RETORE

REMEMBER TO REMEMBER

in Belgium

RESEARCH CENTRE FOR LEARNING IN DIVERSITY

HOGENT

Co-funded by the European Union

VSB TECHNICAL UNIVERSITY OF OSTRAVA

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Akademia Techniczno-Humanistyczna w Bielsku-Białej

1 Introduction

1.1 The 'Remember to Remember' Research Project

The Remember to Remember (ReToRe) project was a collaboration led by the Technical University of Ostrava's Project Support Centre (Czech Republic), with partnerships from the Technical University of Ostrava (Czech Republic), Haskoli Islands (Iceland), Hogeschool Gent (Belgium), and Akademia Techniczno-Humanistyczna W Bielsku-Bialej (Poland). Funded by the Erasmus+ Programme under KA201 – Strategic Partnerships for school education, this project spanned 36 months from January 2022 to December 2024.

The primary objective of Remember to Remember was to develop an innovative toolkit with various tasks aimed at enhancing 'prospective memory' and 'metacognitive skills' of children with learning disabilities and/or Autism Spectrum Disorder (ASD). The tool(kit) consists of worksheets about prospective memory, worksheets about executive functions, self-evaluations about metacognition and digital ProxyQB, and was developed by Mgr. et Mgr. Tereza Benesova, PhD., Mgr. Lucie Kytnarova, PhD., and Tereza Rosikova, MSc. As part of the project, children aged 12 – 15 years underwent 10 training sessions (1 per week). Each training session, children participated in prospective memory tasks in combination with executive functions tasks. Based on these test training experiences in all countries, the toolkit has been refined by all partners throughout the project.

Secondly, by targeting prospective memory and metacognitive skills via the toolkit, the project aimed to expand the range of possible remedial interventions available at the time for cognitive training, particularly tailored to children with ASD and learning disabilities. Part of the project was a publication of a monograph written by the collaborative team from all the cooperating countries, i.e. a specialized publication on Prospective Memory and Metacognitive / Executive functions training. This chapter is a part of the monograph, focusing on the experiences and results from the training in Belgium.

1.2 Education in Belgium

In Belgium, the education system is structured by regions, with distinct regions for the Dutch-speaking community (Flanders), the French-speaking community (Wallonia) and the German-speaking community (in the eastern part of the country). Each community manages its own educational system. In Flanders, the northern region of Belgium, the educational system is organized into several distinct stages: 1) preschool or kindergarten education (2.5 – 5 year olds), 2) primary education (6 – 12 year olds, grades 1 –

6) and 3) secondary education (12 – 18 year olds, grade 7 – 12). Tertiary education is offered at colleges and universities. Most children attend preschools or kindergartens from the age of 2.5 – 3 years, and it is obligatory from the age of 5 years (education, n.d.).

Secondary education in Flanders offers students a choice among various tracks based on their interests, abilities, and future aspirations. These tracks include general education (Algemeen Secundair Onderwijs, ASO), technical education (Technisch Secundair Onderwijs, TSO), vocational education (Beroepssecundair Onderwijs, BSO), and arts education (Kunstsecundair Onderwijs, KSO). The ASO track is academically oriented, preparing students for higher education (doorstroomfinaliteit), while TSO, BSO, and KSO offer more practical and specialized training, with options for students to enter the workforce (arbeidsgerichte finaliteit) or pursue further education (dubbele finaliteit).

Learning support centres provide additional support to schools when existing care measures are not sufficient. They help when a pupil follows an individually adapted curriculum or when a pupil follows mainstream education with intensive support. Learning support focuses on the needs of pupils as well as teachers and school teams. It also builds on school care measures which are already in place (Naar een Decreet Leersteun Voor Leerlingen met Specifieke Onderwijsbehoeften, n.d.). These centres consist of expert health care professionals (e.g. speech therapists, occupational therapists, clinical psychologists, remedial teachers, …). The goal is to ensure that students with special educational needs (SEN) can participate fully in regular classroom activities while receiving additional help they need.

