows', while other exercises request insight or reflection by the participants. Finally, at least one exercise should help AAWID make the transfer from what he/she has learned to real life situations (doing and/or integrating in daily life situations).

The participants might have selected exercises or activities that do not address issues such as 'social inclusion', 'QoL' or 'transfer of knowledge'.

On the other hand, we cannot rule out that some of the exercises that have been created for this TRIADE 2.0 project will need to be revised to achieve the objectives that have been set forward by the partners. Therefore we recommend that the MNAM digital platform is created as an open access platform, allowing for continuous updates of revised materials, new ideas and other enriching tools.

Overall, we might still conclude that:


TRIADE 2.0 developed and implemented a MNAM digital platform that was **successful**. The platform proved to be an efficient method for trainers to teach AAWID knowledge and skills that are **beneficial for a good quality of life**. The platform exercises also proofed to be **accessible and usable** for trainers of all ages and professional affiliations. It also shows that it is definitely **worthwhile to teach ageing adults with ID** new knowledge and skills and that they have the potential to learn to use those new skills functionally.



SUMMARY OF CONCLUSIONS AND/OR RECOMMENDATIONS

1. Creating the conditions, content and concept of the MNAM digital training platform.

Analyse the context and conditions




Prior to the development of a digital learning platform, define achievable goals and dare to rethink them if the context demands it.


Determine who are the main users of the platform.



Ask the question if a digital learning platform will help reach the goals.



E.g. during the course of the Triade 2.0 project, it was decided that not AAWID but their trainers would be the main users of the platform.



The focus also shifted from training digital competences to improving the overall QoL by targeting those learning outcomes that best suit AAWID current support needs.

Make sure all goals are shared by all the members.
Cooperation and critical attitude of the members is key to success.



Determine the MNAM content



Define the content and main learning outcomes of the platform based on existing scientific literature and/or theoretical framework(s)

E.g. The content of MNAM platform was derived from the scientific literature on AAWID and theoretical framework on QoL

Involve all necessary stakeholders to determine the MNAM content.

E.g. interviews or focus groups with AAWID and their formal and informal network could reveal new contents.

2. Creating the MNAM content while keeping the learning outcomes in mind.

Defining the MNAM FACTOR UNITS

An important step is to further concretize the MNAM content and work towards a shared understanding of the UNITS and subsequent learning outcomes (knowledge and skills).

Ensure that all members are involved in this debate.

E.g. In Triade 2.0 time the partners developed the units separately. As members sometimes had different interpretations, it created an overlap within the learning outcomes and MNAM exercises.

Develop minimum standards & prototypes

Create exercises that are accessible for the clients or that can be customized to fit the learning needs of the clients.


Reach for quality exercises by developing minimum standards.

Develop exercise prototypes by using Design Iterations, i.e. successive small-scale tests of a prototype with a group of clients in order to permit continual design refinements.

E.g. In the Triade 2.0 project, time was limited. Prototypes were created based on literature and clinical practices. An iterative design process would have enabled the construction of prototypes that meet not only the clients' but also the platform users' needs in the best possible way. However, as the MNAM platform is an open accessible platform, such iterative design process is still possible in order to improve them.

3. Quality development: review and revise MNAM content.

Review of MNAM exercises



To further optimize the exercises, ask stakeholders (internal as well as external to the project) to review the exercises using the 29 item MNAM Exercise Rating Scale (MERS). This instrument contains 29 Likert-scale items and assesses the quality of the exercises (i.e. engagement, functionality, aesthetics, information, ...)

The ratings give an indication of the quality of the exercises.

E.g. in the course of the TRIADE 2.0 project the partners evaluated the exercises. For a more objective review, it is suggested to engage stakeholders and organisations who are not involved in the development of the exercises.

Revise the MNAM exercises



Use the comments and suggestions collected in step 5 to improve the exercises.

E.g. In the Triade 2.0 project a summary of the results from the MERS indicated only small adjustments were needed. The partners indicated that some unit descriptions or instructions for trainers needed to be refined. Some exercises needed to be adapted to the local situation (pictos, pictures, technologies, specific services, ...), while some needed extra questions that elicit reflection by clients. Others had to focus more on the positive aspects of ageing or needed extra clarification about the level of difficulty of the activities.


4. Pilot study: Evaluation, conclusions and recommendations.

Pilot-study - evaluating the MNAM exercises

Organise a pilot study and evaluate if the digital learning platform has achieved its objective.

Use research methodologies that allow for qualitative as well as quantitative data gathering.

E.g. For the Triade 2.0 project we developed 4 tools:


- 
- 1. QOL-AAWID – interview with AAWID about QOL (not mandatory);***
 - 2. Pre- and post-assessment of the knowledge and skills of AAWID;***
 - 3. Implementation process of the MNAM exercises/activities for AAWID;***
 - 4. Trainers user satisfaction of the MNAM exercises/activities in general.***

QOL-AAWID gathered qualitative and quantitative information but was not mandatory because all instruments needed to be translated for analyses.

However, it could give more in-depth information on the clients support needs and help with the selection of MNAM exercises.

In order to assess transfer of knowledge, we suggest a longitudinal research design (trajectory of clients)

Conclusions and recommendations



Be aware of the motives for (not) selecting particular MNAM exercises. *E.g. The results from the Triade pilot-study indicate that people select exercises that are more common to them and avoid those that might be more difficult or too sensitive to tackle.* Overcome this barrier by listening to the client's motivation and desires for learning. Start from the assumption that clients have the right to information.

Pay attention and assess the motives of participants that rate their experience of the exercises as neutral or negative. *E.g. Most of the participants in the pilot study were positive about most of their experience with the MNAM exercises but for those that had an other opinion we couldn't find out why. Qualitative data is needed to subtract such information.*

The ratings also suggest that continues updates and revision of exercises is needed to optimize the platform.

Overall, we might still conclude that we developed and implemented a MNAM digital platform that was successful.

The platform proved to be an efficient method for trainers to teach AAWID knowledge and skills that are beneficial to better cope with live as they grow older.

The platform exercises also proofed to be accessible and usable for trainers of all ages and professional affiliations.

SECTION 4. How to develop new digital accessible content for MNAM platform.

**Guidelines, recommendations and suggestions for designing and
elaborating accessible content**

4. 1. Introduction.

Every citizen has the right of producing and sharing information (every time it does not cause a law infringement), and depending on the target user, this information will have to be provided with particular characteristics to be reachable and understandable. Accessibility is defined as the degree to which all people can use an object, visit a physical place or access to a service regardless the cognitive, physical and technical capabilities.

The new United Nations agenda on the Sustainable Development Goals reinforces the idea of equality for a sustainable development in the Goal n° 4."Quality education".

Moreover, in the New Delhi Declaration this statement is more evident:

“Universal access to information and knowledge, through technologies of information and communication (ICT) and auxiliary technologies, in equality of conditions with others, it is for people with disabilities a right inalienable human life and a precondition for living independently and participate fully and on an equal footing in society.”



The development of accessible content in educational context is elaborated through three principles:

- **Representation** (What): It refers to the form in which the information is displayed to the user, like texts, sounds, pictures, schemas, etc.
- **Expression** (How): Allows the users to interact with the information and show what they have learnt according to their capabilities
- **Participation** (Why): The reason of the knowledge construction and the active and participative learning.

These principles seek to maximize the learning opportunities according to the perceptual characteristics of the users, so the educator can focus on their strengths, their learning needs and their possibilities of participation. The educator must combine the three principles and use the available resources in a dynamic and flexible way.



Development of accessible texts

The elaboration of texts accessible for all students should follow a set of recommendations:

- Use Arial or Verdana font (without serif). Font size 14 or larger, depending on the visual capabilities of the users.
- The font should be normal (avoid using bold, italic or underlined).
- The texts must be presented with horizontal orientation and without justification.
- The line spacing of the text must be 1.15 or 1.5 dots.
- Capital letters are recommended for the beginning of a sentence or short words.
- Use a soft yellow background with black or navy-blue letters. White background is not recommended as it returns brightness.
- In the case of visual impairment or reading difficulties, audio recording/reading assistant should be used instead.

Use reinforcement pictures linked to the topic of the text to ease the understanding.



Exploring the web

Some of the activities may involve searching information in the internet, browsing interesting portals or just playing. When the educator wants to use this as a resource for the session or even for leisure, it is convenient to explore all the sites in advance to the users.

- Guide the users by offering two or three websites they can start to look for information.
- When possible, the educator should be together with the user and take enough time to analyze the website, evaluating if he/she is able to:
 - Read the heading/subheadings of the website.
 - Look the pictures and images in the website.
 - Identify the required information.
 - Verify the relevant multimedia materials.
- Games are always an attractive resource. The educator must guide the user during the activity to frame it in an educational context.

Accessibility in the web

Web accessibility is the universal access to the web, regardless of the type of hardware, software, network infrastructure, language, culture, geographic location and capabilities user.

The Web Accessibility Initiative (WAI) developed by the W3C is an international community that develops recommendations and web standards. The objective of the WAI is to facilitate access for people with disabilities, through the development of accessibility guidelines, improving the tools for their evaluation and repair, through of an educational and awareness work in relation to the importance of accessible design of websites.

Content Accessibility Guidelines state that websites must respond to four principles:

- **Perceptibility:** the information and interface components are presented to the user in a way in which he/she can perceive them, regardless of his sensory abilities.
- **Understandability:** It refers to the fact that both the information and the handling of the user interface must be understandable.
- **Operability:** the interface and navigation components must function in such a way that the user can navigate the content smoothly and independently, regardless of the device you use and the speed of use.
- **Robustness:** the content and operation of the website must be as robust enough to be interpreted by a wide variety of devices, including assistive technologies.

These principles include a series of guidelines that allow us to improve and eliminate those elements that block or interfere with access to the web.



[\(Source\)](#)

4. 2. Objectives of developing accessible contents.

Universal accessibility measures generate global benefits to the whole society and its principles represent a fundamental step for social integration in equality of conditions to individuals who may feel excluded without their application.

Moreover, there are important reasons to consider creating accessible materials:

1. Accessible materials ensure that individuals with disabilities can access the information and gain knowledge.
2. Accessible materials will also help individuals with a wide range of learning needs. For example, changes to how you structure text can help students to understand better the key concepts.
3. Simplifying the navigation can help individuals using Information and Communication technologies, such as mobile devices or tablets, as well as persons who are low vision or blind.
4. Adding captions helps individuals with hearing loss as well as persons who are new to a content area and key terminology.

In the specific case of easy reading, there are several groups that are primarily benefited, since their cognitive and intellectual abilities they present limitations for a complete development of literacy.

The American Association on Intellectual and Developmental Disabilities defines the intellectual disability such as that which is "*characterized by limitations significant both in intellectual functioning and in adaptive behavior, which covers many social skills and day-to-day practices. It originates before the age of 18*". This definition establishes that the intellectual functioning or intelligence refers to 'mental capacity, such as learning, reasoning, problem solving, etc.

At this point it is very important to differentiate three types of adaptive behaviors: Conceptual skills (language and literacy, concept of the money, time and numbers, and self-direction); Social skills (interpersonal skills, responsibility social and self-esteem) and Practical skills (daily personal care activities, skills occupation, health

care, transportation, routines and schedules, security, use of money and use of the telephone).

A person with intellectual disability will have cognitive and linguistic limitations, which implies difficulties for understanding reading information. However, the grade of these limitations is very heterogeneous and the capabilities of each individual are particular. It is not possible to establish a standardized pattern according to the type of intellectual disability or syndrome or disease that causes it.

It is estimated that the number of older people with intellectual disabilities reaches 1.5% in developed countries and almost 3% in development countries. The World Health Organization establishes four levels of intellectual disability: Light, Moderate, Severe and Profound. There are other two unspecified categories.

The objective is to elaborate materials that can be understood and processed by these persons, independently of their level of intellectual disability and sensorial capabilities.

4. 3. Easy reading principles and suggestions.

Experts identify two fundamental works to develop easy-reading contents. On the one hand, the “*Guidelines for reading materials easy*”, of International Federation of Library Associations, and the guidelines entitled “*The easy way*”, published by Inclusion Europe, which are based on IFLA guidelines and add more concepts.

The reader of this guide must know that there are several manuals and commentaries on the methodology proposed in these two references, which may be helpful to adapt, improve and update texts to be easy-to-read. The first concept proposed in these two cornerstone books are also applicable to this guideline, and refers to the fact that these guidelines should not be viewed dogmatically in their application. Flexibility is mandatory, and the person preparing the materials should understand the type of text she/he is preparing, the audience to whom is directed and the creativity.

The following subsections are aspects that authors should consider basic when preparing the text to be easy-to-read and therefore accessible.

Spell checking: writing easy-to-read texts does not is the opposite of spell checking. They should only be considered certain guidelines to avoid the use of some signs spelling that may make it difficult to understand the text.

Punctuation: Punctuation marks help to order and emphasize ideas. The period will be the fundamental orthographic sign for the separation of contents. Semicolon should be avoided. The full stop will be helpful to separate paragraphs with different ideas. The use of the period instead of comma is preferred to better separate and differentiate linked ideas. The use of the comma can be applied to separate items in a list designed with bullets at the beginning of each item. Colons are useful for introducing who is speaking and the cataphors: as well as to complete ideas.

Numbers and dates: The main preference is to always write the numbers with numbers (no letters). There are publications that choose to write the numbers in letters up to a certain amount. Phone numbers should be typed separating them in a

standard way. Dates should be written completely, with the name of the day included. Roman numerals are not recommended.

Vocabulary complexity: Use simple words expressed simply. Use words short, with the fewest number of syllables and the less complex. Use words of high lexical frequency (everyday use) and close to spoken language, that uses the target audience of the text. Avoid long or difficult to pronounce words. Use words with precise meaning. Reiterate terms to maintain readability. It is preferable repetition, which must be done systematically. Avoid variation unifying different names and ways of referring to something, maintaining consistency in the use of terms. Explain less common or complex words through the contextualization, image support and explanation of meaning.

For the latter, it is convenient to highlight them in bold or underlined the first time they appear and explain in the margin or in a final glossary its meaning. It should be noted that not everything can count on a basic lexicon: there will be objects, situations, facts, characteristics of the characters and environments, unknown places for the reader to be introduced, but will favor the vocabulary expansion.

General guidelines: Write in a concrete, simple and direct way, close to the style of conversation. Avoid oversimplification. Limit the number of ideas and messages, selecting from form precisely the main ideas to be transmitted and reflecting them clearly. Be concise, expressing one idea per sentence and avoiding introducing several ideas or actions in a simple sentence. Each line must contain one or two sentences with one or two ideas. It is important concentrate the related information, but if it is not possible because is extensive, it will be chosen to cut it and offer it separately, using guides such as headings and footers to facilitate continuity and monitoring of information between pages, if necessary.

Address readers in a respectful, direct and personal way, personify the text as much as possible and highlight the aspects that may be closer to or interesting for him.

Typography: Use a maximum of two fonts: for text and for titles. The font size must be large enough, between 12 and 16 points, being a common option 14 points,

although it varies according to the typeface. Use fonts without serif, because they are clearer. Among others, may include Arial, Calibri, Candara, Corbel, Gill Sans, Helvetica, Myriad, Segoe, Tahoma, Tiresias and Verdana. Avoid characters ornamented or simulating handwriting. Do not use very fine characters, neither italics nor capital letters (in this last case, except for very specific exceptions in which there is only one or two words). Use bold and underlined to highlight words, even if always in a moderate way to avoid distractions. The use of underline can be very useful to highlight people's names and places and facilitate memorization. Avoid typographic effects, such as ornaments, colors, and shadows.

Among the aspects to highlight of the contents presented here, it is possible point out that, first of all, it is necessary to deepen the knowledge of the reading process and how it is affected in people with disabilities, in order that these deficits are considered when it comes to write to better suit your objectives. It's true that we return, in this regard, to a starting point: the heterogeneity of intellectual disability. However, from this knowledge could be determined with more objective criteria why there are guidelines easy-to-read that work with some people and not with others, so that you could establish a segmentation of solutions.

It is interesting to note how the regulations has arrived in recent years to descend to excessive levels of precision for a standard to promote the introduction of the easy reading in some areas, such as administrative. International laws should promote certain practices and solutions without descending to that level of detail. It would be more convenient to raise a content design project adapted to easy reading that later serve as a global benchmark and be mentioned in the regulations as "Adapt the texts to the tools established by the XXX body". In this way, a technical evolution would be allowed faster and less dependent on the approval rates of the rules.

If you need to prepare a presentation and you are using Microsoft Office Power Point or similar, follow these recommendations.

Content of slides

- Limit amount of information on each slide and avoid long sentences.
- Use plain language and avoid the use of abbreviations.
- Provide text descriptions for pictorial elements or graphs. To do this, right click on 'Image', select 'format picture', click the third icon along and select 'alt text' and then add in the title and description and click 'OK').

Style of slides

- Use standard slide layouts and check order of information in outline view to ensure accessibility for those reading slides using screen readers.
- Ensure writing is in a dark font and that the background is light enough to provide clear contrast. A cream background is often more accessible than pure white. Avoid backgrounds which are overly 'fussy'.
- Use a sans typeface (Arial is best) of font size 24 or above (45 bold for titles).
- Bullet points assist in making slides easier to follow.
- Avoid adding text boxes.
- Do not use colour as the only indicator of meaning, such as priority items shown in red.
- Avoid animations and sounds if not crucial to content of presentation. Animations may cause screen readers to read the slide twice.
- When adding in information from Word, Excel and so on, [embed](#) the file name into the slide rather than cutting and pasting.

To do this:

1. Open the PowerPoint presentation and the Word/Excel file you wish to embed into the slides.
2. Select and copy the section from the Word/Excel file you wish to embed.



3. Click on the section in the PowerPoint slide where you wish to embed the file.
4. From the top menu bar select "Edit" then "Paste Special".
5. Select the format you wish - Excel/Word etc.
6. This should embed the item into the presentation. If you double click on the item you will be able to edit it in Word/Excel whilst it remains in the PowerPoint.