Supporters from learning support centres, often referred to as "ondersteuners," play a crucial role in the system. They are specialized professionals - such as special education teachers, therapists, and psychologists - who work closely with students, teachers, and schools. Their support takes various forms, including direct assistance to students, i.e. helping them with specific learning tasks or managing behavioural challenges. They also provide indirect support by advising teachers on how to adapt their teaching methods or classroom environment to meet the needs of all students better.

Furthermore, “ondersteuners”/supporters collaborate with parents, teachers, and other professionals to develop individualized education plans (IEPs) for students with SEN. These plans outline specific goals and also strategies used to achieve the goals, ensuring that each student receives tailored support that aligns with their unique needs (*Wat? - OT Pixel*, 2023).

For the ReToRe project, we collaborated with supporters from three learning support centres. Three members of one learning support centre, here and after referred to as 'supporters', trained children with the ReToRe toolkit from January to May 2024. Three other supporters of three different centres trained children from November to December 2024. All the 20 trained children were diagnosed with learning disorders and/or ASD which was an inclusion requirement of the project. They needed support in areas of executive functions, prospective memory, and/or metacognition. That is, the support needs of these pupils had to include the need for the development of executive functions, prospective memory, and/or metacognition. Only in this way could the available time the supporters have with their pupils also be justified for this project. The project fits into the objectives of this organisation, provided it also meets the needs of the pupils (see the last section - Discussion).

2 Methodology

2.1 Participants

Seven trainers participated in total. Three of these trainers were affiliated with the Learning Support Centre PIXSY, an organization specializing in educational interventions targeting children with learning disabilities. Three other trainers were linked to three different supportive teams. The last participating trainer was from Hogeschool Gent. Thirteen students were trained by 'trainers-supporters' from one learning supportive.

20 children were trained aged 11 to 15 years (M = 12 years 5 months). Each child was diagnosed with developmental and/or learning difficulties and required special support. For more details see Table 1.

Table 1. Descriptive information about participants.

Age	**Developmental and/or learning difficulties**
11	Reading and spelling disorder
11	Reading and spelling disorder
11	Autism Spectrum Disorder (ASD), ADHD & Dyslexia
11	Autism Spectrum Disorder (ASD) and ADHD
11	Spelling disorder, motor impairment, Autism Spectrum Disorder (ASD)
11	Autism Spectrum Disorder (ASD)
11	Dyslexia
11	Dyslexia

Age	Developmental and/or learning difficulties
11	ADHD and Giftedness
12	Dyscalculia
13	Spina bifida type 4 (motor impairment)
13	Autism Spectrum Disorder (ASD)
13	Learning difficulties
14	Developmental dysphasia, speech, and language development disorders
15	Autism Spectrum Disorder (ASD)
15	Autism Spectrum Disorder (ASD)
15	Autism Spectrum Disorder (ASD)
15	Autism Spectrum Disorder (ASD) and ADHD

20 students who participated in the "Remember to Remember" project will have completed the full series of training sessions by December 2024. The first group of 15 children was trained from January to May 2024. The remaining 5 children were trained from November to December 2024. therefore, data from the remaining 5 children were not available at the time the chapter was created. The diverse group of respondents provided a comprehensive view of the opportunities available in working with children with learning disabilities and offered valuable insights.

2.2 Procedure: Training sessions

Fifteen children were trained individually in Belgium from January 2024 to May 2024, 5 children from November 2024 to December 2024. The training program consisted of 5 to 7 sessions per student. One session mostly lasted 50 minutes, the same time limit as a school period. Twelve of the 15 respondents who already finished the training needed 5 sessions to complete the training, while the remaining 2 respondents needed 6 sessions, and one needed 7 sessions. Each session was carefully structured, and a detailed protocol was followed to ensure consistency and to maximize the effectiveness of the interventions:

- Each session began with the trainer completing an observation document. That included asking about the child's mood and noting it down.
- The trainer then introduced a prospective memory task (2.3.1 Materials Prospective Memory). The student was given a document with the task instructions, along with a drawn plan of a fictive city and a pawn to use during the tasks. The student was given time to read and memorize the instructions before the document was removed and only the card and the pawn remained. After introducing the

prospective memory task, the trainer continued with executive function worksheets (2.3.2 Materials Executive functions).
- At regular intervals or after a specific signal, the trainer asked the student to recall and perform the previously introduced prospective memory task. The necessary materials were then provided to the student to perform the task. Throughout the sessions, the trainer monitored the student's progress on both the background tasks and the prospective memory tasks. If the student encountered difficulties, the trainer gave partial directions to guide the child. The trainer could differentiate in their approach.
- Each prospective memory task had 3 different subtasks. The prospective memory task was finished when the 3 tasks were completed or when the 50 minute time limit expired.
- 15 minutes before the end of a session, each child completed 6 digital exercises from a pre-planned task set prepared on a tablet that was connected to ProxyQB (2.3.3 ProxyQB). The tasks were the same for every child in all the involved ReToRe partner countries. All answers were recorded including response time and correct answers.
- Each session ended with the respondent completing a self-assessment (2.3.4 Metacognition). The trainer discussed metacognitive strategies that were used during the prospective memory-games with the child, so the child could reflect on them and to recommend other strategies for next time.
- Finally, the trainer gave a short assignment for the student to work on in the following week (homework). The homework, or more little tasks to think of during the upcoming week included tasks like: 'touch your hair every time you see a dog / touch your knee when you blow your nose / write down how long you work for school every day /...'. In the following session, the trainer could ask if the child remembered to do the homework.
- All observations and notes were accurately recorded in an observation document by the trainer.

The methodical approach ensured that each training session was both consistent and adaptable to the individual needs of the participants, providing valuable data about the interventions. The combination of prospective memory tasks with executive function exercises was created in a way so that a child with learning disabilities could benefit from cognitive development.

2.3 Materials

In a chapter by Tereza Rosikova, materials created and used in this project are described. The Remember-To-Remember toolkit consists of a set of prospective tasks, a set of exercises focused on executive functions, a self-assessment tool for metacognition, and a set of a tablet and 4 plastic cubes, Proxy QB.

The ReToRe set of tasks consists of the 5 prospective memory tasks, 6 executive function tasks and ProxyQB set. The main purpose of this whole test package is to investigate 1) whether children become faster and better at exercises within the ProxyQB set as the training sessions progress, 2) to gain insight into the metacognitive strategies children use in fulfilling the prospective tasks and 3) the experience of the trainers of using the ReToRe toolkit.