4.4. Guidelines for Accessible Materials.

Creating materials that are easy to perceive requires a series of considerations. The following practices can be applied across various types of media and platforms, varying slightly depending on whether the primary materials are text-based, audio, visual, or video media.

Use simple language and be mindful of reading level. There are numerous tools and frameworks available to help you analyze your course materials for simple language. By incorporating this practice, you can ensure that your materials are equitable for your individuals with varying levels of access, background, and ability. If your text-based materials are in a form that cannot be altered, provide additional resources to help persons read strategically and comprehend language with which they may not be familiar.

Use headings to organize documents. Most text processors have the ability to differentiate between structural elements in text (e.g. body text versus headings). Use these built in features to increase accessibility for screen readers and support careful reading for all persons.

Use page numbers and tables of contents. This can help to navigate directly to the information they need, or when referring students to specific locations within a given text.

Provide alternative descriptions for images as both captions and "alt. texts." This information is the primary information an individual using a screen reader will use to gain access to visual information. This same content can also be included in captions for key figures. For visuals that include text, reproduce textual information in a readable (text-only) format nearby. If an image is decorative, leave the alt tag blank.

Check your color palette for contrast. If you are using colors for emphasis, ensure colors contrast well against one another. This will help individuals with vision differences to perceive visual information.

Use descriptive links instead of “Click here.” Links within a document or web resource should be descriptively linked to indicate or explain the resource you are linking to. This helps both individuals using screen readers as well as curious audiences who might want to explore resources you share, but want to know what the resource is before they click on it.

Only use tables for data that requires it. Consider whether a table is the best way to present your information. If it is, make sure to include column headers and captions describing the table’s contents.

Present information in multiple ways and formats. For example, if your materials rely on textual information, consider adding visuals as an alternative way to represent information. Or, if you have a news article, consider including audio recordings about the same topic or an embedded video of the material.

4.5. Accessibility in specific platforms and editing tools.



Microsoft Office has several help resources for improving accessibility with the built-in Accessibility Checker for each of the Office 365 tools. Additionally, there are numerous resources from Microsoft on the topic of accessibility, such as the built-in Ease of Access features for Windows 10, Read Aloud, Dictation, and real-time transcriptions for video calls.



Google Docs and Slides have built in features that promote accessibility, but it lacks a global document checker. In order to promote accessibility in Docs and Slides, use built-in headings, tables of contents, page numbers, and alt descriptions for images (add with right-click image > Alt tag). Google Slides also recently added real-time transcription for presenters.



Apple offers a collection of resources on accessibility across their software and platforms. The University of Montana offers an additional resource on accessibility in Keynote files specifically.



Canva has both built-in and add-on features for accessibility. When creating content in Canvas, use the built-in Accessibility Checker in the Rich Content Editor (the human glyph icon on the Rich Content Editor). Use UDOIT (on the left navigation in Canvas) to check an entire set of materials for accessibility errors, tips, and fixes. Individuals with vision differences can also enable the High Contrast UI and Underline Links in the personal settings for a more readable Canvas experience.

4.6. Accessible web design.

This section contains two powerful resources you can use to design a web page or platform, and besides, to establish some guidelines to partners who have to develop content with you. These resources establish design guidelines and characteristics of multimedia resources to use.

ARASAAC

It offers graphic resources and materials adapted with a Creative Commons license (BY-NC-SA) to facilitate communication and cognitive accessibility to all people who, due to various factors (autism, intellectual disability, lack of language, the elderly, etc.) , present serious difficulties in these areas, which make it difficult to include them in any area of daily life. This project is funded by the Department of Education, Culture and Sports of the Government of Aragon and coordinated by the General Directorate of Innovation and Professional Training of said department.

<http://www.arasaac.org/>

Easy Reading Association (ALF)

A complete set of principles, guidelines and recommendations to elaborate text that will be easy to read, covering format aspects and content (grammar, lexicon, etc.)

<http://www.lecturafacil.net/>

UNE 153101: 2018 EX

Standard on Easy Reading which specifies the guidelines and recommendations for the adaptation, creation and validation of Easy Reading documents, and seeks to facilitate the understanding of written information to guarantee equal opportunities.

<https://www.une.org/encuentra-tu-norma/busca-tu-norma/norma/?c=N0060036>

4.7. Resources.

- Web Content Accessibility Guidelines. <https://www.w3.org/WAI/standards-guidelines/wcag/>
- Guidelines for the elaboration of accessible digital materials. Ministry of Education. Government of Argentina.
- Introduction to Web Accessibility. The Chang School. <https://pressbooks.library.ryerson.ca/iwacc/>
- Web Accessibility Guide. Andersen, K., Hoss, H., Bridge, C. (ISBN 978-0-7334-3949-0) <https://www.homemods.info/resources/hminfo-research-publications/occasional/web-accessibility-guide>
- The WebAIM organisation has a guide to creating accessible PowerPoint presentations. <https://webaim.org/techniques/powerpoint/>
- <https://material.io/design/usability/accessibility.html#understanding-accessibility>
- <https://dcal.dartmouth.edu/resources/teaching-methods/creating-accessible-materials>
- <https://www.ed.ac.uk/information-services/help-consultancy/accessibility/creating-materials>



SECTION 5. Implementation, generalization and transfer -from training to real life performance

5.1. Introduction.

This section deals with the conditions and techniques to be used by the educator to promote the implementation of the competences learned by the AAWID in the real world after the training. The improvement of the quality of life and the real successful inclusion of the AAWID will only be achieved when the AAWID is able and is supported to apply spontaneously what he or she has learned during the training. Especially for AAWID, this is a very challenging issue, as cognitive transversal skills are necessary to achieve the transfer; very often, the AAWID have not (yet) acquired these skills. Therefore, this section deals with conditions to promote these transversal skills. The 'My New Ageing Me (MNAM)' Platform includes many exercises focusing on specific knowledge and skills that are relevant in the context of ageing and quality of life, but it does not include training of transversal and transfer skills. To train the transversal skills, a specific training and a consequent methodology - being cognitive in nature - is necessary. Although this requires an extensive training for the educator and for the AAWID, conditions - related to a specific quality of the training and to beliefs of the educator - can be created to invite the AAWID to do efforts to use what has been learned in real life. And so, these conditions - being the content of this document - can also be set during the MNAM training of TRIADE 2.0.

This document includes information, suggestions and some illustrations of how these conditions can be set or implied. We are aware that these suggestions are rather general, but this is related to the nature of the strategies that are provided by cognitive or transversal training programs, being *reflections* between the educator and the AAWID, and focusing on *metacognitive* processes, as will be explained in the next pages. It will be addressed: the definition of transfer; basic beliefs on the side of the educator; the quality of the content and process of the learning situation; adaptations of the exercises to be tailored to the characteristics and level of functioning of the AAWID; the educator's teaching style; and the bridging

technique. Some training materials for the educator and additional information are added in the appendix section at the end of this document.

5.2. Transfer.

5.2.1. Implementation - generalisation - transfer.

Teaching and learning efforts in a formal classroom situation have less value, if any, when the taught skills, attitudes, strategies, knowledge are not applied in real life situations. Training in a 'controlled' situation is an important tool, but doesn't guarantee the implementation of what has been taught and acquired every time when it is relevant or necessary: therefore, supporting the *real life* performance of what has been acquired during the training and especially *transfer* goals need to be included in the educational strategy.

Definition of transfer

'That almost magical link between classroom performance and something which is supposed to happen in the real world' (Swinney, 1989)

'The application of skills, knowledge, and/or attitudes that were learned in one situation to another learning situation' (Perkins & Salomon, 1992)

'Real transfer happens when people carry over something they learned in one context to a "significantly different" context' (Fogarty, Perkins & Barrell, 1992)

Although the proposed definitions may sound very clear, frequently the concept of transfer is used to refer to different, distinctive goals and processes, with -as a consequence - the need for different (often complementary) educational and supporting strategies. The proposed distinction below is arbitrary and may reveal some overlap, but it is proposed for didactic reasons. The logic is that what has been learned, can be applied in a safe environment exactly as it has been taught (implementation); in a second stage, the application is required in a set of similar problems or tasks (generalisation), while in a third stage, what has been learned is becoming a more abstract principle that can be applied in different problems or tasks (transfer).

Implementation: performing a learned skill.

Consider¹: during a training session, with an educator providing information and creating opportunities to practice in a safe environment, the AAWID has learned and practiced to follow a well defined route and to use a specific means of transport to reach the workplace.



¹ In the MNAM platform, there are no specific exercises to train 'taking a bus', but the topic of *mobility* is addressed. When the topic of Rights (Unit 12) is at stake, and *mobility* is referring to a personal mobility, it may be important to expand the training to concrete training of personal mobility skills. It is not enough to know that you have the right to be mobile and that conditions need to be created by society to support mobility - being very crucial for inclusion -, it also is important to be able to move and be mobile. This refers to an important responsibility of the educator who has to select, adapt or expand the exercises of the MNAM to be meaningful for the AAWID.

Implementation: without the assistance of the educator, the AAWID follows the same route and uses the same means of transport. The educator (or someone else) may assist the AAWID to perform what has been learned, including systematic reduction of assistance and support until the AAWID can do this on his/her own. Strategies may include live practice, rehearsal, automatisisation, appraisal, etc.)

In this stage of transfer, we have to take into account that there are specific conditions at stake to make the transition from pure acquisition to performance (e.g. A. Bandura and Social cognitive theory (2005)). These conditions may be at the level of the AAWID (e.g. self efficacy, intrinsic motivation, etc.) or/and at the level of the environment (is the environment 'expecting' performance, 'inviting', 'stimulating', etc.?). These conditions may help us to see this implementation level as 'transfer' as they refer to important additional issues that go beyond the mere performing of a learned skill or strategy.

In addition, one very significant issue has to be added during this stage. Although a practical skills training is a necessary step, it is not a sufficient condition for independent, autonomously performing acquired skills or strategies or concepts. Knowing how to deal with unforeseen situations and problems is another necessary condition to fulfil. This means that the teaching effort will have to include strategies to learn how to solve problems and to take initiative in dealing with problems (both examples of critical cognitive transversal skills). Also this, and maybe 'especially this' additional theme helps to transcend the mere acquisition of skills.

Generalisation: broad application of a learned skill.

Consider: in addition to the mere implementation of the skills to use the bus and following the specific route to reach the workplace, the AAWID can be expected and stimulated to use the bus to reach another destination and visit the family or friends, or to use another means of transport to reach the workplace.

Generalisation can be limited or more extensive and may include gradations in the degree of difficulty or complexity such as travelling further or longer, use public transport for different reasons, change train or bus several times, or combine bus and train. But the skill to use public transport to reach a destination, and so the “content”, is always the same. Generalisation is present within a specific content area.

Transfer: going beyond a learned skill and content.

Once you change the content, or expect to implement skills to different domains, we move from generalisation to transfer. In literature, distinctions are made between vertical, horizontal, near and far transfer. In this context, we refer to transfer in a general way, i.e. once we *leave* the specific content that was at stake during the previous stages, independent the level of novelty, complexity, difficulty, etc. This means that we can not count anymore on the mere practical skill or knowledge that was the content of the training. Taking a bus is only relevant when ‘mobility’ is at stake. And yet, there is something present that is very relevant and is the basis for the real transfer: taking a bus is not only performing a set of practical actions; this set of actions is supported by a process, made concrete in answers to the questions: ‘How are you performing these actions?’, ‘What do you take into account?’, ‘What may be a challenge?’.

To take the bus, you need to be prepared, informed on time tables, you need to plan, to check, you want to control, etc. These actions refer to cognitive, transversal actions, useful in many more situations (and content areas) than just making use of public transport. Transfer, therefore, will always refer to making transitions of these transversal skills into whatever other content area or situation, with a large variation in the degree to which the situations are similar or different. *It may be helpful to be prepared before you go to shop, just as it is helpful to be prepared before you go and catch the bus. Or it may be helpful to know how you can deal with an unforeseen situation at the time*



you want to pay what you bought (forgot your wallet), just as it is helpful to know how to deal with the situation that the bus is very late or is not coming.

The three levels are very closely related to each other; they represent one and the same reality -namely going beyond the actual learning/teaching context-.

5.2.2. Challenges.

Supporting for transfer is not easy, many challenges are bumping in the road. The educator needs to understand that acquisition of a skill or strategy is not enough to expect performance (and definitely not transfer). Also an educator needs to take into account that practical skills training is not only the starting point; it is also a necessary point. Additional efforts from the very beginning, and even before the training starts, will be necessary to realise implementation, generalisation or transfer. Teaching and learning for transfer is not a distinct activity, but is rather an integral part of the complete teaching and learning process.

The ability to generalise and make transfers is often not presumed in AAWID. Just as is the case on the implementation level, also on the generalisation and transfer level, many conditions of various kinds are critical factors for success: intrinsic motivation, the mindset and self-efficacy of the AAWID, the quality of the *inviting* environment, etc. Especially -but not only!- (meta-)cognitive and transversal conditions play an important role (see 5.3.1.2.b.). They must be seen as prerequisites for transcendence. It may be clear that skills like planning, problem solving, comparison, flexibility, etc., play an important role in this. And so, training these skills must be part of the educators effort; and need to be added to the training course at stake. It is not sufficient to presume these skills: especially as these (very) intellectual skills are the main challenge for AAWID, a specific approach -tools and methodology- will have to be implemented. The real challenge here is that the educator is expected to understand and to be competent in addressing the many conditions that have an impact on the implementation, generalisation and transfer outcome. This implies additional training -if not yet present- of the AAWID that exceeds the content of the TRIADE 2.0 Workbook for trainers (available together with the rest of the products on the project website -<https://www.ivass.gva.es/Triade2.html>- and on the MNAM Platform -<https://triade.webs.upv.es/t20/->).

The next sections explain critical factors of success for learning and transfer, especially of AAWID, and provides examples of strategies to close the gap between training and real life, and so to contribute to social inclusion of people with an intellectual disability. It should be emphasized, that learning for transfer has its starting point at the very beginning of the learning process, and even before this learning process has begun. Transfer happens after a training session; learning to transfer happens during (and even before) the training session.

5.3. How to support implementation, generalisation and transfer?

This section deals with very basic conditions on the level of the educator and provides strategies for adapting whatever learning situation or exercise so it is tailored to the AAWID. The quality of the training and teaching will have an impact on future performance of the AAWID. As transfer refers to skills that are cognitive, it is important that the educator really believes that the AAWID is able to generalise and to make transfer to new situations. This is often not the case.... Also, the educator will have to adapt many exercises of the MNAM in such a way that the tasks are meeting the needs, the learning style and the level of functioning of the AAWID. General educational strategies, defined in particular to be used with people who have learning disabilities - characteristic for AAWID- will show how tasks can be prepared, offered and discussed (reflection) with the AAWID. So, as well what educators belief (explained earlier), the efforts to customize the training content to fit with the AAWID ZPD (Zone of Proximal Development) as the quality of the interaction with the AAWID (see 5.3.1.2.a), are basic conditions for whatever successful learning process, always including the transition from training context to real life.

5.3.1. BASICS.

Beliefs - Customized training - Quality of the training.

5.3.1.1. Beliefs.

Professionals working in the field of disability vary in their *beliefs on competences, on modifiability and learning potential of AAWID and on intelligence in general*. Between others, Biklen & Burke (2006), Dweck (2015) and Feuerstein et al. (2010) provide inspiring models to describe promoting or hindering beliefs: active modifiability versus passive acceptance, growth versus fixed mindset or presumed competence are concepts often referred to this context.

Promoting beliefs refers to a positive and optimistic attitude towards the learning potential and abilities of AAWID, while hindering beliefs refer to not presuming competences or learning potential. Both orientations have a significant different impact on the outcome of training effort. In addition, the same is true for beliefs on ageing. Believing or not that ageing people can or can not contribute to society in an active and successful way. In this context, we find concepts as ageism and ableism, referring to beliefs and prejudices based on (often) implicit philosophies. The combination of ableism² and ageism³ may have a dramatic impact.

In order to implement successfully educational or training strategies for ageing adults with an intellectual disability, educators need to show evidence of an appropriate belief system as this determines the nature of the training goals and didactics, and so the short and long term outcomes of the training. Relevant for this training process is the professionals' beliefs on change,

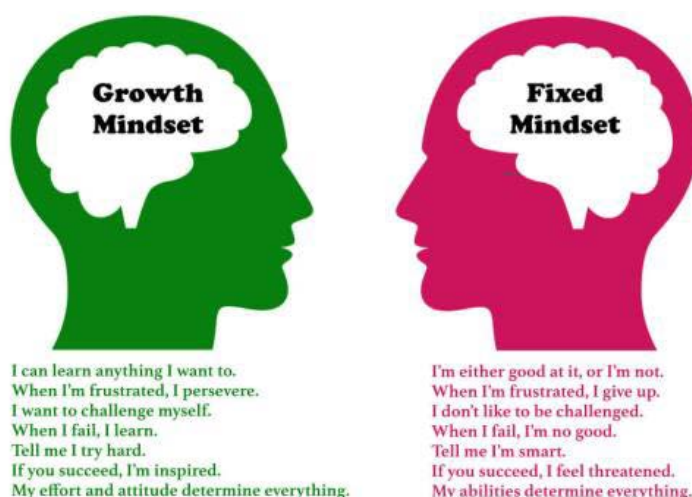
² Ableism is the discrimination and social prejudice against people with disabilities and/or people who are perceived to be disabled. Ableism characterizes persons who are defined by their disabilities as inferior to the non-disabled. On this basis, people are assigned or denied certain perceived abilities, skills, or character orientations.

³ Ageism is stereotyping and/or discrimination against individuals or groups on the basis of their age. Ageism is seen as a combination of three connected elements: prejudicial attitudes towards older people, old age, and the aging process; discriminatory practices against older people; and institutional practices and policies that perpetuate stereotypes about elderly people.

modifiability and plasticity of adults with an intellectual disability, their beliefs on Quality of Life and their beliefs on ageing, especially for AAWID. It is important for the educator to reflect on these beliefs, and to find out what issues may build in restraints.