3 Results

3.1 ProxyQB

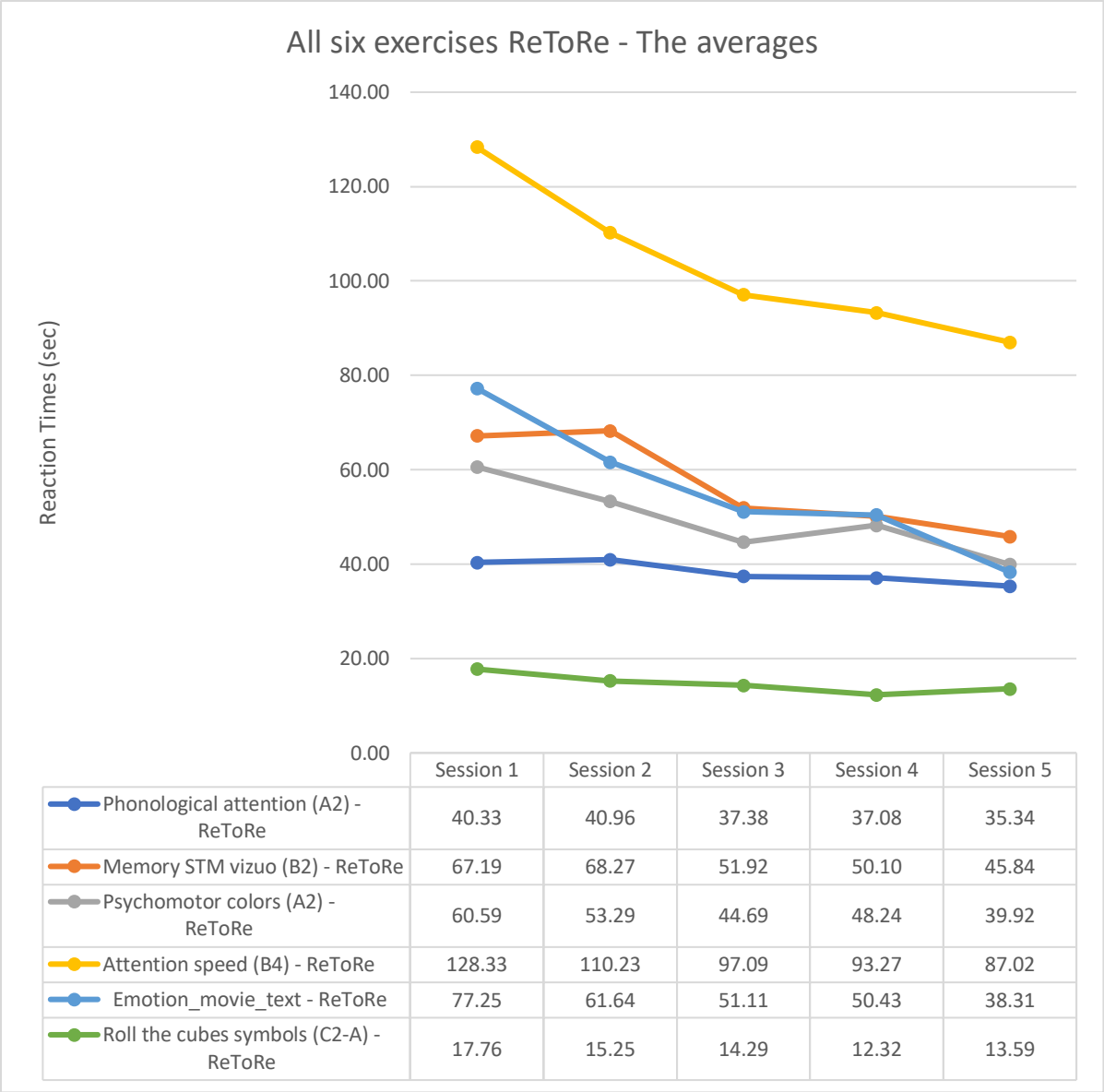
The aim was to use the ProxyQB set at the end of each session. However, since the set was a prototype, many technological problems occurred. For the set to work, a few requirements needed to be fulfilled including a good Wi-Fi connection, well-charged cubes, and a tablet. There were also issues with login into the system, orienting in the application ProxyQB and finding the right tasks. In the first month of training, it was not yet clear (or not possible) that a rehabilitation programme had to be followed, so exercises were first selected manually, and later the software itself suggested 6 exercises. Due to all the issues described above, during training, it was often impossible to fulfil all the required 6 tasks. Despite that, some questions related to the ProxyQB training were answered:

1) **Do children get achieve higher speed in fulfilling the tasks as training progresses?**

A total of 15 children (N=15) performed 6 exercises each session, for 4 to 9 sessions each time, according to the software. If someone needed more than 5 sessions, the average of the last sessions was taken as the mean for session 5.

The software recorded the time in seconds, up to 2 decimal places. Outliers with SD=3 were not included in the results.

The graph below shows the mean time (M) needed by the 15 students (N=15) to complete the 6 exercises in 5 sessions. The time taken per exercise was measured in seconds (up to two decimal places) and is shown for five consecutive sessions. The data were analysed without outliers (SD > 3) and the mean time per sequence was calculated.



	Session 1	Session 2	Session 3	Session 4	Session 5
Phonological attention (A2) - ReToRe	40.33	40.96	37.38	37.08	35.34
Memory STM vizuo (B2) - ReToRe	67.19	68.27	51.92	50.10	45.84
Psychomotor colors (A2) - ReToRe	60.59	53.29	44.69	48.24	39.92
Attention speed (B4) - ReToRe	128.33	110.23	97.09	93.27	87.02
Emotion_movie_text - ReToRe	77.25	61.64	51.11	50.43	38.31
Roll the cubes symbols (C2-A) - ReToRe	17.76	15.25	14.29	12.32	13.59

The horizontal axis shows 5 sessions (session 1 to session 5). On occasion, session 5 is considered an average: if students needed more than 5 sessions to complete the exercises, an average of sessions 5 to 9 is taken and this value is assigned to session 5. That value is then considered to calculate the average of that range for all students for that exercise.