A tool developed by the partnership of Erasmus+ project *Cognition & Inclusion*, may be useful for educators to reflect on their beliefs⁴.

The Mindset of the AAWID and the impact on the learning effort of the AAWID



The concept *Mindset* refers to implicit theories that people (also AAWID) hold regarding the nature of intelligent and learning behaviour: to the degree that individuals attribute intelligence and learning (potential) to fixed traits, they hold a *fixed mindset*; and to the degree that they attribute intelligence to learning, effort and training and practice, they hold a *growth mindset*. Individuals with a fixed mindset believe that their qualities (such as intelligence or other personality traits) are “set in stone” –how God made you is basically who you are. Someone’s traits are fixed-, not something that can be practiced or developed. Individuals with a growth mindset, on

⁴ Erasmus+ "Cognition&Inclusion": <http://www.ensa-network.eu/cognitionandinclusion/c-i-projectsresults.html>

the other hand, believe that effort or training can change someone's qualities and traits.

The mindset orientation of the AAWID will have an future impact on the outcome of the training and on the implementation of what has been learned. It shows the motivation (or lack of motivation) to persist and keep on trying to implement what has been learned in contexts that are more challenging or provide less safety to try out. The motivation to try out and to take risks will be higher when the AAWID shows evidence of a mindset that is 'growth' oriented, and will be lower or even not existing when the mindset is a 'fixed' mindset.

The mindset of a person is not innate, but is shaped along one's development, especially based on the messages someone receives. Especially when a learning or intellectual disability is at stake, the impact of the beliefs of the educator may be significant. A fixed mindset may be reinforced, just as the set of attitudes related to the phenomenon of learned helplessness. When the educator continuously attributes success to inborn or innate abilities, not presuming competence, people will develop a fixed mindset. Praise of someone's performance can be particularly likely to produce a fixed mindset when it attributes the success to intelligence (implying aptitude or fixed traits). However, if success is attributed to effort and practice, people will be more likely to develop a growth mindset. Praise of efforts to practice, or attributions of success to the prior practice in which the person was engaged, can contribute to the development of a growth mindset.

More specifically, feedback and intervention related to the learning and thinking process, and supporting the AAWID to contribute to the strategies for solving the problems or doing the activities of the program, will support intrinsic motivation and firm beliefs of potential. This will be described more in detail in section 5.3.1.3 (Quality of the interaction).

5.3.1.2. Customized training on content and process.

Most exercises and activities on the TRIADE 2.0 - MNAM platform have to be seen as a framework, illustrations and examples; they invite the educator for adaptation to the personal experiences and the concrete living situation of the AAWID, for him or her to see the relevance of the goal and the learning effort that is expected. This means that the educator has to know the AAWID and his living situation very well.

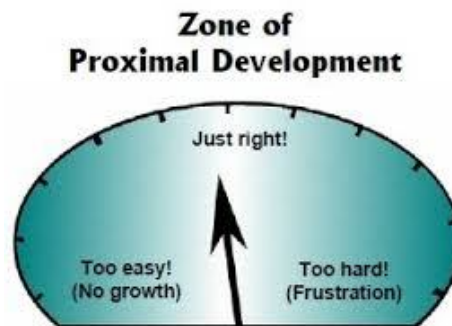
Besides the tailoring of the content, the exercises and activities need to be adapted according to:

- a) The AAWID's actual level of competence and to what the AAWID is *ready* to develop (Zone of Proximal Development)
- b) The personal learning related characteristics like cognitive skills, learning style and preferences (see b. Cognitive map as a tool to match the activity to some of these characteristics).

For sure, the AAWID's mindset (a growth or fixed mindset and his/her motivational orientation (intrinsic or focusing on extrinsic rewards) will have an impact on the learning outcome (see p. 100)

a. Zone of Proximal Development (ZPD).

The concept of *Zone of Proximal Development* is useful to find learning activities that are neither too easy nor too difficult.



According to Vygotsky (1987), the ZPD is defined as the distance between the *actual* developmental level as determined by autonomous performance or independent problem solving and the level of *potential* development as determined through performance or problem-solving under adult guidance, or in collaboration with more capable peers. The ZPD refers to the difference between what an AAWID can do without help and what he or she can achieve with guidance and encouragement from a more competent other. The term 'proximal' refers to those skills that the AAWID is 'ready' to develop or 'close' to mastering. Learning only occurs in this zone of proximal development: activities in the zone of actual development are too easy and don't need learning efforts anymore; activities outside the ZPD are too difficult for the AAWID: even with a lot of support by the educator, the AAWID will not succeed in acquiring and/or performing the goals and skills of the learning activity at stake. Vygotsky believed that when an AAWID is in the zone of proximal development for a particular task, providing the appropriate assistance will give the AAWID a 'boost' to achieve the task. To help an AAWID to move through the zone of proximal development, educators have to focus on critical components that promote the learning process: the presence of someone with knowledge and skills beyond that of the AAWID (a so called 'more competent other' like e.g. the educator, another member of the training group, a peer, etc.), interactions between the AAWID and the more competent other that invite to focus, to observe, to reflect, to evaluate,

etc., on the learning effort done. These components are underlying the concept of *mediation* as developed by Feuerstein (see 5.3.1.3).

The main suggestion for the TRIADE 2.0 educators is to avoid activities that are too difficult for the AAWID, and -if so- to re-develop the activities so that they can *almost* perform the activity independently or with some help. When the educator observes that the AAWID is not able to perform the activity successfully, even with a lot of help, the AAWID may be disappointed or to lose their motivation. The activity is not in his/her ZPD. When this is observed, the educator has to look for the reason for not performing the activity successfully. Several factors may be responsible for this. Very often these reasons are sought and found in the weaknesses of the AAWID, while the reason for not being successful may be found in the characteristics of the activity itself: the task may not fit with characteristics of the AAWID on the level of preferences and learning style. The next section b. offers a tool to find out what characteristic(s) of the task may contribute to the failure, and helps to find ways to adapt the task so that the AAWID can deal with the task in a more successful way.⁵

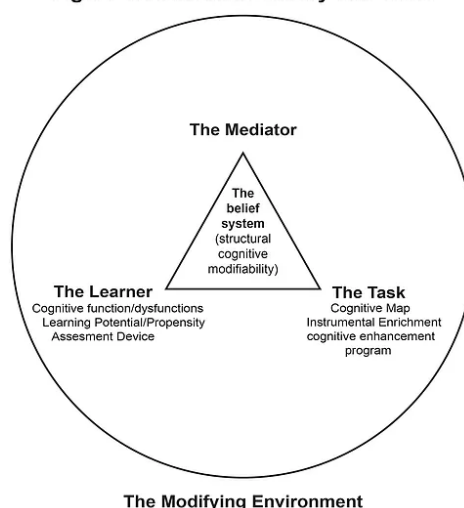
⁵ Besides these task related and more cognitive conditions on the level of the trainee, motivation and other dynamic affective conditions will have an impact on the outcome of the training session.

b. The Cognitive Map.

The Cognitive Map is a tool developed by Feuerstein (e.g. 2010) to conceptualize the relationship between the characteristics of a task and its performance by a AAWID. It is a tool to analyse an exercise, problem, task or activity according to several parameters; it is helpful to find out what may be a possible source of a challenging performance or learning process and allows the educator to modify or manipulate characteristics of the task. This can be done either to check ideas or hypotheses the educator might have concerning the difficulties the AAWID's have, or to provide options for manipulating the learning process through changing task characteristics. The educator then has a wider range of options, with -although always interrelated - possible task-focused adaptations (e.g. changing the modality of the activity, e.g. pictorial presentation instead of verbal instructions), as well as educator-focused changes (e.g. to focus on specific items of the activity, repeat stimuli, hide some parts of the stimuli, etc.) and AAWID-focused changes (e.g. adaptation of the content).

The Cognitive Map is presented here, as it helps the educator to adapt - if relevant - the activity, in order to have the best match between AAWID and task features. It is often not a matter of manipulating one parameter, but it may be a matter of changing several parameters at the same time. The illustrations given below will show that adaptations to tailor the task, are not always difficult or complex, but they always take

Figure 1. Feuerstein Theory and Tools



into account specific features of the AAWID, especially on his learning preferences or learning style.

The parameters of the Cognitive Map

1-. Content: What is the activity going about? This parameter is easily to understand for educators: in the TRIADE 2.0 MNAM platform exercises, we find content like rights, my social network, friendship, healthy food, a 'new' life plan, etc. The main issue here, is to find out if the content is relevant for the AAWID and if he grasps the reason for dealing with this. In the context of the TRIADE 2.0 - MNAM Platform, the content is well defined, and it refers to a major goal of the program: to learn about topics that are relevant for wellbeing when someone ages. This will probably not be the parameter that needs to be adapted. The content has been selected based on several academic, scientific sources that reveal what is critical for the quality of life of ageing persons with an intellectual disability. The issue may be, that the complexity of the activity or the way the information is presented may be too high or is not matching with the learning style. This refers to other parameters of the Cognitive Map.



Illustration: as the content of the activities is related to the specific content of this unit, it is not desirable to change the general content, being the food pyramid. What can be done, is to check if the AAWID knows the food (or in the second

activity the physical activities) that are presented. It is likely to use pictures of Shopska or typical ingredients for Shopska or Baklava.... in Bulgaria, and pictures of Pizza and 'Fico d'India' or Paella and Nisperero in Italy or Spain. For good

information processing, types of food he is knows (and can name) must be presented.

2-. Modality: This parameter refers to how the information, the activity, the task, etc. is presented or communicated with the AAWID. Modalities include pictorial, verbal, symbolic, numerical, geometric, etc. Some AAWID prefer a written instruction, others profit from verbal instruction, pictorial tools may be helpful for the AAWID to understand some concepts used, for some an abstract symbol for 'employment' is fine to understand what the activity is going about, someone else may need a photo of a person who is working, but for others it may be necessary to present a picture of the AAWID himself while being active in a workshop. By changing the modality, it may be that the activity can be performed successfully without changing the so called difficulty of a task; but as it matches with the learning style of the AAWID, he or she can deal with it effectively. And often, several modalities are used in one activity, and may cause some confusion or distract the AAWID from the real task to complete.



Illustration: the way the 'stimuli' are presented can be visual (showing concrete fruit or pictures), auditive/verbal

(naming the types of food or fruit) or kinaesthetic (less used, but sometimes someone can optimize the input by manipulating or 'feeling' the object). Choosing the modality that is in line with the preferences of the AAWD, will guarantee a best input of stimuli for information processes.

3-. Complexity: This parameter refers to a quantitative and a qualitative feature of the task. The number of variables, stimuli, information units, etc. for the AAWID to work with, or the number of steps in the process of solving a given task. The complexity of a task based on a story with family members of Maria, has a higher level of complexity when only the peers and the parents are involved compared to a story

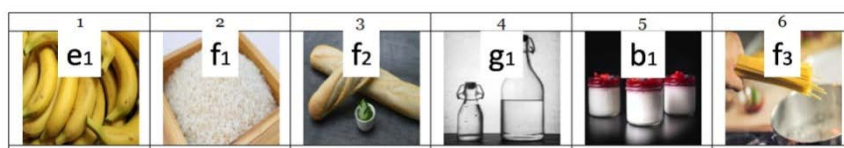
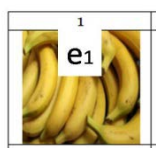
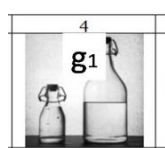
including also the nephews, grandparents, etc. The qualitative dimension of complexity refers to the degree one is familiar with the content. Being familiar with the information or the task, will help to process the information more fluently (and easier). To learn to use the public transport -e.g. taking a train to Brussels- it will be easier for a AAWID to learn this, when he or she is already familiar with taking a bus to a specific destination, as -e.g.- less effort will have to be done to (learn to) buy a ticket or to be prepared by using a time table.

Complexity is often categorized in terms of simple, intermediary level of complexity, and complex.



Illustration: for AAWID, depending on the level of functioning and on the familiarity, the overview presented here, may be challenging due to the number of pictures presented.

Taking into account the ZPD (see earlier) or a weak working memory, the educator may opt for using only half or a few pictures. It doesn't mean that you can not present all figures, but you take your time and present several sets for a few pictures.



4-. Abstraction: Abstraction refers to the distance between the information the AAWID has access to and the reality it may represent. A symbol is more abstract than a word, a word is more abstract than a picture, and a picture is more abstract than an object that can be physically manipulated. The content of the task may involve objects that can be sensorially perceived or handled completely by motor manipulation. On abstract level, the educator expects the AAWID to make mental representation of something that is not actually present. Listening to a story is a higher level of abstraction than looking at a YouTube movie.

Levels of abstraction may be categorized in terms of concrete, intermediary (verbal) or abstract (symbolic).



Illustration: a banana may be presented by using the written word BANANA, or by showing a picture or a drawing, or by having a fresh banana on the desk. Also, here the educator can take into account to present 'live' a fresh banana, to give it in the hand of the AAWID, to show the word or to just 'name' the word, or to use categories (=abstraction) of food, such as (fruit, citrus fruits, yellow fruit, etc. all categories of a different abstraction level).

5-. Operations: An activity or task may ask the AAWID to 'manipulate' the information or stimuli that is presented. Mental operations are *actions* with the stimuli and information we receive in the task. These operations may be very simple (recognition, identification, labelling, etc.) or more complex (conservation, seriation, classification, comparing, analyzing, making a synthesis, adding, inductive or deductive thinking, syllogism, etc.).

These operations may be applied to existing information or may generate new information. When you classify a set of items, you arrive at a point that you have created 'classes'.

This parameter is related to the developmental level of the AAWID. The operations have a logical sequence in their acquisition: it may sound clear that recognition or labelling need to be acquired before (e.g.) classification is possible. These operations can be found in the writings of Jean Piaget, linked to the stages of the cognitive development.⁶

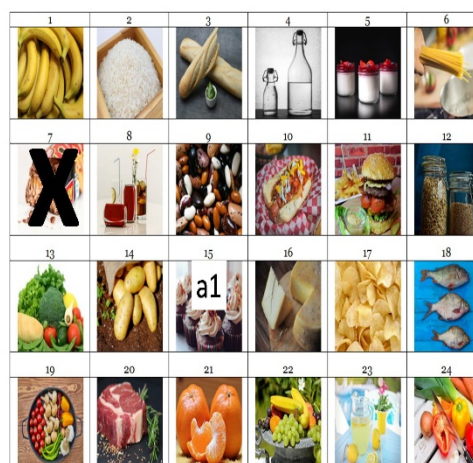
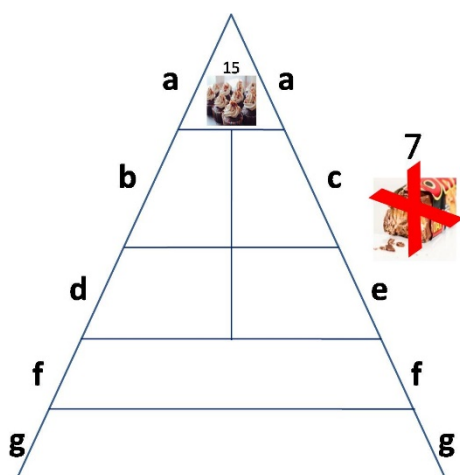


Illustration: In this exercise 2 of Unit 4, the AAWID has to execute several operations to be able to solve the problem. E.g. the AAWID has to give a name to the types of food (labelling), he has to identify classes of food, he has to compare and he has to categorise.

The challenge for the educator is to understand very well what operations are needed to do the task successfully, and to assess if the AAWID is able to do these operations. This depends on the cognitive development of the AAWID. E.g. the AAWID will not be able to categorize if he is not able to make or understand classes of food. The educator needs to know the stages of development as described by Piaget, and so he can decide to make the exercise 'easier' by asking to 'make classes' independently, e.g. to ask to make a group of food that has equal feature(s) - fruit, fish, etc.

⁶ A good introduction to these stages can be found on youtube:
<https://www.youtube.com/watch?v=IhcgYgx7aAA>

6-. Cognitive functions/Building Blocks of Thinking⁷:

A thinking activity can be divided into three phases, all closely interrelated:

- a) Input (gathering information by looking, listening, feeling, etc.).
- b) Elaboration (working with the gathered information).
- c) Output (producing responses or giving answers).

In each phase, some cognitive functions are critical for a successful phase. These cognitive functions are different from the mental operations, as they do not 'manipulate' or process the stimuli, but they support the mental act toward a qualitative thinking act. In the input phase, data gathering can be done systematically or unsystematically, or the AAWID may look for well defined data or feels ok when 'similar' things are found (accuracy). During the elaboration phase, the AAWID may not spontaneously refer to past experiences to find out how a problem can be solved, or he may not define the task and the task demands correctly. During the output phase, the AAWID may be impulsive or may communicate an answer to a question in a way that is clear for him but not for the one who is addressed. It is often found that the deficient cognitive functions are very typical for the quality of the information processing of AAWID. It is important to know that especially the cognitive functions on the input and the output level are challenging for AAWID, and that these cognitive functions are not innate but need to be acquired. Appendix 1 presents several models of cognitive functions that represent the supporting mental activity of information processing. Although all cognitive functions are important for processing a task or problem, some cognitive functions are marked (grey) to highlight those functions that are significantly contributing to successful generalisation and transfer. The main functions are spontaneous comparing and looking for connections and relationships between objects, events and situations as the main ones.

⁷ Further information about models of cognitive functions can be found in: Erasmus+ "Cognition&Inclusion": <http://www.ensa-network.eu/cognitionandinclusion/c-i-projectsresults.html>

Illustration: the educator is expected to know very well what cognitive functions are helpful for a smooth performance of the task. Considering this parameter means for example that a task, with a high level of complexity, may require an extended mental orientation (see 5.3.2.1.) to avoid trial and error or impulsive performance. Knowing this, the mediational interventions or the instructions given by the educator have to focus on inhibition of impulsivity or on systematic exploration of the presented information/pictures. It is important to consider that an observed impulsivity or unsystematic behaviour, may not be the consequence of not well developed inhibition of impulsivity or self-regulation or systematic exploration, while the impulsivity may be caused by the presentation of a task that has a level of complexity that is too high for the AAWID. This observation is very important as attributing 'not being successful' to 'cognitive deficiencies of the AAWID' has a much more negative impact on how we perceive the person with AAWID, his/her learning potential or his/her intelligence, than an attribution linked to the task.

7-. Level of Efficiency: This parameter is less relevant for TRIADE 2.0, but is added to completely present the Cognitive Map. Feuerstein (2010) defines this in terms of precision, time, and effort needed by the AAWID in arriving at a problem solution. This criterion is dependent on the other parameters of the cognitive map and is a very person related parameter. It may be interesting to observe this efficiency as it may help the educator to see when a AAWID is close to giving up or becoming discouraged.

The cognitive map, especially, must help the educator to see that challenges, or failures not necessary are related to 'not being able', but may be related to characteristics of the activity or task; sometimes, by simply changing a parameter - and so, by changing the nature of the task, not the content - the AAWID may become successful.

5.3.1.3. Quality of the interaction - creating a mediated learning experience.

To bridge the gap between the training context and real life, the educator not only needs to include specific strategies to connect the actual learning content to future (and past) situations, but also has to create a very focused and meaningful learning situation. A customized activity in the ZPD of the AAWID is a necessary, but not a sufficient condition for a qualitative learning situation: the learning situation needs to be supported by a specific quality of learning and teaching, characterized by the use of universal strategies, not depending on language modality or content. Feuerstein, deepening the theories of Piaget and Vygotsky, names this quality *mediation*, including 3 basic mediational strategies⁸:

- a) Mediation of Intentionality and Reciprocity.
- b) Mediation of Transcendence.
- c) Mediation of Meaning.

a. Mediation of Intentionality and Reciprocity refers to an educator deliberate effort to share the (learning) goals he has in mind with the AAWID, focusing on providing meaningful stimuli or contents, alert attention, alter stimulus frequency, (re-)order events, link novel information to familiar contexts, etc.

These evidences of *Intentionality*, however, are inadequate without signs of the AAWID's *reciprocity* by showing evidence of understanding the goal, willingness to contribute to the goal, responding and/or doing learning efforts, etc.

For an educator to assess the Intentionality/Reciprocity quality of the learning situation he has created, the next (non-exhaustive) set of reflective

⁸ Updated from Warnez, J. (2002)

questions may be helpful. Each question may be answered by a simple 'yes' or 'no', but especially invites the educator to explain 'how'.

- # What's the educators specific focus and/or learning goal?*
- # Is this goal situated⁹ within the ZPD of the AAWID?*
- # Is the goal made explicit and shared with the AAWID?*
- # Does the training start with some moment of mental orientation?*
- # Does the training include an (intermediate) evaluation and/or recapitulation? evaluation of the outcome of the training effort? evaluation of the process and/or effort done?*
- # Does the educator use mistakes as an opportunity to learn?*
- # Does the educator make 'expectations' explicit?*
- # Is the content related to the world and the needs of the AAWID?*
- # Are stimuli repeated to draw the AAWIDs attention? Are stimuli sequenced, simplified or reinforced?*
- # Does the AAWID respond to the offered stimuli or questions and does he expect a response?*

b. Mediation of Transcendence is characterized by interactions in which the educator goes beyond the concrete here-and-now-training situation or beyond the immediate needs of the AAWID: what has been learned is generalized or linked to new future (and even to past) situations. Each learning situation is an opportunity to learn the AAWID something he or she can use at other times and places. This strategy is the one that is often 'forgotten' as it is often believed that AAWID are not able to represent future situations or to find similarities between the here and now situation and the future (or past) situation.

⁹ Appendix 2 includes an overview of main assumptions and concepts of the MLE-theory

Mediation of Transcendence is closely related to the Intentionality issue, as now the nature of the learning goals becomes more specific: generalisation or transfer can only be realised when the educator leaves, and so, goes beyond the concrete content of a lesson, and focuses on the learning, thinking or problem solving process that supports the way the here-and-now situation and concrete content needs to be processed. So, intentionality -in addition to what is written in previous section- includes the intention to work on a generalisable, often cognitive goal.

Referring to situations or experiences in the past and/or in the future is very illustrative for mediation of transcendence. Is this new for you? How did you deal with this last week? When can you use what you are learning now? Any reference to past situations (How did you solve the problem at that moment?) any link that is made to later (Can you think of a time that you can use what you are learning now?) helps the AAWID to disconnect from the current situation. The general intellectual and verbal level will, for sure, have an impact: for one AAWID, it will be the educator who will have to verbalize the link with the past or the future, instead of the AAWID; for another AAWID, it may be that the educator can expect that the AAWID can give examples of situations or contexts where what is learned can be applied. Also the level of abstraction (the more or less the principle or the cognitive skill is generalizable or transferable) or the complexity may have an impact on what is possible for. It is clearly different to ask a AAWID 'Joke, when is it important to slow down?' compared to 'When is it important to adapt your behaviour?'. Or, asking for a situation in the past -one that the AAWID already and truly has experienced - will be more easy to remember and (re-) imagine compared to a future hypothetical situation that the AAWID has not experienced yet. Anyhow, this universal strategy of Mediation of Transcendence refers to the effort of the educator to 'leave' the actual situation. An event can be seen as only an isolated event, but a mediational educator will give such an event transcendent (generalized) meaning by attempting to relate the event to previous and even future events of a similar nature, and thus to extract a generality.

For an educator to assess the Transcendence quality of the learning situation, the next (non-exhaustive) set of reflective questions may be helpful. Each question may be answered by a simple 'yes' or 'no', but invites the educator to make explicit how this was done.

Are there references to past situations, challenges, successes, etc.?

Are there references to future situations?

Are evidences of efforts to 'leave' the here-and-now situation found?

Is a (cognitive)¹⁰ principle made explicit?

Does the educator implements the 'bridging' technique? (See section 5.3.2.2.)

Are generalisation activities part of the training session?

Does the educator invite the AAWID to (re-)imagine situations?

Are there any strategies involved? (e.g. strategies to solve problems or to remember information taught, or is the training focused on information?)

Does the social environment know about the goals of the training?

c. Mediation of Meaning is characterized by a educator who conveys the affective and value-oriented significance of an object, an event and especially the learning goal. These efforts must create energy, intrinsic motivation to do the efforts to learn and contribute to the learning goal and to apply the skill or knowledge in the future.

The value-oriented significance of the content or the skills that are included in the learning goal or the learning activity, may refer to how the content or

¹⁰ Principles may also relate to the meaning criterium of mediational interventions, as explained in next section c.

skill contributes to the AAWID's competence and/or to the contribution to his autonomy, being or becoming a full citizen, personal development or his Quality of Life. An exercise may address, besides the concrete content, problem solving skills, e.g. to solve a problem while using public transport, and can be used to generalize the problem solving skills. Also the public transport or mobility topic may be valuable for the AAWID as public transport can create opportunities to reach the place where someone wants to volunteer. The educator may convey both meanings: "Jose, learning to solve problems is important when you have to deal with unforeseen problems while shopping, while cooking, etc. it will make you more independent". Why do you think it is important for us to do this? Yes, so we will have a plan, and know what to do as we go along!" But also, "Inge, the effort to learn to become familiar with public transport, will create opportunities to travel, to go more often to your family, to go to the knitting club, etc.". In this way, the activity becomes meaningful for the AAWID, being a condition for doing efforts to learn and to use in the future what has been learned.

Besides these more objective meanings, Mediation of meaning also may include subjective meanings, like interests, aesthetics, traditions, etc. Also, meaning can be conveyed in a non-verbal way by expressions of evidence of value, importance, interesting, beauty, excitement, etc.

For an educator to assess the meaning quality of the learning situation, the next (non-exhaustive) set of reflective questions may be helpful.

Is the objective value of what is learned made explicit?

Is the subjective value made explicit?

And the functional significance?

How does the educator motivate the AAWID?

Is the outcome a personal meaning?

According to Feuerstein, the three universal strategies mentioned are *necessary* conditions for a successful learning process. The author names several other supporting strategies to be seen as *situation specific* interventions, referring to specific situations or related to specific conditions or challenges such as e.g. AAWID's characteristics. *Mediation of feelings of competence*, *mediation of regulation and control of behaviour* and *mediation of sharing behaviour* are the main supporting strategies. They refer to the effort of the educator to develop a positive estimation of self-efficacy, inhibition of impulsivity or strategies for cooperation and modelling.

5.3.2 Practical mediated learning experience (M.L.E.) strategies¹¹.

Teaching style - Bridging - Generalisation - Implementation.

Two important strategies to create a mediated learning experience, as described earlier, are the implementation of a metacognitive reflective teaching style and bridging technique. Both are elaborated below and offer suggestions for qualitative teaching. This quality is visible in the way the educator invites the AAWID to reflect on the way he or she will deal or has dealt with the task that has been presented. Particularly, the reflections are on the efforts done by the AAWID to acquire the concepts or skills and so, they focus on the thinking process that elaborates the content of the task. The suggestions presented are often abstract, and as they do not focus primarily on the content, they are not almost equal in whatever situation. Anyhow, the content of the reflections -the thinking processes- are the same as the skills that are necessary for the AAWID to transfer what he has learned. This implies that these educational strategies are as well improving the quality of the learning process as the potential of the AAWID to realise real transfer in all day life.

¹¹ Throughout this section some easy to grasp examples are provided: they mainly refer to the many topics that invite the trainee to make well considered choices regarding nutrition, finances, leisure activities, etc. Making considered choices is present in a lot of exercises on the TRIADE 2.0 MNAM platform.

5.3.2.1 A Mediatlional Teaching Style.

There are at several factors -not completely independent one of each other- that make a significant difference in the effectiveness of any training program: (1) the *content* being taught; (2) *individual differences* in the AAWIDs; (3) individual differences in the *educators*; (4) *methods and materials*; and (5) the *style of teaching/training*. It's not known exactly how much of the effectiveness of a training program is attributable to the curriculum itself and its materials (*what* is taught) versus how much is attributable to the characteristics of the educator (e.g. beliefs) or to the style of teaching (*how* it is taught). There is, however, general agreement that the teaching style has a significant effect on training outcomes.

A teaching style is concerned not only with what one teaches but primarily with how one teaches it. Every interaction between an educator and an AAWID has some potential for being a mediated interaction, that is, for being generalized beyond the content of the immediate situation. Whether or not a given interaction will be useful in promoting the learning process of the AAWIDs will depend upon the quality of that interaction (see 5.3.1.3. for necessary conditions). Based on the three universal strategies (5.3.1.3.), it is possible to describe a teaching or training *style* that illustrates the general way of interaction with the AAWID during the training, independent of the content. The main differences between mediated and non mediated interactions are visible in the educator confidence in the AAWIDs' ability to learn and in the process orientation. This means that the dialogue between educator and the AAWID is not focused on content -i.e. "not only..." as the AAWID has to acquire some knowledge too- but is mainly focused on generalizable processes of thinking and learning. This is especially clear when the AAWID is invited to use what he has learned in a future situation, or when he wants to learn from a previous experience. It will be important to be able to compare and find relationships between the past, and the actual or the future situation; this means that working on auto pilot is not efficient and requires problem identification, planning, monitoring, etc. important skills for generalisation and transfer.



A mediational training style can be summarized in 6 suggestions¹²:

1. The educators' interventions are not only content oriented, but also, and in particular, ***process oriented***.
2. The educator asks ***questions***.
3. Requiring ***justification***.
4. ***Cognitive modelling***.
5. ***Task-intrinsic*** motivation.
6. Support ***transfer*** and ***generalisation***.

¹² Based on and updated from Warnez, J. (2020)

1. The educators' interventions are not only content oriented, but also, and in particular, **process oriented**.

The learning content and the learning process are two sides of the same coin. The content refers to the concrete assignment, exercise, knowledge of the training session. The process refers to what has to be done to deal with the content (how you approach the task) and so, refers to cognitive functions, metacognitive actions and mental operations (comparing, deducing, make a representation, making a plan, check the outcome, looking for reasons for a failure, etc.). This process is the main focus of a mediational intervention and necessary for generalisation and transfer. To be clear, mediational interventions do not ignore other conditions for successful processing of a task, like motivation, self-efficacy, mindset, etc. For sure, content need to be taught also, being important and necessary, but only focusing on content will not be labelled as a mediational intervention. The reason for stressing on this 'process' and cognitive issue, is related to the beliefs of educators (and others) that AAWID may not be able to (learn to) think, solve problems or make transfers.

The way the educator includes this process orientation, is visible in his **how** or **why** questions and reflections, not in what or how much or how fast questions. A simple example may show the difference between a mediational and a non-mediational intervention for a same content/context¹³:

"Ilse, how many people are present in this (class)room?"

"Ilse, how can you find out how many people are present in this classroom?"

The educator may express his **appreciation** for what the AAWID is doing, but this appreciation will focus on the process. Not *'Oh, Joke, this was fast!'* or *'Good, Jose, the outcome is correct! Good job!'*, but rather : *'Victoria, nice to*

¹³ Appendix 3 includes a simple exercise for educators to see (or experience) the difference between mediational and non-mediational interventions.

*see that you made a good plan to solve this problem' or 'Ilse, good job, I saw you slowing down when the task became more difficult'. Appreciation is for how someone dealt with the task or the challenging situation. The appreciation is not a simple 'Good Job, Loes' but also includes **information** about what the educator observed regarding the process related efforts. This helps the AAWID to develop a 'cognitive' vocabulary that is fundamental for the AAWID to reflect on his or her efforts.*

A main strategy that illustrates this process orientation is inviting the AAWID to develop a habit of taking time to think before performing a task (**mental orientation**). This mental orientation is introduced by the educator when he/she invites the AAWID to think about the content and the process of what is at stake. *'What are you expected to do? What do you need for this? Is this new to you? Is it easy or challenging? Did you do such a task in the past? How can you solve this problem? What do you have to do first, and what next? What may be difficult and at what point may you make mistakes? How will you know that you are successful? etc.'* The educator asks this kind of questions to the AAWID, but the AAWID is expected to copy these kind of statements, and after a time to ask these questions to himself - automatically. This mechanism is extremely important as a metacognitive tool, that is, it helps to focus the AAWID's attention on his own thinking processes and encourages him to engage in similar *small conversations* with himself.

This mental orientation self talk contributes to the efficiency of the problem solving and in general to autonomy, as the AAWID is not depending anymore on the instructions and help of another. He has internalised this mental orientation.

To the same degree, **reflection** after a learning effort, solving a problem, etc. is significantly contributing to the learning process. The reflection is on how the AAWID did the task, what made him successful? What hindered him or caused difficulty: *"Maria, how did you solve the problem? Was it easy?*

Challenging? Is the outcome ok? Did you feel well while doing the tasks? How did you deal with the mistake? What can you do next time to do it successfully?, etc.” It is clear that this reflection is on the learning or thinking process, on the strategies used: these strategies are general (i.e. generalizable) principles or rules, being the real content of transfer. This rule helps to know what to do in future similar situations.

A very strong strategy is to always use this **cognitive structure**: whatever intervention from the side of the educator can be organized in such a way that there is a moment of mental orientation before, and a moment of reflection at the end. Also, each lesson or training session can be divided into three parts: at the beginning is a *planning time* important to draw the attention to “*Petya, what are we going to do today? What are we going to learn today? What did we do yesterday?*”, “*Tina, what we learned yesterday, how can this help us today?, etc.”*

At the end of the session, the *reflection* includes looking at the learning outcome (goals reached, difficulties experienced and successes found, feelings about all this, what kind of effort has been done, etc.) The main part of the training session -in terms of time spent- will be the activities that have been prepared, but they are preceded by a planning time and followed by a reflection. But during the activities, from time to time, an intermediate evaluation can be organised - “*Loes, Are we doing well? Are we proceeding? What is difficult? Do you think you will reach your (personal) goal?*”. These actions refer to *monitoring*. Planning time, monitoring and reflection, etc. are the basics of all problem solving strategies. Including these three parts and creating a habit of *always thinking before, checking during and reflecting after* the activity contributes to efficient problem solving.

2. The educator asks **questions**.

This suggestion is part of the previous one. It is made explicit here to stress on the importance of questioning. Questions invite to think, reflect, etc. Providing information is not enough to invite 'cognitive' behaviour: it is much more 'empowering' to ask questions than to tell or give information. Telling is ok for the mere transition of information, but is not enough to invite people to address their own potential. Besides, asking questions and questioning is an invitation to active involvement (see 5.3.1.3.a).

Limited verbal and/or communication skills are seen in many of our AAWIDs. Questioning therefore is for many of our AAWIDs seriously challenging. And yet it makes sense to question the AAWIDs, even when we do not expect a (verbal) reaction. It always invites -more or less- the AAWID to use his imagination, and to develop an (internal) set of words and concepts that may help him to think about ways to process information or solve problems. And, it is by no means wrong for the educator to provide the answers to the questions himself, or to invite the AAWID to give a non verbal answer (nodding the head or pointing or by whatever modality). It's up to the educator to *expand* the simple or incomplete answer and to check if he has understood what the AAWID wanted to communicate. 'Joyce, is this what you mean?'. It is very significant to reflect, with the AAWID, on how he approached a task. The educator may ask '*Delphine, how did you approach the task?*', but he also can name what he observed, e.g. he saw the AAWID working systematically, making use of a plan, or that he saw the AAWID comparing to look for any imperfections - followed by reflective questions such as: '*Evelyne, was this a good plan?*' or '*Did you work systematically?*'

3. Requiring *justification*.

To invite AAWIDs to think, learn or solve problems with full attention and to contribute to full insight in what is making a difference for efficient learning or thinking, it is important to (almost) continuously ask the AAWID for the *why*, the *reason* of a response or answer. *"Mieke, why do you think this is the right answer?"* Good mediational educators establish the habit of challenging both correct and incorrect responses. In this, challenging must be accompanied by the rule of accepting as much as possible of AAWID's responses (the "Yes, but..." mechanism). The educator might say, for example: *"Yes, Joyce, you are right, it could be that way. You could also look at it another way, and maybe find an even better answer."*

Too often, questioning happens only when something is wrong. However, it is important to ask questions also when something is right or correct. Habit formation in this is important. Challenging correct answers conditions the AAWIDs against the expectation that a challenge by the educator means that their answers are wrong. A response followed by a question does not necessarily refer to a mistake or failure. A "correct" challenge might be: *"Manuel, yes, that's right. How did you know that should be the answer? Why is this better than other one? What would be wrong with this one? Could you, Manuel, show me/tell me how you thought about that and found the right one?"*

Just as is the case that a AAWID can learn from mistakes (see next suggestion), the AAWID can learn from *reasons* of success. To reflect on the answer to the question *'Julian, how did you find the right answer?'* contributes to understanding and comprehension. The AAWID learns that his response is not based on coincidence, but the outcome of active, adequate, efficient efforts to apply good (cognitive) skills and attitudes. AAWID very often show evidences of (learned) helplessness and -too often- attribute successes to external conditions (the task to be completed was easy or the educator helped me) and attribute failure to themselves (I'm not good at this).