The y-axis (vertical axis) shows the average time (in seconds) required to complete the exercise. There were 6 exercises to complete, so 6 average times are shown per session, 1 per exercise with the ProxyQB.

For each exercise, the average for session 1 is lower than the average of session 5. In the first session, the average time was higher than in the last session. A continuous decreasing trend is the case only for exercise B4-Attention speed. In the 5 other exercises, the values fluctuate. The graph

shows that the average time taken by the students to complete the exercises is shorter in the last session compared to session 1.

3.2 Metacognition

Metacognition involves planning, monitoring, and evaluating. The self-assessment document probed for the students' metacognitive skills when completing the prospective tasks. In more detail, this self-assessment document is about metacognitive evaluation. Namely, it involves adjusting and correcting the student's own cognitive activities and behaviours in response to the student's evaluation of performance during the tasks (Broadbent et al., 2021). The self-assessment tool specifically asks about students' metacognitive strategies in tackling the prospective task and not about their approach to exercises around executive functions. Out of the total of 79 separate training sessions among all the 15 respondents, a total of 32 self-evaluations was completed. The 15 respondents completed a self-assessment paper on average 2.13 times, each time at the end of a session in their training series. One student did not complete any self-assessment paper (0 out of 5, lower limit), and 1 student after each session (5 out of 5 in total, upper limit). Of the remaining 5 learners whose training is currently ongoing, no self-assessment documents were incorporated into these results.

Through this self-assessment tool, this study aims to answer the research question:

2) **Which metacognitive strategies do students use during Remember-To-Remember tasks, more specifically in the Prospective memory exercises?**

Answers given by the students in the self-assessment document after training were collected. The answers were gradually obtained under the guidance of the trainer and thus better described on the self-assessment document. The answers students gave are task strategies. Task strategies include strategies that helped students integrate and connect new information with previous knowledge, select appropriate information and also make connections between the information to be learned, and apply previous knowledge to these new tasks (Broadbent, 2021). The answers were categorised into six random categories based on learning strategies:

- **Visualisation** refers to a visual representation of the info to be memorised.
- **Auditory strategy** is linked to an auditory skill used to remember the info**.**

- **Time-based strategies:** Where time measurement was needed according to learners to complete prospective tasks successfully.
- **Active learning:** When students did something with the task information.
- **Repeating:** When a student said they repeated the subject matter.
- **No strategy:**
    - if students explicitly stated they did not use a strategy or had no idea what they were required to do.
    - if students said they used their brain, without telling how or what they did.
- **Other:** Where all other answers that did not fit previous categories fall into.

Questions that were left blank (and thus not answered) were not included in the above answers.

The analysis did not show whether a certain type of answer was given by one pupil in different self-assessment papers or whether several pupils gave the same type of answers, thus suggesting a use of the same strategy. That applied to all the questions discussed in this analysis.

Below, answers to the following question(s) were organised into the following categories as based on open coding.

Questions: 'I chose to use these strategies beforehand' and 'Next time, I will try this strategy to remember even better'.

- **Visual strategies:** 10 answers referred to a visual representation of the info required to be remembered: Using the city plan (visual support) / Writing it down / Holding fingers / Tapping fingers / Using fingers / Using environment / Imagining it in my head / Visual thinking / Looking in front of me, imagining it / Visualisation.
- Examples of active learning was given 5 times:
    - Selecting info and sequencing / Reading everything correctly
    - Key words / Key words / Key words.
- Repeating: 4 times student(s) gave an answer about repeating:
    - Repeat in my head / Repeat / Repeat/ Repeat before executing.
- **Other**: 8 answers were categorised under Other: Because I understand correctly / Doing my best / Doing the right thing / Asking for help / Doing everything right / Depends on the exercise I get / Doing the same or more / Creating categories, patterns.