The suggestion to require justification of good responses is an antidote to the (learned) helplessness by linking successes to active efforts. And it contributes to a positive feeling of competence and intrinsic motivation.

When a training process is happening in a group setting, positive responses, right answers and efficient approaches contribute to a positive atmosphere. Good habits, efficient and adequate behaviour are observed by the other participants; observational learning may happen.

4. Cognitive **modelling**.

A mediational style is supported by an educator who shows (i.e. models) explicitly how he or she -with enthusiasm- solves problems, approaches tasks, deals with failure, inhibits impulsivity, talks to himself, reflects on what he is doing or did, mentally orients himself, etc. The AAWID not only shows, i.e. non-verbally, his/her mode of thinking or problem solving, but also makes explicit the self talk - what he is asking or saying to himself during these actions. By doing so, the AAWID sees and hears how the AAWID is dealing with problems, mistakes, successes, self-reinforcement, etc.

Besides being a model for the AAWIDs themselves whenever possible, the AAWID asks a *peer*, e.g. another AAWID in case there is a group session going on, to show (and verbalize) how he or she is dealing with the tasks. This is an important strategy, as everyone is -often unconsciously- more willing to learn from someone with who he can identify themselves.

Also, the willingness to learn from what is seen and heard, will not be very present when the model is a *mastery* model, i.e. someone who always performs tasks perfectly; it will be more present when the model is a coping model. A mastery model shows behaviour that - according to the AAWID - may be too difficult to acquire, while a coping model shows some imperfection and so, achievable behaviour.

5. *Task-intrinsic* motivation.

When mediation focuses on the process that leads to a result, and not on the result itself, it cannot use forms of reinforcement derived from Behaviouristic models (operant learning, punishing, ignoring, etc.). After all, the purpose of operant conditioning is to link reinforcement (e.g. reward) to desired behaviour, which means the outcome. For (classical) behaviourists, everything that takes place between a stimulus (S) and a response (R) is unobservable and therefore not possible to be influenced. Rewards, point systems, response cost systems, etc. (extrinsic reinforcement, as they come from outside) are in other words linked to thinking or problem solving outcomes. It is well known what are the limitations of these classical operant procedures: as soon as rewards disappear, so does the motivation to perform this 'desired' behaviour, and so, also the behaviour disappears. This is because the source of the motivation lies outside the individual. Generalisation and transfer are also challenging points in this operant approach.

Although largely subject to purely theoretical discussions, a cognitive approach proposes to promote task-intrinsic motivation. The source of this motivation is to be found in the task and/or in the person, such as the challenging nature of the task, the person's openness to challenge, or the feeling of competence. The examples of (task-) intrinsic rewards below show that extrinsic and intrinsic reinforcement cannot be purely separated.

- *Intra-individual* evaluation and praise

Inter-individual evaluation is evaluation of progress or performances compared with the performances of others. Intra-individual evaluation happens when the achievements of a AAWID are compared with his/her own previous achievements. By opting for the intra-individual evaluation, the feeling of changeability and being able to learn more or do things more independently are reinforced. In this mediational style, for sure, it will -as much as possible the process dimension that will be intra-individually evaluated.

'Elena, you managed to take into account more elements at the same time than last time when we were practicing this'.

- Social rewards

Since e.g. materialistic or activity-related rewards draw the attention on the reward following the outcome, and not on the learning, thinking or problem-solving process preceding the outcome, social rewards such as a pat on the shoulder, a wink, etc. are chosen more often to praise the ongoing effort. Also here, to be mediational, the AAWID is consequently informed about what he is rewarded for, giving particular attention to the effort and the process that is leading or has led to an outcome.

- Self-reinforcement

Research (albeit from a cognitive-behavioural perspective) indicates that self-reinforcement (such as rewarding yourself by telling yourself that you did a good job "Yay! I did it!") is much more powerful than any external reinforcement. For sure, self-reinforcement must be based on proper self-evaluation, and this has to be taught.

- Intrinsic rewards

There are few known examples of purely intrinsic kinds of reward. The most frequently mentioned is the reward where the successful performance of a task or assignment is rewarded with a more difficult or complex task. Here the openness to challenges is both nurtured and addressed. Intrinsic motivation manifests itself in taking risks, accepting challenges, finding pleasure in solving problems, and so on. *'Victoria, you were successful in travelling by bus to your sister's place; you had to take one bus to arrive at your destination. I am pretty sure that you will be successful also when you travel to your boyfriend's place, Jose, although you will need to change the bus once.'*

6. Support **transfer** and **generalisation**.

This refers to one of the main strategies that defines a mediational intervention, i.e. transcendence. New experiences, skills are linked to contexts different from the learning context (other environment, different level of novelty, etc.). It is important to support the AAWID during their attempts to apply skills in different situations, especially by creating a safe environment (*‘Let’s try, Delphine, we both know you can do it, and no problem if things may not go well, we are here to find out how to deal with it...’*), to create ‘try outs’ within the zone of proximal development and by giving as much as possible feedback and inviting for reflection. As long as necessary, the educator (or the professional who supports the AAWID in everyday working or living context) guides the AAWID through the steps of the mental orientation (see suggestion 1) by asking process (and content) related questions. *“Evelyne, you have learned how to prepare for shopping during the training, and now you want to go to the bakery and the pharmacy. Let’s think together how, etc.”*

Many cognitive psychologists suggest to prepare for transfer at the time of the training, by inviting the AAWID to *imagine* situations or times where what is learned may be applied. The educator creates ‘imaginary bridges’. This is not easy, and it may take a time, but it is found that also AAWID can develop this way of thinking about and imagine future contexts. Too often, professionals assume that the AAWID are not able to do this... although, they do believe that these people are able to dream and fantasise... Section 5.3.2.2. elaborates the bridging technique.

To summarize the *mediational training style*.

There are many specific ways to mediate and these ways are related to the own personality of the educator and to the feedback someone gets from the AAWID to regulate the behaviour and to select mediational strategies. As an illustration, and not as a list of statements that has to be memorized -and so, with some hesitation...-, the following list is a sample of statements often heard while a educator is training in a mediational way:

Ilse, what do you need to do next?

Joyce, tell me how you did that.

Joke, what do you think would happen if ____?

Evelyne, when have you done something like this before?

Delphine, how do you feel if _____ ?

Sigrid, yes, that's right, but how did you know it was right?

Maria, when is another time you need to ____ ?

Petya, stop and look carefully at what you're doing.

Jose, what do you think the problem is?

Tina, can you think of another way we could do this?

Manuel, why is this one better than that one?

Johan, where have you done that before to help you solve this problem?

Tina, let's make a plan so we don't miss anything.

Elena, how can you find out?

Julian, how is _____ different (like) _____?

5.3.2.2. Bridging.

Bridging is the process whereby educators encourage AAWIDs to think of different applications of the thinking processes and strategies they have been using and discussing. Content may also be bridged, but in order to support the transfer of what has been learned, the way something has been approached is more important as it contributes to learning to transfer. Whenever you want to (or have to) use something that had been acquired earlier, the AAWID will not come to a point to use this in the new situation, when thinking processes are not activated: "What do I have to do here? What do I know that can be useful/necessary in this situation? Is this situation equal to the one I experienced before?". Transfer relies on thinking processes related to (b.o.) comparing, looking for all kind of relationships, recall strategies, predict the outcome, making choices, etc.

Bridging is a concept that is used by Feuerstein (b.o. 2010) as a part of the mediational teaching style. In Feuerstein's usage, the notion is that it is important to "set" the understanding and application of cognitive functions and strategies in diverse contexts. It is possible to do some of that symbolically: by imagining and talking about different applications of cognitive rules, principles and strategies rather than by actually having to do the application. As human beings are capable of representational thought, actual trying out of thinking principles in varied real situations is not completely necessary; we can "try out" applications symbolically, by imagining them and by discussing them. This is *bridging*. In Feuerstein's terms, then, the bridging activity is primarily discussion, with nominations of situations and contexts in which cognitive principles are applied, being elicited from the AAWID whenever possible rather than being suggested by the educator. From our experience, adults with an intellectual disability are very able to learn to bridge, but guided practice in real situation also is important as the educator, or the professional who is supporting the AAWID, can create the necessary safe environment for experimentation and learning from mistakes.

How to apply the bridging technique?

Bridging takes place after the AAWID has completed a task, and involves asking two 'big' questions. The first question '*how did you do that?*' is to focus the AAWIDs attention on the process, the skills and general principles used during the task. The second '*when or where could you use those principles?*' is used to encourage the AAWID to see the widest possible application of the principles.

a. How did you do that?

The AAWID is encouraged to tell how he or she approached the tasks, what he took into account, etc. The educator helps the AAWID to express this in the most general possible way, or formulates the general idea. The AAWID are asked to explain why these principles, processes or strategies work, and why they are important. The educator may name this for the AAWID, but as much as possible, the educator will encourage the AAWID to name these processes, the steps of the strategy... themselves. It is important that the AAWID uses his/her own words, as the 'own' words reflect the level of abstraction or complexity the AAWID can deal with.

To elicit the answers from the AAWID, the educator will use the Socratic questioning technique to 'discover' the processes, skills and strategies; in fact, this is metacognitive reflection. This may be time consuming, but if there is a need for the AAWID to learn to transfer, it will be necessary to take that time. The goal is to build the learning on the AAWID's experience, and build on the AAWID's present skills which are often unconscious processes. The analogy of a computer or software is useful here: we don't want to install a new application, we want to update the old one. If a new and an old application exist together on the same machine, then the machine may default to the old one even though the new one is better. Because skills are often unconscious, AAWID often default to their old way of doing things, especially when distracted by stress, excitement or other factors.

b. *“When or where could you use those principles/processes/strategies/approaches?”*

The educator encourages the AAWID to think of/in? Applications in the widest and most general possible way. When first asked this question AAWID usually answer ‘the next time that I have to do this task, I’ll do it just like we described’, but the educator can use again Socratic questioning to help the AAWID see much wider applications.

The following principles should govern the use of bridging as a mediating mechanism:

- ‘Bridges’ should be elicited from the AAWID, not told to them (although some "cueing" is often necessary).
- ‘Bridges’ should be to events and circumstances that are familiar to the AAWID.
- ‘Bridging examples’ should be simple and straightforward, not complex and logically tortured.
- ‘Bridging examples’ should be elicited in several domains of experience, especially other living contexts, home situations, employment, or peer group interactions.

5.3.2.3. Practical case: reflections on how these suggestions can be used in the UNIT 4 of the TRIADE 2.0 MNAM Platform.

The exercises on the nutrition pyramid (unit 4) may be a good starting point for expanding the process of making choices, as this process is not only at stake during many exercises of the platform (finances, retirement plan,



physical activities, etc.), but is addressed very often and almost continuously in different contexts and domains of life. Equip a AAWID with this competence of making choices autonomously will have an impact on his Quality of Life, as it will give the AAWID a tool to be less dependent of (the preferences and influences of) someone else. It is a complex skill, with different stages, but -as it was explained in the section of the cognitive map- it must not be difficult... The content or the level of novelty and complexity of the task may facilitate or hinder the autonomous making choices. Already very young children show evidence of making choices successfully: give them the opportunity to choose one piece of cake, offering several pieces, small and big ones. What may be the outcome? Yes... right! Very young children may not be able yet, to describe the steps of the strategy or what they have taken into account to make the choice, but they do apply the strategy.

When making the exercise on healthy food (unit 4), exactly the same strategy needs to be applied. The problem definition will not be the same, but a problem definition, including a personal goal will be and needs to be defined. A young child will include less content than an ageing person. Taking the biggest piece and eat it, is the personal goal, without any urge for taking into account health issues, while for an ageing person, there may be health issues at stake, and so the personal goal may be different. It is clear that content and knowledge is important: knowledge of

the personal health needs and challenges, and knowledge on healthy food, for now and for the future must be present. And there is the issue of motivation... This makes things more complex, as many more critical criteria for making the right choice(s) are at stake.

After setting a goal, different alternatives need to be contrasted against each other. The outcome will bring the person to make a choice. Making a choice between two alternatives may be, but not necessarily, easier, depending on novelty or risks that are allowed to take. The chosen alternative will be applied - for some people by representation, for others by applying concretely. Later, the outcome will be evaluated.

In fact, this strategy is an application of a general problem solving strategy - problem definition, alternatives, planning, monitoring while doing, evaluation. This is a heuristic and so, maybe... will not have the desired outcome. If you have in mind to travel to your friends home, you can make a choice between a bus, a taxi, your mother having a car and willing to drive, etc., but, it is uncertain if the alternatives are available. It may be that you make a choice for taking the bus, but... on Sunday there is no bus driving to your friends city. A new choice, with again uncertainty, must be made. Flexibility, perseverance, monitoring, etc., are all part of the strategy.

The context of the nutrition exercise has the potential for the metacognitive reflection, guided by the educator. It may be clear that the exercise is taking into account the 'cognitive' needs of the AAWID (see parameters of the cognitive map and the concept of Zone of Proximal Development). Also, this part of the training must be relevant and significant for the AAWID, to have potential for 'meaning' and 'reciprocity' (see 5.3.1.3.). The mediating educator will invite to reflect on how choices are made, not only for classifying the different food as is the case in exercise 4.2, but also for contrasting against the personal needs, preferences and challenges. Although not described in the template, to mediate meaning and to invite the AAWID to do effort, this personal meaning must be established. This

personal meaning is the vehicle for finding situations that have the potential for the AAWID to apply representationally what has been learned. To make it as concrete as possible, you may invite the AAWID to think about breakfast (and healthy options), inviting friends for lunch, going to the supermarket or making a shopping list. This representational activity is not the same as generalisation (see 5.3.2.4.) as this happens concretely. Leaving the context of nutrition, there may be situations for making choices and contributing to health - as is the case for physical activities. And even 'further' bridges of making choices can be illustrated in completely non-food or non-health related contexts: housekeeping activities, professional or volunteer activities, friendship, etc. A link to other exercises of the TRIADE 2.0 - MNAM Platform may make things easier, as in some way more concrete for the AAWID. Big issues as a retirement plan, and smaller topics as finances and spending money have the potential to link and bridge. A most important thing is to invite (or to present) situations that unconditionally are meaningful for the AAWID.

5.3.2.4. Generalisation.

From our point of view, bridging must be seen as the main technique to foster transfer. For obvious reasons, it may not be possible (yet!) to address the representational level of the AAWID. The point here is: the higher level of abstraction the more applicable and useful the principle.

Although a *mediating* educator will always prefer this strategy, it is important to work into the zone of proximal development and to find intermediate steps to work towards transfer on the representational bridging level.

A simple adaptation of the real bridging technique, is not to look 'into the future' (representing situations that not happened yet), but to look back 'to the past', by asking for and explaining situations where the AAWID already tried out the principles, processes or approaches, or where they could have used these principles, or where they observed someone applying the principle. Although this is also making a bridge on representational level, the AAWID can rely on experiences that happened in real life. Asking for *'Ilse, do you remember when you had to make choices last week? Earlier this week? This morning? or less general 'Joyce, do you remember this morning during breakfast, together we talked about how to spend this free day, and we had to make choices; do you remember how we dealt with it?'* For both directions - future or past - it may be difficult for the AAWID to name or explain bridging situations. The mediating educator may make use of what he knows about the AAWID's life or work, to name *himself* past or future situations and to explain *himself* the application of the principles, as long as they are relevant and meaningful for the AAWID. He can present a situation and expect the AAWID to complete the bridging and explain how things can be applied. Or, the educator can present a situation and also describe how what is at stake can be applied. The presented situation may refer to past experiences or may be hypothetical situation that may happen in the future.

All this refers to (real, far) transfer. Very often, it will be necessary to support generalisation (often referred as ‘near’ transfer). Some authors see this as a prerequisite and necessary step (e.g. Perkins & Solomon, 1992). As explained earlier, generalisation is application of a principle or an approach to (very) similar tasks or contexts, but always within the same content domain. This generalisation always is supported by practice and rehearsal, i.e. automatisisation of skills. The educator will make use of his knowledge on the zone of proximal development of the AAWID, to plan exercises that become progressively more difficult: the different parameters of the cognitive map may be helpful in this (see 5.3.1.2.b.). It is found that extensive and varied exercises within a same content domain are very important for people with learning challenges. The challenge here is that the skills may be executed blindly, without a mental orientation (see 5.3.1.2.a.) or without noticing or looking for differences in the task that may require cognitive flexibility and so, adaptation of the approach or strategy. Therefore, establishing the ‘attitude’ of mental orientation and reflection is critical. And a mediating educator is hesitating to challenge AAWIDs, by changing things without announcement or by making mistakes consciously. Role playing within the safe training context may be helpful to make the bridge to the (less safe) real life context.

5.3.2.5. Applying what has been learned.

And so... the AAWID may be ready for next step: applying what has been learned in real life. Many conditions from as well the AAWID as from the (social) environment will have an impact on successful application.