- **No strategies:**
  - 6 times students explicitly stated that they had no idea whether and what strategy they (would) use: No idea / I didn't really have a strategy / No strategy / I still don't know / No idea / I don't know.
  - 15 answers in the self-assessment paper were strategies about 'using their brain': Because I've been thinking / Using brain / In my head / Everything in my head / Just remembering / Learning / Thinking about the subject / Remembering (brain) / Thinking better, using head better / Using brain / Using my brain / My brain / My brain / My brain / My brain.
- **Time-based strategies:** 6 responses were given where time measurement was required: Using a timer / Alarm clock / Using an alarm clock / Timing on a mobile phone / My mobile phone / Using a clock.
- **Auditory strategies:** 5 answers were categorised as an auditory strategy when students were required to verbally produce an answer: Speaking out loud / Saying a command out loud / Out loud / Repeating it in my head or out loud / Repeating it in my head and out loud before performing.

Together, the 2 questions were answered 58 times in the 79 self-evaluations submitted. 'Use brain' is the answer most often read in the self-assessment documents. The answers to the first question were the result of 2 questions which might give a biased picture in the number of answers compared to the following questions where 1 question was asked, answered, and analysed each time.

Below, the literal answers to the question 'What helped you succeed in the exercises?' are organised.
The result after open coding of the question was:

- **1 x Time-based strategy:** Mobile phone used to see the time.
- **4 x Auditory strategies:** Listened to the explanation / Listened well / Listened to what you said / Listened to the task, understood it, and knew what I had to do.
- **1 x Visual strategy:** Visualised.
- **11 x No strategy:** Just made it / Ready quickly / Thinking well / I remember it / Remembering well / Being smart / Because I think / Because I used my brain / Remembering / Because I am smart / Being able to remember a lot.
- **9 x Other:** Using tricks / Because I did it right / Because I did it well / I knew what to do / Used tricks / Good concentration / I tried my best / Because I did what I was asked to / Executed everything.

The question was answered 28 times out of 79 papers, which was less compared to the previous two questions. Answers were also more dispersed. ‘Think’ or ‘Remember’ remained the most frequently chosen answer. The other answers were more scattered.

Students' answers to the question ‘What did NOT work well in the exercises?’ were collected as well. The results obtained after open coding of the question were:

- **Time-based strategies**: none
- **Auditory strategy**: none
- **Visual strategy:** none
- **No strategy:** I don't know.
- **Other:**
    - **Attention:** Confused / Not paying attention.
    - **Good or wrong:** Mistaken / Wrong / Because I made mistakes / Mixed up something / Because not everything was correct.
    - **Remembering:** Forgot something / Too much to remember / Forgot.
    - Did not read assignment properly / Difficult.

The majority of answers were linked to ‘did something wrong’ without telling more or ‘remembering’ as the reason why the exercises failed.

In all the answers, students not only gave their strategies for the prospective tasks, but also for the executive functions’ exercises. Answers like 'use fingers' and 'categorise' were not possible in the prospective tasks, but they were possible to use in the executive function exercises.

Trainers indicated that learners found it difficult to complete the self-assessment document without guidance. Guidance proved necessary to make learners think actively as they were often unable to reflect on their own cognitive processes. Following the finding, more support was provided by the trainers in completing the document during later sessions. As Ku and Ho (2010) point out, "In fact, any non-real-time measurement that requires participants to recall their cognition after task completion would give an incomplete picture of the actual thinking process" (p. 254-255). This suggests that obtaining valid data on the cognitive processes during task performance would be more effective than collecting information afterwards, which was not the case in the training.

Collecting valid information before or after an exercise about a learner's thinking process is not straightforward. For instance, it is difficult for participants to be aware of a cognitive process or how it relates to whether one manages a task well (Ku & Ho, 2010). The answer 'I don't know (yet)' / 'no

idea' was given by several students when asked what tricks or strategies they used or wanted to use when doing the prospective assignments. Unanswered questions were not included in this analysis. Trainers said that help was needed to write something down.

Metacognitive skills increase with age and develop during adolescence, partly due to growth in self-awareness (Weil et al., 2013). However, no information was collected within this study on the correlation between students' age and the strategies they chose.