The AAWID must be eager, feel at ease in safe environment, not experiencing high levels of stress, be self-confident, accepting mistakes, etc.

The professionals, supporting the AAWID during the day, have to know what the AAWID has learned, what he already masters (and what needs more assistance). Communication between the educator and the professional is important. Also important: the professional -presuming competence- may show an 'inviting' attitude and make his expectations explicit by communicating what he/she expects from the AAWID (creating a positive stress by challenging the AAWID without any competition) and what the AAWID can expect from him/her (the AAWID can count on the professional). And why not making use of a diary, to 'collect' successes...

The professional avoids extrinsic motivations, as rewards, contingency systems, etc., but focuses on intrinsic motivations (see 5.3.2.1.5. Task intrinsic motivation). Very exceptionally, i.e. to find a starting point or to create a first initiative from the side of the AAWID to try out what he has learned, extrinsic rewards can be considered, but have to be removed as soon as possible, to avoid that the AAWID is doing what he has learned 'just because of the reward'. Task intrinsic motivation will guarantee better future, independent performance, i.e. transfer.

As (cognitive and practical) skills may be complex, tools to support the (working) memory or the application of a multi-step strategy can be useful. We all use -very often- this kind of tools: an agenda to remember our appointments, a cookbook with recipes and visualisations, etc. Visual tools may be as well on content (a set of pictures of leisure activities available in the neighbourhood), on specific strategies (to prepare a cake) but also on 'general' strategies as a problem solving strategy.

Examples of these general strategies are found in tools with pictograms, drawings or 'traffic lights', always intended to help the AAWID to 'stop and think', to plan, to 'do' and to evaluate.

To conclude

This document is written from a presuming competence belief... let's try and do the right things, and we will see where we arrive... we do not say 'the sky is the limit'... We recognize that full transfer is not for all, but we believe that all can become more competent in transferring what has been learned.

Training for transfer is a challenge, for the educator and for the AAWID. It requires a lot of insight in information processing, problem solving, taking initiative, etc. It is observed that these skills are too often not expected in AAWID, although cognitive training methodologies are available. It is true that these methodologies are not easy to apply in AAWID... due to the cognitive deficiencies in people with AAWID. To successfully implement the TRIADE 2.0 - MNAM Platform, and to contribute to the use of learned skills in future situations, educators should have to be trained in these methodologies. In the meantime, it may be very helpful to add to the 'My new inclusive job' MOOC a section with case studies, try outs, reports, recordings of how the suggestions to promote transfer are used. I am appealing for these illustrations to be collected and gradually added to the platform.

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SECTION 6. Validation tools

ANNEX 1.

MERS (MNAM Exercise Rating Scale)

MERS: MNAM Exercises Rating Scale

Name of partner who is evaluating the exercise:

NUMBER OF UNIT:

Please select the answer by **changing the colour**.

PART I: THE TEMPLATE

UNIT TEMPLATE	1	2	3	4	5
Introduction					
Clear link with the QoL factor and subdomains	Missing	Poorly	Moderate	Good	Very good
Linked with Learning outcomes	Missing	Poorly	Moderate	Good	Very good
Formulation	Missing	Poorly	Moderate	Good	Very good
Comments for amelioration					
Learning outcomes					
Relation to QoL factor and domains	Missing	Poorly	Moderate	Good	Very good
Formulation	Missing	Poorly	Moderate	Good	Very good
Logical sequence (know, insight, doing)	Missing	Poorly	Moderate	Good	Very good
Comments for amelioration					

Instructions for trainers					
Explaining link with QoL factor and domains	Missing	Poorly	Moderate	Good	Very good
Learning outcomes	Missing	Poorly	Moderate	Good	Very good
Clear instructions on how to perform and support the exercises	Missing	Poorly	Moderate	Good	Very good
Comments for amelioration					

PART II: THE EXERCISES

EXERCISE NUMBER: _____	1	2	3	4	5
Exercise starts with an explanation or a case (story, film, ...)	No	Yes	5.		
The case is appealing and recognisable for ageing adults (AAWID might identify with the case)	Missing	Poorly	Moderately	Good	Very good
If needed, exercises are broken down into smaller activities	No	Yes	6.		
Film materials can be subtitled in partner's own languages	No	Yes	7.		
Instructions for trainers are clear and easy to use	Missing	Poorly	Moderately	Good	Very good
Comments for amelioration					



A. Engagement					
Interesting for AAWID	Not interesting	Mostly uninteresting	Neither interesting or uninteresting	Moderately interesting	Very interesting
Customization/adaptation to AAWID support needs	Does not allow customization	Allows little customization	Basic customization to function	Allows numerous customization	Allows complete tailoring
Demands interactivity of AAWID	No interactive features	Insufficient number of interactive features	Basic interactive features	Offers a variety of interactive features	High level of responsiveness
Appropriate for AAWID	Completely inappropriate	Somewhat inappropriate	Acceptable; may be inappropriate	Minor issues	Specific, no issues
Comments and suggestions for amelioration					



B. Functionality worksheets AAWID				
Contains only essential information	Never ok	Sometimes ok	Ok	
Text is short and straight forward	Never ok	Sometimes ok	Ok	
Text is spaced not cluttered	Never ok	Sometimes ok	Ok	
Use of pictures or pictograms	Never ok	Sometimes ok	ok	
If never or sometimes ok, write the page number + give feedback on how to ameliorate, give good examples.				



C. Aesthetics					
Layout	Very bad design	Bad design, random	Satisfactory	Mostly clear	Professional
Graphics	Amateur	Low quality, resolution	Moderate quality	High quality	Very high quality
Visual appeal	Ugly, unpleasant	Bad, boring	Okay, average	Pleasant	Beautiful
Comments and suggestions for amelioration					



D. Information					
Quality of information	Irrelevant, inappropriate, incorrect	Poor	Moderately relevant, appears correct	Relevant	Highly relevant, correct
Quantity of information	Minimal	Insufficient	Okay, not comprehensive	Broad range, some gaps	Appropriate, correct
Visual information (visualisations)	Completely unclear, confusing	Mostly unclear	Okay, but often unclear	Mostly clear	Perfectly clear
Comments and suggestions for amelioration					

Overall evaluation					
The exercise and/or sub-activities enable AAWID to reach the learning outcomes	Minimal	Insufficient	Moderately	Broad range, some gaps	completely



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ANNEX 2.

QOL-AAWID – interview with AAWID about QOL

Validation questionnaire 1

QOL-AAWID

This questionnaire has been developed to have an open interview on the '**Quality of Life with Ageing Adults with Intellectual Disabilities**' (QOL – AAWID). The interview questionnaire comprises the eight QoL domains developed by Schalock and Verdugo¹ and an extra domain on existentialism/spirituality.

Each QoL domain consists of topics and some example questions that are specific for ageing adults. The information retrieved from this interview should be written down in the boxes. Especially the info on the questions that are within the boxes are important to be registered. Based on this information, help the participant to answer the final two questions for each domain.

This interview will give you an idea on what is important for your ageing client. It will also give you an indication of your client's knowledge gaps or missing skills. This will help you to decide which exercises on the MNAM – digital learning platform might be best suited for your client at this time.

When doing the interview keep in mind the following guidelines

1. Make sure the conversation takes place in a room that is comfortable and ensure privacy and confidentiality. The actual conversation about life domains should occur after you have spent a little time 'getting to know one another.' This pre-conversation time can be used to talk about topics (e.g. the person's hobbies, or family life) that are of interest to the person. Tell something about yourself as well. This will create an open atmosphere that leads to more confidentiality.
2. A family member, or another person that knows the AAWID well, can be present during the conversations to assist in clarifying certain issues. If this is the case, this person's input should focus on giving examples and helping clarify the question, NOT to answer for the AAWID. In addition, during the conversation, you should have a

direct line of sight to the individual so that you can focus on the individual during the conversation.

3. Make sure you communicate clearly about the goal or purpose of the conversation and assure him/her that the conversation is not a test. In essence the clarification phase is to ameliorate the QoL of the person, taking into account his/her own priorities. However, it is better to explain everything from the beginning, so also the process of planning and evaluating.

→ In layman's terms, the conversation is about the process of ageing, in which he/she explains his/her wishes for the future. Concrete exercises will be put forward in order to work towards those wishes for the future.

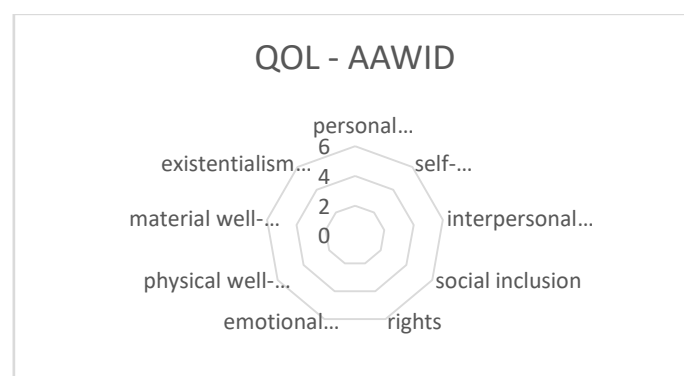
4. If an item is difficult or the respondent does not provide an answer, the best procedure is to go come back at it later and ask about the question again.

5. Do not hesitate to confirm the answers with additional probes, especially when you're not sure an accurate answer is given.

6. There is a 3-point scale (1 = never; 2 = sometimes; 3 = always) formed by two questions in the last box of each domain. To be sure that this scale is well understood, you can use the following example, or use emoticons or other tools you usually use to support the client in making a choice.



Once you have answered the scales, you can make the sum of each of them for each domain and have a representation of the outcome scores by domain by using the spider diagram in page 20.



7. If the individual either finds the conversation stressful or asks to leave, then the best procedure is to give the individual a rest period or come back later.
8. Make every effort to keep your language clear and simple, and check often to see whether the person understands what you're saying. Be patient.

Tips

- ✓ *Use terms that your client understand. What to do if the person has different interpretations about certain concepts. For instance, the concept of money. A person can have a positive experience about his finances but in reality he is in debt. It is important to realize that there are no right or wrong answers when assessing the QoL of a person.*
- ✓ *If a person is unwilling to talk about a specific subject, even in the presence of a proxy, respect his/her wish to privacy.*
- ✓ *Take note of all important information and let the person see what you are writing down. If possible, and only with the approval of the person, record the conversation (tape recorder or video recorder).*

1. Personal development

“The opportunity to freely engage in intrinsically meaningful activities of one’s own choosing”

Hobbies/leisure activities

- What do you do during your leisure time? How often do you do this? Do you like doing these activities? Do you have other hobbies you can tell me about?



Do you like the things you are doing during your leisure time? Do you feel like you are doing these activities too often or not often enough? Would you like to do or learn other activities? What are your dream and hopes? Do you sometimes dream of doing an activity you have never tried before?

Write down the answers of AAWID here:

Work/daily activities:

- Are you still working or doing other activities during the day? How often? Do you like it?
- Are you satisfied with the level and intensity of the work/activities? Do you feel like you have no time left to relax or too much time to relax?

Would you like to stop or cut down on your current work activities or day activities? Do you have an idea about other work activities or day activities you would like to do? What are your dreams and hopes?

Answers:



Do you know what retirement is? Can you give an example? Are you retired from work or your day activities or are you thinking about retirement? Would you like to talk about it some more?

Answers:

During the last year ...

I had the opportunity to do the activities I liked to do (work, hobbies, etc.) and to achieve new things when I wanted to.

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) about the level and intensity of my work/activities and about (new) things I achieve in life.

Never (1)

Sometimes (2)

Always (3)

2. Self-determination

“Personal control, planning and goals. Making every day decisions and making choices”



Daily life choices

- Are you free to make your own choices about
 - how you decorate your house/room?
 - what, where and when to eat?
 - when to wake up or go to bed?
 - who you invite?

Would you like to change things? Make more choices of your own? Explain.

Choices about the future:

- Do you make your own decisions about
 - where you want to live (ageing in place or move to another place?)
 - what activities you want to do or not to do?

What are your desires for the future?

Respect for own choices:

Do you feel that people around you (family, care-takers, friends) respect all your choices?



During the last year ...

I felt in control of my own life, I could decide how I want to live my life.

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) with the level of control I have over my life.

Never (1)

Sometimes (2)

Always (3)

3. Interpersonal relationships

“Personal relations with family, friends, people from the social network and the support they give”



Family

- Can you tell me a little about your family?
- Where does your family live in relation to you?
- How often do you have contact with family members (visit, call, chat, etc.).
- Did you lose contact with some family members over the years?

Are you happy about how often you see your family or would you like to have more contact (or re-connect) with family members that are important to you?

Friends

- How many good friends do you have? (ask to explain what is a ‘good’ friend)
- How often do you have contact with your friends (visit, call, chat, etc.).
- Did you lose contact with some friends over the years?

Are you happy about how often you see your friends or would you like to have more contact (or reconnect) with friends (or a friend) that are important to you?

Professional support network

- Who are your support workers?
- Do you have a good contact with your support workers?
- Are there any support workers you really like but with whom you lost contact over the years?

Are you happy about how often you see these support workers? Would you like to have more contact with one or more of the support workers we talked about?



During the last year ...

I felt I have a good contact with family, friends, or support worker(s), who support me when I need it.

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) about the intensity of my relationship with my family, friends, or support worker(s)

Never (1)

Sometimes (2)

Always (3)

4. Social Inclusion

“The level of integration and participation in the community, the role you play in this community and the support you receive”



Social contacts

- Do you have contact with people from your neighbourhood or with other community members (non-residential)?

Would you like to have more contact?

Participating in social activities

- Do you engage in leisure activities in mainstream community organisations, i.e. retirement clubs, sports clubs, etc.
- How often do you go to a bar, restaurant, cinema, shops, music event, etc. in the city?
- How many times do you do activities (recreational) together with others (non-resident) from the mainstream community?

Would you like to do more activities within the community?

Social roles:

Do you sometimes help others (i.e. (non-residential) neighbours, friends, etc.) when they need your help?

Are you working as a volunteer somewhere?

Would you like to help out people in your neighbourhood by doing little things for them?
Or would you like to be a volunteer?



During the last year ...

I lived a socially inclusive life (had contact with people , I did regular activities in the community, etc.).

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) about my social life as it is right now.

Never (1)

Sometimes (2)

Always (3)

5. Rights

“Human rights (respect, dignity and equality) and concrete rights (citizenship, accessibility, equal treatment, etc.)”



Human rights

- Do you have the feeling that people always treat you with respect and dignity?
- Do you feel that sometimes your rights are being violated?
- Do you feel you have the right to privacy? (physically & spatially)

Do you know what your rights are?

Other important rights:

- Do people tell you all information about you or your life (e.g. results from a doctor's examination, what to do when you get older, etc.)
- Are you involved in or informed about retirement options and end-of-life choices?

Would you like more information about these things?

During the last year...

I felt I was treated with respect and dignity by others.

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) about the way I am treated by others (respectful and giving information)

Never (1)

Sometimes (2)

Always (3)



6. Emotional well-being

“Being satisfied, self-esteem, not being stressed, mental health”



Being satisfied

- Are you a happy person (not sad or depressed)?
- When you wake up in the morning, do you feel happy (despite possible health problems)?
- Are you happy with yourself and with what you have done in your life up until now?

What would make you (even) more happy right now?

Safety

- Does your environment make you feel safe? (i.e. no irritating noises, people entering the room without permission, violence, etc.)
- Who are the people you can trust and rely on when things are difficult? Who do you talk to?
- Do you worry about the past or the future? (negative past experiences, what after retirement, where should I live when I grow older, what will happen with me when my parents die, etc.)

What would make you feel (even) more safe?

Loneliness:

Do you feel lonely sometimes?



During the last year ...

I felt safe, relaxed and happy with myself and with my life.

Never (1)

Sometimes (2)

Always (3)

Overall, I am happy (satisfied) with myself and with how my life is going.

Never (1)

Sometimes (2)

Always (3)



7. Physical well-being

“Health and health care issues, mobility, ability to take care of oneself.”

Overall health

- How would you describe your overall health? Are you healthy enough to get out and about?
- Does your health restrict you from looking after yourself? (mobility, hearing, visual, tasting, etc.)
- How often do you experience pain or how often are you sick?
- Do you have to take medications?



What would you like to change about your health if it would be possible?

Physical health

- Do you have enough time to rest or to relax?
- Are you able to take care of yourself (bathing, clothing, eating, etc.).
- What physical exercise do you do?

Do you know how to take on a healthy lifestyle when you grow older?

Healthy food:

Do you eat healthy foods? (what are healthy foods?)

Do you have to be on a diet?

Do you know how to make a menu with healthy food for the day?



During the last year ...

I felt energetic and healthy, I took on a healthy lifestyle (did some exercise, sports or work-out, ate healthy food, etc.).

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) about my health and physical well-being.

Never (1)

Sometimes (2)

Always (3)



8. Material Well-being

“Financial resources, accommodation, belongings, etc.”



Financial means

- Do you have an idea about the money you have?
- Do you handle yourself your money?
- Can you buy all life essential things? (e.g. food, drinks, clothes, etc.)
- Can you do recreational things with your money (going to a movie, a daytrip, a restaurant, etc.)

Do you worry about your financial means? Do you have sufficient money to retire? Do you know how much income you have and how many expenses you have?

Accommodation

- Do your finances allow you to live where you want to live?
- Do you have enough resources to pay for the care and support that you need?

If you would have the money, would you like to live elsewhere? Would you dream of having other care or support services?

Belongings

- Can you afford to buy nice things? Things you like to have (e.g. smartphone, TV, books, etc.)

Do you have all the belongings you want to have?



During the last year ...

I was able to buy and pay for all the things I needed.

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) about the things I have, the money I have and the things I own.

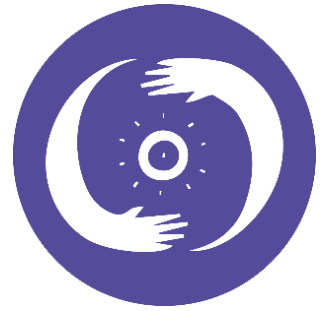
Never (1)

Sometimes (2)

Always (3)

9. Spiritual/existential well-being

“Religion, spirituality, existential questions”



Religion/spirituality

- Are you a religious or spiritual person?
- How do you celebrate your religion/spirituality? (holidays, church going, etc.)
- Do you feel your religion gives you meaning to your life?

Do you feel the need to talk more about your religion/spirituality with other people? Do you want to do more activities or experience more things that are related to your religion/spirituality?

Existential questions

- Do you think about ageing? About who you would like to be when you grow older?
- Do you think about what happens when people die (or when you get really sick)?
- Are you afraid of dying? Do you sometimes think about it?

Have you thought about other existential questions?

During the last year ...

I felt supported in experiencing my religion/spirituality and I was able to talk to someone about different existential questions.

Never (1)

Sometimes (2)

Always (3)

I am happy (satisfied) with how I experience my religious/spiritual and existential well-being.

Never (1)

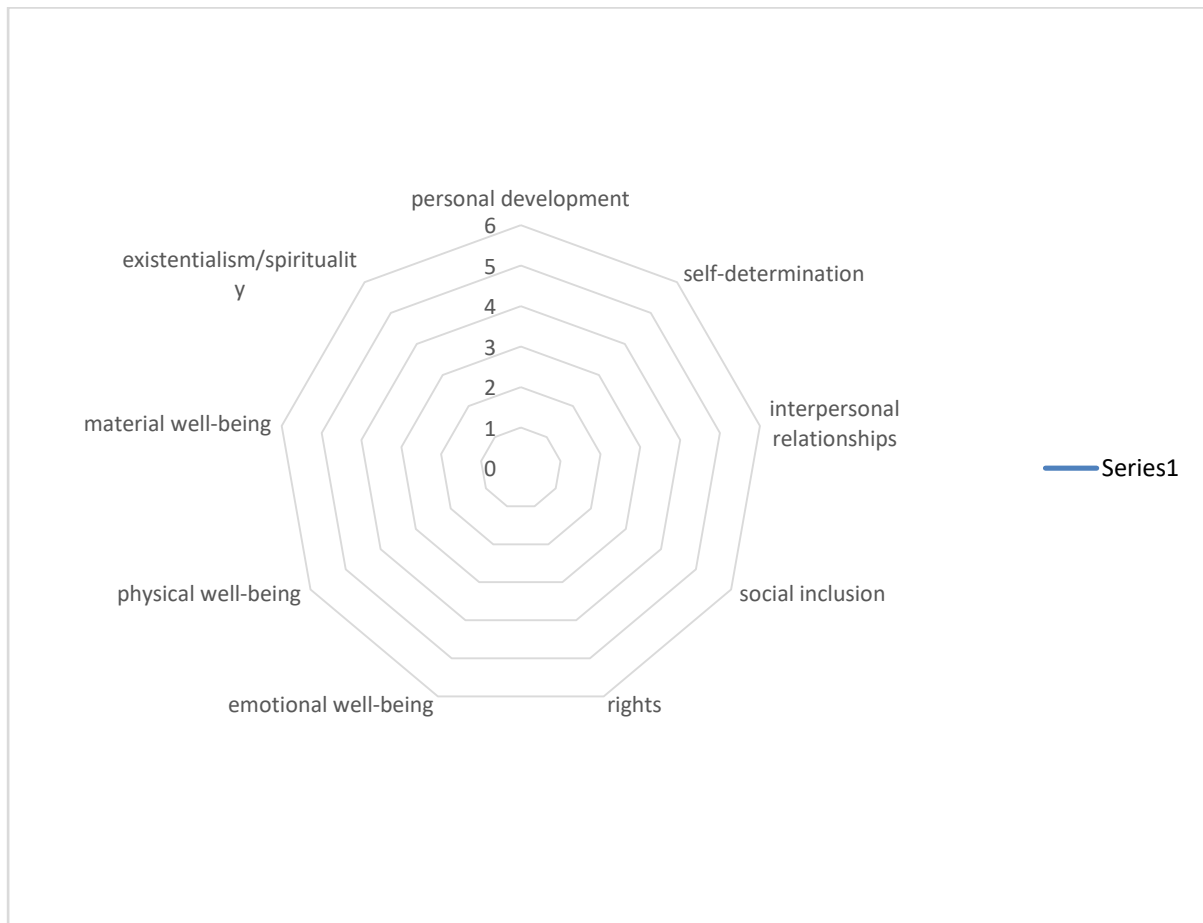
Sometimes (2)

Always



Outcome scores per QoL domain on a SPIDER DIAGRAM

Make the sum of the two scales for each domain to have an indication about the QoL.





ANNEX 3.

Pre- and post-assessment of the knowledge and skills of AAWID

Validation questionnaire 2

Pre- and post-assessment of the knowledge and skills of AAWID

The objective of this questionnaire is to assess to what extent the exercises, published on the TRIADE 2.0 MNAM digital platform, support the training process and social learning of AAWID. More concretely, whether these exercises improve their knowledge and skills on aspects specifically related to the domains of Quality of Life for AAWID.

INSTRUCTIONS

This questionnaire has two be filled in by the trainer for each client. We ask you to:

1. Select the exercises (from the MNAM e-learning platform) that focus on the training needs of your client.
2. Do a pre- and post-assessment of the knowledge and skills of the client (only for the exercises you selected)

To capture changes in knowledge and skills, we ask you to complete this second questionnaire before and after carrying out the exercises.

1. General information about the client

- Initials or code of the client:.....
- Age:.....
- Gender: Male/female

2. General information of the trainer

- Initials or name of the trainer:.....
- Age:
- Gender: Male/female
- Profession:
- Number of years of working with AAWID:
- Country:.....

Here you have a list of the 14 Unit exercises that are published on the MNAM digital platform. Select those exercises that you will use to train your client during the TRIADE 2.0 pilot-study?

Unit	select	Exercises
1.		
		1.1. Moving to another place
		1.2. What should we take into account when deciding where we will live when we are older?
		1.3. What are the advantages of each of the different residential options?
		1.4. Which residential option suits my interests and needs best? (My future residence).
		1.5. Adapting the home. What is the best option.
2.		
		2.1. Difficulties in the activities of the daily living.
		2.2. Adapted environments.
		2.3. My support products (walker, hearing aid,...)
		2.4. Helping Maria to choose her support products.
		2.5. Matching assistive technology with its usefulness.
		2.6. True/False questions about adaptation, support products and assistive technology.
3.		
		3.1. What new needs older people have?
		3.2. What concerns me about money?
		3.3. Identify my income
		3.4. Identify my expenses
		3.5. Identify my balance
		3.6. Identify my debts
		3.7. Reducing my expenses
		3.8. Organizing my documents
4.		
		4.1. Improving health
		4.2. The food pyramid
		4.3. Physical activities and benefits
		4.4. Healthy ageing
5.		
		5.1. What does it mean ageing to you?
		5.2. What does it happen when we get older?
		5.3. Ageing Concepts relation
		5.4. Quiz about ageing changes
		5.5. Open debate about psychosocial changes
6.		
		6.1. Concept & types of abuse
		6.2. Physical abuse
		6.3. Psychological abuse

	6.4. Economic abuse
	6.5. Sexual abuse
	6.6. Abuse of rights
	6.7. How to respond to abusive situations
7.	7.1. Who is important in my life?
	7.2. Ways to reconnect or stay in touch.
	7.3. My plan to reconnect or stay in touch
8.	8.1. Retirement
	8.2. Work & Leisure
	8.3. My dream retirement plan
9.	9.1. Having a social role to play
	9.2. The little helper
	9.3. Social roles that are important to me
10.	10.1. Using the internet and/or social media?
	10.2. Search for information on the internet
	10.3. Safe use of the internet and social media
11.	11.1. What are my rights?
	11.2. What to do when rights are violated?
	11.3. Actions for my rights protection.
	11.4. How do my rights work for me?
12.	12.1. My family and relatives
	12.2. My friendships
	12.3. My colleagues
	12.4. The circles
13.	13.1. What does life goal mean
	13.2. It starts happening
	13.3. The plan is ready
	13.4. My life goal worksheet
14.	14.1. Palliative care & end-of-life
	14.2. Active role in palliative care
	14.3. Choosing palliative care & end-of-life
	14.4. First steps in choosing palliative care
	14.5. The sequence in choice making for palliative care

In the next few pages, you will find the most relevant learning outcomes of each unit (knowledge and skills to be reached through the exercises).

For each of the learning outcomes, first assess the current level of skills and knowledge of your client. After the training, assess them again. The level of control is assessed on a 5 point scale from 'not at all' to 'completely'.

You only need to do this for the units (exercises) you selected earlier (see table of previous pages).

UNIT 1	Before training					After training				
	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
My client...										
knows and understands the concept of moving to another place.										
knows and identifies different residential options that are available for him/her when he/she ages.										
reflects about the concept and relevance of moving to another place.										
identifies relevant factors to take into account when moving to another place (e.g. level of independence, proximity to family and friends, support needed, ...).										
is familiar with the most important (dis-)advantages of each residential option.										
identifies characteristics of each residential option that best suits his/her own interests and needs.										
identifies some characteristics of how to adapt a home/room: accessibility, safety, equipment.										

UNIT 2	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
identifies difficulties that might occur in his/her daily living due to the process of ageing.										
recognizes the most important resources that are available in their environment.										
knows how to ask for help to better handle difficulties in his/her daily living.										
identifies the most important characteristics of an adapted environment.										
provides ideas about the most important modifications that can be done in his/her home environment to improve his/her autonomy.										
knows some of the support products (e.g. glasses, hearing aid, wheelchair, ...) that might be relevant for when people age.										
reflects on the support products and assistive technology that might be relevant for him/her in the future.										
is familiar with how to properly maintain support products.										



UNIT 3		Before training					After training				
My client...		Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
identifies difficulties that might occur in his/her daily living due to the process of ageing.											
Identifies the needs and priorities related to money management that can appear as a result of ageing.											
Identifies the fixed incomes that might be available weekly/monthly.											
identifies the occasional income that may be available at certain times of the year (Birthday, New year, etc.).											
classifies incomes according to whether they are fixed or variable.											
identifies the fixed weekly/monthly expenses.											
identifies the occasional weekly/monthly expenses.											
classifies expenses according to whether they are fixed or variable.											
identifies his/her salary.											
knows how to reduce his/her expenses.											
is able to identify debts.											
knows how to safe money.											
identifies different documents related to his/her income and expenses.											
knows his/her right to spend/save money.											
identifies different types of supports that can help organize his/her financial documents.											



UNIT 4	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
knows different activities that lead to healthy ageing.										
differentiates healthy food from unhealthy foods.										
knows how to create a healthy menu.										
differentiates different types of food and the proportion in which they should be included in a healthy menu.										
knows physical activities that are appropriate for the ageing people.										
is able to differentiate appropriate from less appropriate physical activities.										
identifies benefits associated with physical activities.										
knows different activities that lead to healthy ageing.										

UNIT 5	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
understands the meaning of ageing.										
knows the most important characteristics of ageing.										
knows the most important consequences of ageing.										
identifies changes related to ageing.										
identifies the physical differences between young and elderly people.										
identifies which activities can slow down the ageing process.										
knows how to prevent or change psychosocial problems related to ageing.										

UNIT 6	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
knows the meaning of the concept 'abuse'.										
identifies different types of abuse (physical, sexual, psychological, economic,...).										
recognizes how the different types of abuse are manifested.										
knows how to respond to an abusive conduct.										

UNIT 7	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
Knows and identifies important family members and friends.										
Knows how regularly he/she meets these family members and friends.										
Selects how often he/she would like to hear or meet the people important to him/her.										
Identifies possible ways to keep in touch or meet up with family and friends.										
Knows possible ways to reconnect with family and friends.										
Is able to choose tools that enable him/her to get in contact with family or friends.										
Develops a plan to keep in touch or reconnect with family or friends.										

UNIT 8	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
knows and understand the concept of retirement.										
knows and reflect on the reasons why people retire.										
reflects on what people do when they retire.										
identifies and reflects on possible pros and cons of retirement.										
reflects on his/her personal retirement plan.										
determines his/her pace of the retirement plan.										
is able to discriminate work activities from leisure activities.										
knows and understands what are work activities and leisure activities.										
reflects on their own work, leisure activities.										
understands difference between work activities and voluntary work activities.										
identifies and reflects on postretirement (voluntary) work activities and or leisure activities.										
determines the pace by which he/she wants to engage in these activities.										
reflects on skills needed to perform postretirement activities in the community.										
reflects on support needed to perform postretirement activities in the community.										
developed his/her own retirement plan.										

UNIT 9	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
reflects on the notion of taking on new social roles after retirement.										
is able to define some social roles.										
recognizes social roles.										
identifies his/her current social roles.										
identifies activities that he/she likes doing in the future.										
knows his/her own talents.										
reflects on how he/she can contribute to society.										
knows how he/she can help others (neighbour, acquaintances).										

UNIT 10	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
knows what is the internet.										
knows what is social media.										
reflects on the reasons for using the internet.										
knows that in order to use social media an internet connection is needed.										
knows when there is no internet connection.										
knows where to go to get internet connection.										
Is able to look for specific information on the internet.										
identifies safety treats when using the internet.										
Knows some golden rules about how to use the internet safely.										

UNIT 11	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
identifies important professionals and how they may contribute to more independence in daily living activities.										
can distinguish rights from wishes.										
knows how to link human rights with concrete social service providers.										
is able to distinguish the areas of activity of different social service providers.										
knows how to ask and look for administrative help.										
is able to recognize the names and logos of different institutions in the field of rights protection and social services provision.										

UNIT 12	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
identifies important people who may contribute to the independence in work and daily activities.										
is able to distinguish people who belong to different social circles.										
applies autonomously the rules of formal and informal interactions.										
is able to adjust his/her expectations about a person in accordance with the social role he/she takes in his/her life.										
is able to distinguish friendship from acquaintanceship.										
knows that cooperation with others is important to achieve his/her goals.										
identifies important people who may contribute to the independence in work and daily activities.										
is able to distinguish people who belong to different social circles.										

UNIT 13	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
can distinguish dreams from life goals.										
reflects on life goals.										
demonstrates self-reflection and self-assessment skills.										
is able to formulate of his/her own life goal.										
demonstrates the ability to make independent decisions in the context of life goal concepts.										
creates an initial plan for goal achievement.										

UNIT 14	Before training					After training				
My client...	Not at all	very little	somewhat	A lot	totally	Not at all	very little	somewhat	A lot	totally
knows concepts such as palliative care and end-of-life.										
reflects on end-of-life care topics.										
knows to distinguish the professionals who are working in the field of palliative care provision.										
can distinguish the different types of palliative and end-of-life services.										
is able to describe a process of choosing palliative care services.										
demonstrates the ability to make decisions concerning his/her right of choosing end-of-life and palliative care services.										
identifies people of his own supporting network he/she would like to be involve if he has to choose end-of-life care.										

**In the name of all TRIADE 2.0 partners, we thank you
for your participation**

ANNEX 4.

Implementation process of the MNAM exercises/activities for AAWID



Validation questionnaire 3

Implementation process of the MNAM

exercises/activities for AAWID

INSTRUCTIONS

With this questionnaire we aim to evaluate the implementation process of the exercises and activities that you used to train your client.

Please fill out this questionnaire for each client separately.

But first we ask you to fill in some general information questions:

1. Demographics about the client

- Initials or code of AAWID:.....
- Age:.....
- Gender: Male/female

2. Demographics of the trainer

- Initials or name of trainer:
- Age:
- Gender: Male/female
- Profession:
- Number of years of working with this client:



QUESTIONS

1. **Did you need to adapt the exercise(s) to match with the cognitive and/or communication support needs of the client?**

0 = no adaptations

1 = small adaptations (e.g.: change of a photo or the name of a person; minor changes in the stories, to change the order of activities, break-down of some of the exercise/activities into knowledge chunks, the change of the name of an organization such as national employment office)

2 = medium adaptations (e.g.: change of materials supports which are not accessible or meaningful in a country; breaking down most of the materials into smaller units...)

3 = extensive adaptations (e.g.: to eliminate important parts of an exercise or a whole activities...)

4 = very extensive adaptations (e.g.: The whole exercise has been changed, inspiring a new exercise based on the original one)

Unit	Exercise number	Activity number	0 No adaptations	1 Small adaptations	2 Medium adaptations	3 Extensive adaptations	4 Very extensive adaptations

**Add extra rows if needed*



2. How much time did your client need to do the exercises?

Unit number	Exercise number	Activity number	minutes

**Add extra rows if needed*

3. Did your client enjoy completing the (adapted) exercises/activities? (Ask this question to your client after each exercise or activity)

Unit number	Exercise number	Activity number	0 = No	1 = A little	2 = Yes	I don't know

**Add extra rows if needed*



4. ***Did your client find the (adapted) exercises/activities too hard to do?*** (Ask this question to your client after each exercise or activity)

Unit number	Exercise number	Activity number	0 = No	1 = A little	2 = Yes	I don't know

**Add extra rows if needed*

Could you describe one situation that shows that for your client(s) – despite the necessary support and adaptations - the exercises/activities were too difficult to perform. (If possible in English)



5. Please indicate for each exercise/activity to what extent you agree with the statement:

"With the necessary support, the client will be able to transfer what he/she has learned to real life situations."