3.3 Feedback from the trainers

A total of seven trainers were involved in this study. Three trainers are still working with the materials at the time this report was written. Their experiences are not described here. Four trainers who already tested the full package, each with at least 2 students, had a generally positive experience, although they also mentioned some challenges in response to the research question:

3) **What is the trainers' experience in using the ReToRe toolkit?**

The materials

The materials used during the trainings, including the folder with exercises on prospective memory and executive functions, and the digital set (ProxyQB), were considered very useful by the trainers. After some adaptations to the Flemish context, the materials were well applicable in a classroom practice. However, the Proxy-QB did brought frustration, as they often did not work properly at first and were not always easy to connect to the tablet or charge. One trainer also regretted that the ProxyQB could not be used by them in the long run (only prototypes owned by the Technical university Ostrava). The children really liked the ProxyQB, which was an important incentive for their involvement in the exercises. The exercises on prospective memory and executive functions were perceived as clear and well-constructed, although the material needed a good translation to the Flemish context as well as having to be clarified in various assignments among the trainers for the different trainers to conduct the assignment in the same way. The possibility of some interpretation in the exercises was seen as an advantage, as it allowed trainers to tailor exercises to the students' needs.

Added value for learners

All trainers reported interesting insights into the ways their learners approached the tasks. They found that learners often managed challenges

creatively, especially when they got stuck with a specific executive function. By actively questioning which strategies the learners used, the trainers noticed that some learners creatively sought detours to reach a solution. That offered them an opportunity to tailor their approach to the individual needs of the learners. In addition, the trainers were surprised to see how resourceful and motivated the learners were, especially as they were able to keep their attention throughout an hour-long session. The toolkit package provides trainers with information about the learner that they often did not gather in other ways. Thus, the toolkit provided a good addition to the other observations to get a broader picture of a child.

Added value for the trainers

The trainers themselves also learned valuable lessons. Patience often proved necessary, especially when technology did not cooperate, such as the Proxy-QB or tablets. They also developed a better understanding of executive functions and learned how those can be trained in practice during a one-to-one training. One of the trainers indicated that organising and preparing the sessions was essential for smooth running, and that good preparation in advance, such as selecting assignments for the next day, made a lot of difference. The executive functions of the trainers themselves were also challenged to ensure the training sessions ran smoothly and to keep an overview of everything that was happening during the sessions.

Deploy ability in day-to-day operations

The trainers saw many opportunities to further deploy the knowledge and materials they had worked with in the future. For instance, they thought of elaborating the exercises so that they could be used in classes instead of just a one-to-one training. They also thought of spreading the toolkit more widely to other schools. The idea of turning the materials into a classroom game appealed to one of the trainers, as that could further increase students' engagement. Another trainer hoped it would be possible to continue using the Proxy-QB cubes in the future so that pupils' progress could be monitored. The latter was unfortunately not possible.

Meaningful elements and missed aspects

The trainers especially appreciated the opportunity to collaborate and exchange feedback with colleagues and researchers. The folder with exercises on prospective memory and executive functions was considered very useful. The support from both HOGENT and the project coordination in the Czech Republic was praised, as was the openness to feedback. One point of criticism concerned the sometimes too large space for free interpretation, which led to the need for more guidelines and clarity on how to interpret

certain sessions. Time pressure was also perceived as a challenge, as the combination of multitasking and organising the sessions sometimes proved difficult.

4 Discussion

4.1 ProxyQB

The exact link between the paper game set and the digital set is not clear. To what extent did learners become faster with the ProxyQB due to more practice opportunities? The link between the speed of the ProxyQB and the paper worksheets could be made specified.

The data was corrected by removing outliers with SD < 3, as indicated in the methodology. The wide margin also allowed for some outliers which strongly influenced certain peaks in the graph of some students. From the experience of the trainers, the technical aspects could influence the times, which may well explain some outliers.

Due to the diverse group of children (read various learning difficulties) and the various trainers-supporters, it was not always clear what influenced the results. The reason behind certain high or low speeds could not be identified.

4.2 Metacognition

Comparing the number of answers did not lead to a clear picture, as some questions were combined. However, the type of answer pupils gave did provide some information about the chosen task strategy. Learners mainly mentioned memory as the main strategy in tackling the prospective tasks. The way answers were phrased, limited and superficial, such as 'my brain', 'because I am smart' and 'remember well' showed little conscious metacognitive insight, which the literature also confirmed (Ku et al., 2010). The extent to which those learners effectively deployed task strategies versus the awareness of those deployed metacognitive strategies was not clear from this study. Indeed, according to Ku & Ho (2010), being aware of the metacognitive strategies used is difficult and requires guidance during the metacognitive process. Trainers also indicated that the students involved needed thorough guidance to formulate an answer to the questions from the self-assessment form and students found it difficult to answer the questions. The limited number of answers and the superficiality could show that this awareness process required much more intensive guidance to move from a task strategy to metacognitive strategies.

4.3 Feedback trainers

According to the trainers, the cooperation went smoothly, both with the people from the Technical university - Czech Republic (project coordination) and the researcher from HOGENT. The material was perceived as useful. Technical problems with the ProxyQB negatively impacted efficiency. Despite the positive aspects, all trainers indicated that the project was time-intensive, both in terms of the trainings and writing down observations to process the data. However, they appreciated the support and room for feedback in the approach to the trainings and the materials, as well as the freedom in interpretation and accommodation of the materials to the needs of their learners. Nevertheless, the latter is described as a pitfall research-wise. Learners were motivated to work with the toolkit. It gave the trainer-supporter new information about the learners in terms of their attention, strategies and approaches to prospective tasks and tasks requiring executive functions.

4.4 Limitations

The ReToRe toolkit contained a range of engaging, challenging learning games that could be extended for a wider audience beyond pupils with learning difficulties and learning disabilities. It gave trainers a lot of freedom to deploy the games in a way that best suited pupils' needs. The multiplicity and freedom also brought many opportunities for variation and interpretation. The various interrelated components were difficult to separate: the exercises requiring prospective memory, the exercises demanding executive functions, metacognitive strategies about prospective memory and the digital ProxyQB. Thus, it was not possible to disentangle metacognitive strategies about prospective tasks from the exercises focused on executive functions. The therapists' observational data contained fascinating information, although it was difficult to compare because the therapists were given broad viewpoints. Targeted therapist observation points were necessary to gather targeted information.

The package was designed for one-to-one counselling, which, in most educational settings, this was only possible in specific cases or therapeutic settings. Supporters in education need to be responsive and in tune with the student's care and support needs in their support of students. Training executive functions and prospective memory was often not yet seen as a priority for many pupils, schools, and parents, especially when compared to language and maths needs. Trainers, on the other hand, did see the added value of the package focusing on executive functions and prospective memory in students with learning disabilities, as well as in a broader student population.

Finally, it was difficult to find learners and tutors willing to participate into the project. Children with learning disabilities in education were given limited support hours, thus making it difficult to have that time taken up by a project on executive functions and prospective memory which was not among the priorities of their specific care needs and demands. Usually support in mathematics and language was often asked of support workers.

5 Conclusion

On average, students completed the ProxyQB tasks in session 5 across all six exercises compared to session 1. Evidence supporting a positive impact of the ReToRe worksheets on performance in the ProxyQB tasks was not clear. Neither was the impact of the technical problems on average speeds.

Students found it difficult or superficial to name strategies throughout the whole ReToRe toolkit task 'Using their brain' or 'Just memorise' were among the most mentioned strategies according to learners themselves for doing their assignment well. Using a time-related strategy was thought of, but hardly mentioned in response to why a task went or did not go well. What strategies exactly were used for the prospective memory tasks versus the executive function exercises was unclear. The answers to the questions in the self-assessment documents did show that guidance was necessary for students to reflect on their thinking processes, to go from task strategies to real metacognition. Without support, students found it difficult to name their (metacognitive) strategies, which was also evident from the literature (Ku & Ho, 2010).

Trainers were positive about the ReToRe toolkit in terms of the paper version. Concerning the digital ProxyQB, learners were enthusiastic, but a lot of technical problems were experienced. For trainers, using the ReToRe toolkit required some preparation and challenged their executive functions. It was a challenge to see the training series implemented in the already existing coaching of the sought-after target group. Helpful support in both preparation and during the training sessions was appreciated. Great freedom of interpretation and approach was both a plus and a minus. The toolkit gave the trainers a different, refreshing picture of their students regarding attention, approach, and strategies.

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