- 0 = completely disagree
1 = disagree
2 = not agree nor disagree
3 = agree
4 = completely agree

Unit	Exercise number	Activity number	0 Completely disagree	1	2	3	4 Completely agree

**Add extra rows if needed*

Could you describe one example of how you noticed that – with the necessary support and adaptations - your client(s) gained new knowledge and skills through the use of exercise(s)/activities? (If possible in English)



6. To what extent do you agree that the exercises/activities help to maintain or augment the QoL of AAWID?

0 = completely disagree
1 = disagree
2 = not agree nor disagree
3 = agree
4 = completely agree

Unit	Exercise number	Activity number	0 Completely Disagree	1	2	3	4 Completely agree

7. To what extent do you agree that the exercises/activities promote the social inclusion of AAWID?

0 = completely disagree
1 = disagree
2 = not agree nor disagree
3 = agree
4 = completely agree

Unit	Exercise number	Activity number	0 Completely Disagree	1	2	3	4 Completely agree



8. To what extent do you agree that the exercises/activities were appealing for AAWID?

- 0 = completely disagree
1 = disagree
2 = not agree nor disagree
3 = agree
4 = completely agree

Unit	Exercise number	Activity number	0 Completely Disagree	1	2	3	4 Completely agree

9. To what extent do you agree that the stories used in the exercises/activities were recognisable for AAWID, so they could identify themselves with the stories?

- 0 = completely disagree
1 = disagree
2 = not agree nor disagree
3 = agree
4 = completely agree

Unit	Exercise number	Activity number	0 Completely Disagree	1	2	3	4 Completely agree



10. To what extent do you agree that the introduction of difficult concepts by means of a story/casus enabled reflection by the AAWID.

- 0 = completely disagree
1 = disagree
2 = not agree nor disagree
3 = agree
4 = completely agree

Unit	Exercise number	Activity number	0 Completely Disagree	1	2	3	4 Completely agree

If you made alterations to the exercises that you think can be useful for other clients and for the TRIADE 2.0 project, we would be very honoured if you could also share them with us so we can upload them on the TRIADE 2.0 MNAM platform as good practices. You may email them to sorzano_marcas@gva.es

In name of all TRIADE 2.0 partners, we would like to thank you for your participation!



ANNEX 5.

Trainers user satisfaction of the MNAM exercises/activities in general



Validation questionnaire 4

Trainers user satisfaction of the MNAM exercises/activities in general

Instructions

Below are 10 questions about the usability of the MNAM exercises/activities by the trainer.

Based on the activities you did with your client, we would like to know how satisfied you are about them.

The 10 questions will be answered with a 5-point scale from Strongly Agree to Strongly Disagree.

Notice that some of the questions are formulated in a negative way.

- Select ***strongly agree*** when you feel the statement is correct for about **80% to 100%** of the exercises.
- Select ***agree*** when you think that the statement is correct for about **60% to 80%** of the exercises.
- Select ***'don't agree nor disagree'*** when you think that the statement is correct for about **40% to 60%** of the exercises.
- Select ***disagree*** when you think that the statement is correct for about **20% to 40%** of the exercises.
- Select ***strongly disagree*** when you feel the statement is correct for about **0% to 25%** of the exercises.

Before answering the 10 questions, please also complete the following items.

Demographics of the trainer:

- Age:
- Gender: male/female
- Profession:
- Country:
- Months or Years of experience in working with AAWID:



QUESTIONS

1. I think the exercises/activities are easy to use.
strongly agree agree don't agree or disagree disagree strongly disagree
2. I think that the instructions for the trainers on how to use the exercises/activities were not clear.
strongly agree agree don't agree or disagree disagree strongly disagree
3. I think that each unit strived for exercises/activities that show a clear build-up. Some exercise where on the level of knowledge 'knows', while other exercises request insight or reflection by the participants. At least one exercise/activity was on the level of 'doing'.
strongly agree agree don't agree or disagree disagree strongly disagree
4. I find the exercises/activities unnecessarily complex.
strongly agree agree don't agree or disagree disagree strongly disagree
5. I think there was too much inconsistency between the exercises/activities.
strongly agree agree don't agree or disagree disagree strongly disagree
6. I imagine that most educators can learn to use the exercises/activities very quickly.
strongly agree agree don't agree or disagree disagree strongly disagree
7. I felt very confident when doing the exercises/activities with the clients.
strongly agree agree don't agree or disagree disagree strongly disagree
8. I needed to learn a lot of things before I could get going with this exercises.
strongly agree agree don't agree or disagree disagree strongly disagree
9. I think that the exercises/activities were awkward.
strongly agree agree don't agree or disagree disagree strongly disagree
10. I think that I will use the exercises/activities frequently.
strongly agree agree don't agree or disagree disagree strongly disagree

In name of all TRIADE 2.0 partners, we would like to thank you for your participation!



SECTION 7. Appendixes



APPENDIX 1. COGNITIVE FUNCTIONS



-- Model 1 : Deficient Cognitive Functions (Feuerstein R., 2010)--

Input Level

1. Blurred and sweeping perception.
2. Unplanned, impulsive, and unsystematic exploratory behavior.
3. Lack of, or impaired, receptive verbal tools that affect discrimination.
4. Lack of, or impaired, spatial orientation.
5. Lack of, or impaired, temporal concepts.
6. Lack of, or impaired, conservation of constancies.
7. Lack of, or deficient, need for precision and accuracy in data gathering.
8. Lack of capacity for considering two or more sources of information at once; this is reflected in dealing with data in a piecemeal fashion, rather than as a unit of organized facts.

Elaboration Level

1. Inadequacy in the perception of the existence and definition of an actual problem.
2. Inability to select relevant vs. non-relevant cues in defining a problem.
3. Lack of spontaneous comparative behavior or limitation of its application by a restricted need system.
4. Narrowness of mental field.
5. Episodic grasp of reality.
6. Lack of, or impaired, need for pursuing logical evidence.
7. Lack of, or impaired, interiorization.
8. Lack of, or impaired, inferential-hypothetical thinking.
9. Lack of, or impaired, strategies for hypothesis testing.
10. Lack of, or impaired, ability to define the framework necessary for problem solving.
11. Lack of, or impaired, planning behavior.



12. Non elaboration of certain cognitive categories, because the verbal concepts are not a part of the individual's verbal repertoire on a receptive level.

Output Level

1. Egocentric communication modalities.
2. Difficulty in projecting virtual relationships.
3. Blocking.
4. Trial-and-error responses.
5. Lack of, or impaired, tools for communicating adequately elaborated responses.
6. Lack of, or impaired, need for precision and accuracy in communicating one's responses.
7. Deficiency of visual transport.
8. Impulsive, acting out behavior.



-- Model 2: Cognitive Functions (Feuerstein, R. et al. (2010))--

Gathering all the information we need (Input)

1. Using our senses (listening, seeing, smelling, tasting, touching, feeling) to gather clear and complete information (clear perception).
2. Using a system or plan so that we do not skip or miss something important or repeat ourselves.
3. Giving the thing we gather through our senses and our experience a name so that we can remember it more clearly and talk about it (labelling).
4. Describing things and events in terms of where and when they occur (temporal and spatial referents).
5. Deciding on the characteristics of a thing or event that always stay the same, even when changes take place (conservation, constancy, and object permanence).
6. Organising the information we gather by considering more than one thing at a time (two sources of information).
7. Being precise and accurate when it matters (need for precision).

Using the information we have gathered (Elaboration)

1. Defining what the problem is, what we are being asked to do, and what we must figure out (analysing disequilibrium).
2. Using only that part of the information we have gathered that is relevant, that is, that applies to the problem, and ignoring the rest (relevance).
3. Having a good picture in our mind of what we are looking for, or what we must do (interiorisation).
4. Making a plan that will include the steps we need to take to reach our goal (planning behaviour).



5. Remembering and keeping in mind various pieces of information we need (broadening our mental field).
6. Looking for the relationship by which separate objects, events, and experiences can be Used together (projecting relationships).
7. Comparing objects and experiences to others to see what is similar and what is different (comparative behaviour).
8. Finding the class or set to which the new object or experience belongs (categorisation).
9. Thinking about different possibilities and figuring out what would happen if you were to choose one or another (hypothetical thinking).
10. Using logic to prove things and to defend your opinion (logical evidence).

Expressing the solution to a problem (Output)

1. Being clear and precise in your language to be sure that there is no question as to what your answer is. Put yourself into the 'shoes' of the listener to be sure that your answer will be understood (overcoming egocentric communication).
2. Think things through before you answer instead of immediately trying to answer and making a mistake, and then trying again (overcoming trial-and-error).
3. Count to 10 (at least) so that you do not say or do something you will be sorry for later (restraining impulsive behaviour).
4. If you cannot answer a question for some reason even though you 'know' the answer, do not fret or panic. Leave the question for a little while and then, when you return to it, use a strategy to help you find the answer (overcoming blocking).
5. Carrying an exact picture of an object in your mind to another place for comparison without losing or changing some details (visual transport).



-- Model 3 : *Building Blocks of Thinking* (Greenberg, K, 2000) --

Building Blocks for Approaching the Learning Experience

1. Exploration: the ability to search systematically for information needed in the learning experience (I think about what I need to know before I start to work, I listen carefully before I answer questions, I gather all the information or supplies I need before I begin to work, I search for information or supplies in an organized way, I think carefully about what others are saying before I share my thoughts.)
2. Planning: the ability to prepare and use an organized approach in the learning experience (I think about my goal, I decide what steps I am going to take in order to reach my goal, I decide the order in which I am going to do the steps I plan, I use my plan while I am working, I change my plan my plan when it is not helping me to reach my goal.)
3. Expression: the ability to communicate thoughts and actions carefully in the learning experience (I clearly communicate what I want to express in certain activities, I use my plan as I communicate my thoughts and actions, I express everything needed to make my response effective, I express my thoughts and actions in the order I intended to express them, I express my thought and actions without co-opting the opportunity of others to learn)

Building Blocks for Making Meaning

1. Working Memory: the ability to use memory processes effectively (I can use information stored in my brain to help me think, I can clear thoughts and feelings from my Working Memory that keep me from learning, I can focus energy on the thoughts I need in my Working Memory, I try to use all the space I can in my Working Memory, I focus energy in my Working Memory on storing important information in my brain.)



2. Making Comparisons: the ability to discover similarities and differences automatically among some parts of the learning experience (I know there is a need for Making Comparisons all the time, I automatically make comparisons while I work, I think about two or more concepts are the same or different in some way, I compare my thoughts and actions to what I expect them to be and catch careless mistakes, I am able to make more meaning by Making Comparisons.)
3. Getting the Main Idea: the ability to identify the basic thought that holds related ideas together (I automatically think about Getting the Main Idea while I work, I think about what several related ideas share in common, I am aware of the need to think about Getting the Main Idea in order to learn effectively, I try to see how objects, ideas, and actions are related to each other, I talk with others to see if we agree about the main idea.)
4. Thought Integration: the ability to combine pieces of information into complete thoughts and hold onto them while needed (I think about the need to combine bits of information while I work, I use Thought Integration automatically when necessary, I hold on to all the bits of information that I need to combine in the learning experience, I develop strategies for using Thought Integration in the learning experience, I change my strategies for using Thought Integration when I needed to do so.)
5. Connecting Events: the ability to find relationships among past, present, and future learning experiences automatically (I think about the need for Connecting Events while I worked, I think about how certain activities relate to events that happened in the past, I think about how certain activities relate to events that might happen in the future, I think about how to use what I know about other events to help me learn in certain activities, I share my connections with others.)



Building Blocks for Confirming

1. Precision + Accuracy: the ability to know there is a need to understand words and concepts and use them correctly and to seek information automatically when the need arises (I think about the need for Precision and Accuracy while I work, I find appropriate ways to seek a precise understanding of words and concepts, I am able to get a precise understanding when I need to understand words and concepts better, I am able to use words and concepts accurately when expressing my ideas, I develop strategies for using Precision and Accuracy when needed).
2. Space + Time Concepts: the ability to understand and use information about space and time that is important in almost all learning (I think about the size of things as they relate to each other, I think about the shape of things as they relate to each other, I think about the distance things are from each other and the location of things in relation to each other, I think about the order of events and the importance of that to my work process, I think about how long events last and the amount of time between particular events).
3. Selective Attention: the ability to choose between relevant and irrelevant information and to focus on the information needed in the learning experience (I decide what is important to think about as I work, I develop learning strategies for using Selective Attention as I work, I focus attention on relevant information, I ignore irrelevant information, I help others to use Selective Attention).
4. Problem Identification: the ability to experience a sense of imbalance automatically and define the cause when something interferes with successful learning (I think about the need to use Problem Identification, When a problem occurs, I feel it, I define problems that I experience, I experience and define problems automatically, I develop strategies for using Problem Identification effectively).



APPENDIX 2.

M.L.E. - MEDIATED LEARNING EXPERIENCES



Basic concepts of Mediated Learning (Haywood, C (1986, 2020))

It is possible to summarize the important points about MLE from a combination of Feuerstein's Theory of Structural Cognitive Modifiability and Haywood's systematic views of the nature and development of intelligence. The following list contains the essential points.

1. Intelligence itself is relatively constant, and efforts to change it by education yield only modest increases as a result of substantial investment.
2. Intelligence alone (defined as "native ability") is not a sufficient condition to provide for effective perception, thinking, learning, and problem solving.
3. There is a finite number of fundamental processes of thinking that, combined with certain affective, motivational, and attitudinal factors and particular habits of intellectual work, constitute "basic cognitive functions" and are necessary for effective systematic perceiving, thinking, learning, and problem solving.
4. The basic cognitive functions must be acquired (that is, are not genetically "given"), and they are acquired through learning.
5. Cognitive learning is of two kinds: direct exposure to environmental events, and mediated learning experience (MLE).
6. Some MLE is necessary for all people, but the amount, quality, intensity, frequency, and duration of what is needed for adequate cognitive development and learning will vary as a function of individual differences (for example, genetic intelligence levels, sensory integrity, emotional stability, environmental support).



7. When MLE is inadequate to the person's individual developmental needs, the result is inadequate cognitive development, the "syndrome of cultural deprivation," and relatively ineffective academic and social learning.
8. When MLE is adequate to person's individual developmental needs, the retarding effects on academic and social learning of such conditions as poverty, mental retardation, emotional disturbance, and low parental educational levels may be significantly offset. The result is a higher level of cognitive development and relatively more effective academic and social learning.
9. Providing MLE is an essential role of parents, grandparents, tutors, educators and older siblings in a process of intergenerational cultural transfer. This process is repeated in every culture, and all cultures have within them the essential elements for adequate cognitive development. Failures of transmission of culture-characteristic modes of thinking constitutes the syndrome of cultural deprivation.
10. When some aspects of cognitive development have not been stimulated adequately through MLE, it is possible to mediate those aspects at later ages through carefully constructed teaching. In other words, opportunities that might have been missed by parents or educators can be picked up by other educators.
11. The mediational processes can be described and replicated, and these processes constitute an identifiable and important style of teaching: the mediational teaching style.



APPENDIX 3. MEDIATIONAL vs. NON-MEDIATIONAL STATEMENTS¹⁴

¹⁴**Adaptation and translation** from:

Warnez, J. (2002) Mediërend Agogisch Handelen. Leuven, Acco. p.73, app. 1



Instruction.

From each set of statements/interventions below, which one is 'most' cognitively stimulating? Why? Take into account the different suggestions made in the section on Mediatlional Teaching Style.

- 1.a. What did you prepare this morning? What was the menu?
- 1.b. Tell me, how did you do this?

- 2.a. Can you think about other ways to deal with this?
- 2.b. This task can be solved this way. Do it this way.

- 3.a. You will not solve this problem by doing it this way.
- 3.b. What do you think, what will happen if you.... ?

- 4.a. How should you feel if... ?
- 4.b. You will not like this. It's better to do it this way.

- 5.a. Yes, this tree is an oak.
- 5.b. Right, yes. How do you know it's right?

- 6.a. Now we are going to make another puzzle.
- 6.b. How does this puzzle looks like the one we made yesterday? How is it different?

- 7.a. What have we done yesterday?
- 7.b. Tell me, what have we learned yesterday?

- 8.a. Can you think about a time that it was important to slow down and not to work too fast?
- 8.b. When is it important to adapt your behavior to the goal.



9.a. Yes, this is a better solution.

9.b. According to you, why may this be a better solution?

10.a. What's next step?

10.b. Now we have to catch the train.

11.a. Let's make a shopping list together.

11.b. Let's work on a plan, to be sure not to forget something.

12.a. Keep track of the time.

12.b. Let us make a plan, to not forget things.

13.a. How can you find out, if this is ok?

13.b. Check the work you have done.

14.a. That's a perfect answer!

14.b. You gave a correct answer! Can you find out another way to solve this task.

15.a. Do it this way, and you will see what will happen.

15.b. What's next step?

16.a. When did you do something similar?

16.b. You have done this before!

17.a. That's right.

17.b. You did it the right way. You worked in a systematic way and by doing so, you reached your goal.

18.a. No, there are more pins.



18.b. Are you sure that there are no more pins? Look once again.

19.a. Good trying!... but it's wrong.

19.b. Hmm, part of your answer is correct, you did a good job, but...

20.a. Why do you think you made an error?

20.b. This is wrong.

21.a. Have you ever seen this before?

21.b. You don't know this yet, don't you?

22.a. This is stearin.

22.b. Have you ever seen something like this before?

23.a. Do you remember how you dealt with this kind of problem yesterday?

23.b. You should be able to deal with it.

24.a. You can do it!

24.b. Try again! You have done a lot of efforts to learn it, so you will succeed!

25.a. Look on the internet.

25.b. Do you remember what we did to find out the phone number of Rita?
How can we deal with this now?

26.a. Use your time in a good way.

26.b. Let's make a plan to solve the problem in time.

27.a. This is the best answer you gave until now.

27.b. Why is this answer a better one than the previous answers you gave?



28.a. How can we find out the answer?

28.b. Listen carefully to the instructions, and follow them exactly.

29.a. Think! You know the answer!

29.b. According to you, what's the problem?

30.a. OK, look carefully at what you are doing now.

30.b. Did you already check your work?

**Right answers? (not important as depending on the concrete situation,
AAWID, the moment...)**

**1b, 2a, 3b, 4a, 5b, 6b, 7b, 8b, 9b, 10a, 11b, 12b, 13a, 14b, 15b, 16a, 17b,
18b, 19b, 20a, 21a, 22b, 23a, 24b, 25b, 26b, 27b, 28a, 29b, 30a**

Leading Organisation:



Partners:

