



Co-funded by the
Erasmus+ Programme
of the European Union

Evaluating the IAM Project

WP6-1

Inclusive Assessment Map

621435-EPP-1-2020-1-AT- EPPKA3-IPI-SOC-IN

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



**Co-funded by
the European Union**

Content

- Summary 1
- Introduction 3
 - The ICF framework 4
 - Participation 6
 - Motivating the Use of ICF in Supporting Inclusiveness 6
 - Teachers’ Prior Knowledge 7
 - The Pilot Project I AM 7
 - Creating a Tool in Collaboration with Teachers 8
 - Teacher Training 8
 - The Tool I AM 8
 - Testing the Tool 9
 - The Aim of the Evaluation 10
- Method 10
 - Participants 10
 - Teachers Descriptions 11
 - Instrument 13
 - Questions to Match Responses 13
 - Background Questions 13
 - The Inclusion Scale - Participation of Every Student in School 13
 - Usability of I AM 14
 - Procedure 14
 - Participatory Action Research 15
 - Teacher Training 15
 - Focus-Group Discussions 16
 - Ethics 16
- Result 18
 - Perception of Inclusive Education 18
 - Usability of the I AM APP 22
 - Open Ended Responses 24
 - Focus-group Discussions 25
 - When Introduced 25
 - After Testing the Tool 26
- Discussion 27
 - The perception of inclusive education 27
 - The Usability of the App 28

Limitations	30
Conclusion	30
References	33

Appendices

1. Questionnaires Everyday environment in school or classroom and usability of the I AM app
2. Information to participants
3. Comments from the four countries on usability

Summary

This project aimed at developing and implementing innovative methods and practices to foster and facilitate inclusion in education and promote common values. It is based on the International Classification of Functioning, Disability and Health (ICF) as a framework to build bridges between countries with different policies between different professions and theoretical backgrounds. We examined the perception of inclusive education and the impact of using an Inclusive Assessment App, "I AM," in the classroom, focusing on participation rather than deficiency. Based on an inclusive mindset, the project created a tool that supports teachers in inclusive practices using participatory action research when designing the tool. The tool will be practical for key-actors in the field of education and have implications for policy and research.

Inclusive educative systems are characterized by including all students in the sense that students are present, participate and learn in school with other students. The ICF framework of I AM focuses on improving and facilitating inclusion by assessing the school environment, emphasising functioning and participation rather than individual deficiencies. The aim is to address the common challenges most countries face concerning inclusion in a school welcoming all students. A shared challenge is that many students needing additional support often also participate in school activities to a lower degree than others. Another challenge is that teachers face problems attending to individual students and groups of students simultaneously. Focusing on participation and environmental factors presents a new way to address such issues. Facilitating inclusion through the relationship between participation and the environment relates to Availability, Accessibility, Affordability, Accommodability and Acceptability as different aspects of the environment. These 5 A:s were used to analyse inclusiveness.

In collaboration with teachers, this study aimed to create and evaluate a tool, an app called I AM, that was based on the ICF to examine if it could support teachers in their work. The teacher training consisted of two workshops. The first was related to the ICF framework, participation, and environmental factors. The second workshop focused specifically on using the app, identifying important issues related to usability and discussing applications in the classroom. The intention was to include 30 teachers from four countries each in this pilot study (Austria, Belgium, Germany, and Portugal.) Those teachers, the I AM group, should receive training in using the app based on the ICF, focusing on participation activities rather than individuals' need for compensatory support. The data collection also included focus group discussions with teachers about the tool's usability during field trials and questionnaires on their perception of inclusive education before and after piloting the tool. The questionnaires were also administered to a comparison group of teachers. Questionnaires about the tool's usability were also administered to the I AM group.

There was a challenge in recruiting the number of respondents as planned. Instead of 120 teachers responding twice in the I AM group, we received about 60 and about 40 in the comparison group. At the first measure point, we received 87% of the expected responses in the pilot group and 67% of the comparison groups' responses on the questionnaires. Teachers did rate their perception of inclusive education relatively high.

No significant differences were found between the initial and subsequent measures, but a detailed breakdown reveals nuanced patterns. The study employs the 5A:s framework (Availability, Accessibility, Affordability, Accommodability, and Acceptability) to assess perceptions of participation and environmental factors supporting inclusive education. While teachers agree upon the Acceptability of all students, the levels of Accessibility and, perhaps even more, the Affordability of working with inclusiveness seem to be lower. Teachers need time to use the tool and fully grasp the ICF mindset. Teachers already acquainted with the ICF framework, with a more inclusive mindset, found it comprehensive and saw the relevance of the I AM and how to use it efficiently as a tool for planning

and communicating. The most salient critique concerned aspects relating to suggested interventions offered in the app, which added to complexity by demanding reading scientific literature in English.

Lessons learned from the project highlight the complexity of introducing inclusive education concepts across different countries and the importance of involving teachers as well as school boards and administrators. The I AM tool, currently available in English, German, and Portuguese, seeks to maximize accessibility and applicability across countries. The tool encourages a shift in assessment methods to a focus on functioning in everyday life, fostering a more individualized and inclusive approach to education. The project envisions the I AM tool as a sustainable link between theory, policy, and practice, contributing to a more inclusive European education system and, indirectly, increased economic productivity and social participation.

The report is written by Lilly Augustine in close collaboration with Eva Björck, both working at Jönköping University. The Austrian, Belgian, German, and Portuguese teams have collected data and support in interpretation and translations.

Introduction

Irrespective of the country and school, some challenges are common in the educational system, including ensuring that all students feel included in the classroom. Teachers often face difficulties when dealing with large class sizes and having to create a balance between general structures and individual adaptations. To ensure that these adaptations are implemented without delay and are feasible for both the individuals and the setting, teachers are the best candidates to implement inclusive practices. Therefore, providing teachers with support is essential to identify, plan, and intervene in the school environment. Creating such support needs to be innovative and perceived as useful for the intended group. The participation of schools and teachers in designing projects aimed at facilitating their work is critical to achieving this.

The Inclusive Assessment Map (IAM) have an ambitious goal to support teachers using the International Classification of Functioning, Disability and Health (ICF; WHO, 2001a). ICF was officially endorsed by all 191 WHO Member States in the Fifty-fourth World Health Assembly on 22 May 2001 (resolution [WHA 54.21](#)) (WHO, 2001b) as the international standard to describe and measure health and disability. ICF is based on the same foundation as International Classification of Diseases, (ICD, WHO, 2019/2021) and International Classification of Health Interventions (ICHI; WHO, 2023) and share the same set of extension codes that enable documentation at a higher level of detail. ICF was intended to be universal and cover all ages, and in 2007, a version for children and youth was published (ICF-CY; WHO, 2007). Today, the version for children and youth has been incorporated into the universal version of ICF (WHO, 2023). There is a considerable body of research on its framework and applications in various fields, among them education.

The ICF/ICF-CY is an interactive framework focusing on functioning in relation to body function and structure, activity and participation, and environmental factors. The beauty of the classification is that it does not focus on diagnosis but rather on everyday functioning, which is something that teachers work with every day in the classroom. ICF is mainly used within the health and welfare sectors and has not been widely implemented within the education sector. There are exceptions; in Portugal, Taiwan and Japan, ICF-CY have been commended for application at policy level. ICF-CY has been present in Early Childhood Intervention (ECI) programmes in Portugal, Sweden, and Turkey (Castro & Palikara, 2018). After the decree on special education was passed in the German-speaking Community of Belgium in 2009, the first awareness-raising activities on ICF started in 2010. Initially, teachers working in the special education system were given the opportunity to complete additional training in ICF. In the meantime, this additional training is compulsory for teachers in the special education system.

Classroom teachers are the persons that students meet in everyday life in school and are the most essential persons providing support in the school environment. They may work together with special education teachers in the classroom or individually with the child in a separate room. Teachers may collaborate with various experts to provide support and adaptations for all students. It is common that experts from the fields of health and medicine, the social sector and psychology are involved in assessment and interventions for students in the classroom or work as consultants to teachers and parents. In some countries, experts are organised in teams providing support to children, parents, and teachers. The approaches in school have often focused on individual student characteristics when explaining and working with students who have various difficulties in the school environment. Doing so is in line with a compensatory perspective (Maxwell et al., 2018). A compensatory perspective means that the causes of functional impairments and difficulties are identified within the individual. This perspective considers functional impairments as pathological as an undesirable illness or abnormality. With this perspective, environmental factors affecting and hindering a child from participating in education in the classroom are not sufficiently considered. Mahoney (2013) refers to the fact that only 3-5 per cent of all information in support and treatment plans relates to a child's environment in the US. A Swedish study using ICF-codes to analyze everyday life in school for children treated for brain tumours shows that body function was overrepresented, also over time, whereas environmental factors as well as participation represented a smaller proportion (Björklund et al., 2021). This indicates

that treatment tends to emphasize body functioning rather than participation and adaptations to the environment.

In inclusive education environments, students with additional support needs “are present, participate, learn and receive instruction in a general education context with the same chronological age peers for all or part of a school day” (Amor et al., 2019, p.1281). The European Agency of Special Needs and Inclusive Education, a platform for collaboration for the ministries of education including most European countries, defines inclusion in a similar way as “education systems where all learners of any age are provided with meaningful, high-quality educational opportunities in their local community, alongside their friends and peers” (EASNIE, 2020). With the same approach Amor et al (2019). define inclusion with a focus on the environment in school as strategies, materials, or actions to improve access and progress. To sum up, inclusion is characterised by the provision of an accessible classroom where students spend the school-day together with peers and with a pedagogical approach that provides support and facilitates participation for all students in the classroom environment.

The ICF framework

ICF is part of the WHO family of classifications of health together with the International Classification of Disease (ICD)(WHO, 2019/2021). ICD provides diagnoses, and ICF complements the ICD by providing information regarding functioning in everyday life, i.e., functioning in a context. Research has shown that the variability in functioning between two individuals with the same diagnosis is large, so large that in a school context, two students with different diagnoses might function more similarly than two students with the same diagnosis (Granlund et al., 2021). Therefore, functioning, activity, and participation in relation to the barriers and facilitators in context matter more when creating inclusive settings than a specific diagnosis. The ICF includes personal factors as well, but there is no classification of those factors. Personal factors relate to, for example, socioeconomic status, affecting the individual, but they don't in themselves need to be a barrier or a facilitator and are difficult to address in interventions. Therefore, focusing on personal factors might lead down the wrong path, focusing on the individual rather than the environment as the source of change.

The introduction of ICF in 2001, which combines individual functioning and environmental aspects, could be portrayed as revolutionising at that time. It provided a new approach to assessment and intervention with a biopsychosocial perspective focusing on the interaction between body function and structures, activities, and participation and also on environmental and personal factors, and not only on body functions and structures (Maxwell et al., 2018; Sanches-Ferreira et al., 2017; Üstün et al., 2003). It paved the road for a new perspective on health and disability where both medical, psychological, and social factors were included in an interactive system.

Fig. 1. Interactions between the components of ICF, from ICF-CY, 2007, p.20.

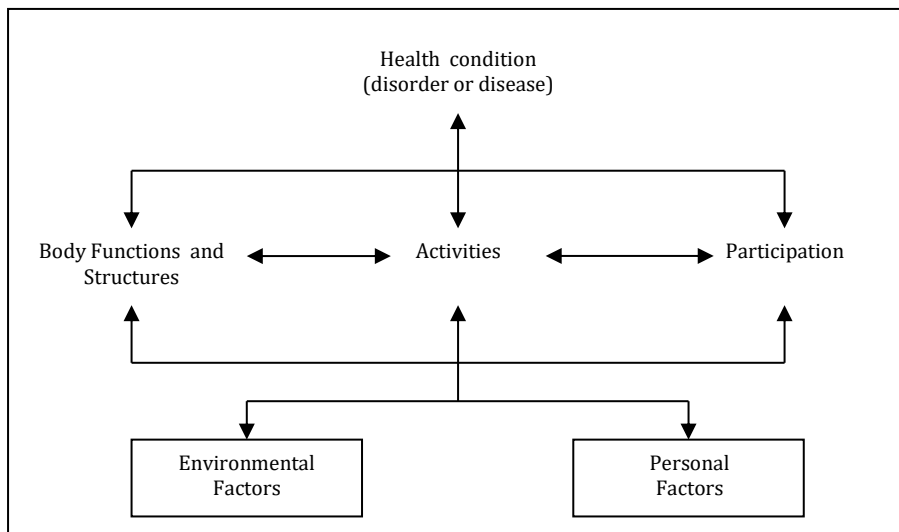


Figure 1. Interactions between the components of ICF (WHO, 2001)

Using an example to understand the ICF’s framework. Peter is having trouble in school. He finds it difficult to understand what the teacher is saying about math. When he tries to focus, he gets distracted and realises too late that everyone else is working, making it hard for him to catch up. Initially, he tries to look at what his friends are doing, but he doesn’t want to disturb them or feel embarrassed. When he raises his hand for help, someone interrupts him, and he loses focus.

So, what can we learn from this? It seems Peter wants to learn math (participation restriction), but the way it is being taught is unsuitable for him (environmental barrier). He has difficulty focusing (body function) and understanding the instructions (activity). We can explain this by looking at his body function, the activity level, and his participation (d-code). In this example, there are environmental factors (e-code) that are either helping or hindering Peter’s learning experience. The support he can receive from his teacher and peers is a facilitating factor, in the environment, while the task’s difficulty and distracting elements can be seen as barriers. We can understand how Peter’s functioning interacts with his environment to affect his activities and participation. These factors may vary depending on personal interests and other individual factors. We do not need to talk about a specific diagnosis to explain this.

The new classification opened for involving the individual and the social and physical environment in daily living in the home, school, and other environments. As the ICF has a descriptive rather than a diagnostic focus, the ICF offers a common language that can serve to document the characteristics of schools and the functioning of students in an educational environment. After the ICF was launched, the International Classification of Functioning, Disability and Health – version for Children and Youth (ICF-CY) was developed (WHO, 2007). This version was adapted to include factors important in handling development for the age period between birth and 18 years of age. The interactive biopsychosocial framework was intact, while items related to functioning and environments for children and youth were added to the structure. The multifunctional framework and taxonomy of the ICF apply to an array of activities that support children’s education. Applications of the ICF and ICF-CY for policy, practice and research in education have been identified in the literature (Björck-Åkesson et al., 2010; Castro & Palikara, 2018; Moretti et al., 2012). Despite possible applications, ICF has not been as widespread in education as it has in the medical field. In the current version of ICF, there is still a strong emphasis on body structures and body functions because of the historically high dominance of medicine and

psychology in assessing children's difficulties and impairments. Without a doubt, impairments of body structures and functions can hinder students from participating in education. However, these impairments cannot be changed in most cases – but teachers and educators can influence environmental factors.

Participation

Children with disabilities often have lower rates of participation in everyday activities than their peers and are sometimes less involved when they do participate (Samuels et al., 2020). They are also more sensitive to the classroom climate (Bertills & Björk, manuscript). However, it is important to note that the everyday functioning of children with the same diagnosis can vary widely, and knowing the diagnosis alone is not sufficient when attempting to address their needs. Therefore, it is necessary to understand their functioning and find ways to identify their needs in their everyday lives.

One helpful way to find ways to identify needs is to operationalise the ICF framework's concept of everyday functioning as participation. The Family of participation-related constructs (fPRC) (Imms et al., 2017) conceptualises participation as having two dimensions: "attending" and "being involved while being there". These two dimensions can be applied to different ecological levels, ranging from the individual in everyday contexts (e.g., attending and being involved in everyday activities) to aspects of societal service systems that can facilitate or hinder participation in interactions with a service system, such as school. Both increased participation in everyday activities (participation as a goal) and active participation in the process (participation as a means) are related to the well-being of children (Dunst, 2020) and parents (Huus et al., 2017). In fPRC, participation is hypothesised to be dependent on intrinsic factors (within the child), such as activity competence, sense of self, and preferences, as well as extrinsic factors (outside the child). The extrinsic factors are further divided into contextual factors, which are the nodal point for interactions constructed by the child and the social and physical environment, and environmental factors independent of the child. Consequently, a child's functioning and participation can be improved by focusing on extrinsic factors.

One effective way to study participation in the classroom is to use the five A:s (Simeonsson et al., 2001), which were further studied by Maxwell and Granlund (Maxwell & Granlund, 2011). These are: (1) Availability, (2) Accessibility, (3) Accommodability, (4) Acceptability, and (5) Affordability. The reason for targeting different aspects of the environment to facilitate participation is that there are different factors related to facilitating the frequency of attending versus increasing involvement. The possibility of acting or getting access was proposed by (Simeonsson, 2000) as closer to attending as it relates to the perception of accessible context. Affordability relates to the effort necessary to gain a return on something and is crucial in focusing on involvement rather than accepting lower levels of activity. When a situation is worth investing in, possible adaptations and feelings of acceptability impact participation. This study focuses on teachers' perception of inclusion based on the environmental dimensions of opportunity. (Maxwell, 2012) argues, based on (Badley, 2008), that these environmental factors can act as scene setters and, therefore, one way to impact children's participation is to work with these environmental factors.

Motivating the Use of ICF in Supporting Inclusiveness

ICF is more commonly used within the medical and health field, which is close to the mission of WHO. In educational settings, many different conceptual understandings and paradigms co-exist; an issue can have sociological, psychological, medical, and philosophical explanations, and they are all relevant. Yet this creates communication difficulties (Hollenweger, 2013). It reflects the understanding of disability as well since categories, such as diagnosis, might not in themselves explain the difference within the same diagnosis. ICF, as a tool, aims to be multidisciplinary. Despite that, ICF is not well implemented in education. Implementing a classification such as ICF needs to correspond to an unfulfilled need, such

as creating a common language or facilitating the combination of perspectives. The strength of the medical perspective is to provide a context-free diagnosis. Yet this gives insufficient information for an environmental situation, such as everyday situations for learning and participating in school. While body functions and structures are relevant, they cannot explain activity limitations and participation restrictions. Therefore, supporting and facilitating participation is contextual and needs to be based on environmental information. By creating a system that focuses on difficulties rather than diagnosis, in participation rather than skills, within a class rather than on the individual, teachers can be empowered to identify strategies in the classroom to create participation and learning. The model for the implementation of an ICF-based tool uses Hollenweger's situation model, focusing on giving teachers (who) a tool (how) to identify social and physical contexts (where) to identify need strategies (what) moving towards inclusion (to what) (Hollenweger, 2016, p.42). The model is described more in detail in the Ethical Framework for the "inclusive assessment map" (WP2 I AM research group, 2023).

Identifying what purpose ICF can have in an educational setting might not be sufficient for successful implementation. Supporting teachers in their mindset regarding inclusive environments and creating an understanding of ICF as a common language is also crucial. Introducing a new categorical system and supporting the understanding of it might be beneficial. However, starting to use this tool may naturally fill a need. The combination of categorisation, digitalisation, and networking could create an overview of the students' participation in the classroom and provide examples of possible actions that will be evidence-based. The focus should be on identifying barriers and facilitators for participation. Diverting the focus from individual deficits towards participation in the classroom could also be challenging for teachers and may take an extended time to accomplish.

Teachers' Prior Knowledge

Policy in different countries differ, and their understanding of both students in need of special support and inclusive settings also differ. Before implementing the I AM tool pilot, a dissemination of the countries' values and policies was considered (WP1). Austria focuses on special education needs due to diagnosed disabilities. Austria is using a two-track system with special schools or inclusive settings in mainstream schools. Gaining access to support is necessitated by failing or applying due diagnosis or risk of failing in school. Belgium's inclusive education focuses on identifying the student's needs to determine the best place for support and focusing on the learner's academic, behavioural, social, and emotional aspects, as well as environmental factors. To identify accommodations and adaptations according to the student's needs to access the curriculum. Focusing on five intervention levels depending on the level of compensation needed. In Germany, every student's performance is assessed according to their capabilities. Special educational needs focus on identifying individual educational needs concerning tasks, requirements, and support measures in school. The assessment is based on syllabus requirements and focuses on knowledge, abilities and skills acquired in a particular class. Having focus on both the student and its environment. Portugal focuses on identifying educational measures within a multilevel system to meet students' support needs, focusing on mobilising resources rather than students' categories. Focus is on the learner's academic, behavioural, social, emotional, and environmental aspects. Portugal uses more of a universal design, with most students attending regular education. Austria and Germany are described as more compensatory based on the different inclusive education systems. Portugal has a framework incorporating the biopsychosocial model.

The Pilot Project I AM

The I AM aimed to identify environmental factors that can facilitate or hinder participation in school, reducing barriers and enabling participation. This facilitation of participation and learning could be done through international best practices, overcoming focusing on individuals' deficits and instead implementing an inclusive policy. ICF, as the common language, promote collaboration and

understanding as well as focusing on environmental factors with participation in focus rather than diagnoses. Focusing on participation rather than deficits supports teachers' work in the classroom, creating inclusion and facilitating participation, learning (Gustafsson et al., 2021) and well-being (Augustine et al., 2022). Focusing on teachers and supporting ways for them to create inclusion efficiently can impact attitudes (Savolainen et al., 2022) and, through that, impact students. Creating opportunities for teachers to develop structured material focusing on the environment creates opportunities to discuss adaptations with colleagues and parents.

This pilot project testing the tool I AM was conducted in four cities in different European countries: Austria, Germany, Belgium, and Portugal. Teacher and teacher education in these countries have different levels of exposure to the ICF in education, with more exposure in Portugal than in the other countries. For some, participating in the teacher training was the first time they encountered the ICF.

Creating a Tool in Collaboration with Teachers

Creating inclusive settings focusing on participatory activities cannot be done if not together with the teachers themselves. Therefore, within the I AM project, one aspect of the field trials was to create the tool in collaboration with the teachers, using participatory action research. Focus groups were conducted within the countries testing the material. Before talking to the teachers, the project members of I AM needed to make their ideas more concrete to have something to present. The ambition was that the tool I AM should focus on three levels: school, class, and individual child. The outcome does not necessarily need to focus on the child, given that when focusing on the child, the intervention tends to be related to changing something concerning the child rather than changing the environment. There is a need to change the mindsets from only looking at the child to the interaction between the child and the environment. The grid of good practices and suggested interventions connecting ICF d-codes to e-codes was created from work package one (WP1 I AM research group, 2023) to provide suggestions to teachers who used the I AM about interventions.

The first version of the tool, I AM, was on paper as planned initially within the project application. However, after the first focus group discussion, the teachers stated that working with a paper version was considered to generate too much work, and an app could facilitate the process. Early on, it was made clear that teachers wanted to keep this tool for themselves, for the moment, and not involve families in the development and piloting of the tool. However, the recommendation is to involve the family and the child to create a shared understanding between teachers, students, families, and colleagues in school, creating a broader perspective on the everyday functioning and inclusion of students in the classroom.

Teacher Training

In all countries, teacher training consisted of two half-days to understand the ICF and the tool I AM. The first day of the teacher training focused on the ICF -model and understanding participation and environmental factors. The focus was on changing the emphasis on the individual and their deficits and concentrating on participation in activities and the environment. During the second session, the focus was on using the tool based on casework, discussing how to use it with parents and colleagues, and giving room for challenges that arose during the sessions. On top of that, there are different suggestions regarding support. The implementors of the interventions usually stood by responding to e-mails and giving Zoom sessions when needed.

The Tool I AM

While developing the app, teachers tested draft versions, discussed its usability, and needed revisions. As this project was a pilot, this instrument was created as a part of this pilot, and the process of

adapting the app in collaboration with teachers was conducted during the summer and fall of 2022. The data was collected in early 2023 and again during the late spring and early summer of 2023.

Early collaboration with teachers made the need for a web-based tool evident. The I AM App was created as a webpage that works as an app. This web page contains information concerning the project, the project's aims, and the mindset needed to use ICF and the ideas behind the ICF-model. There was a possibility of trying and using I AM. When using the I AM, a local login was created unrelated to the e-mail address or other personal information of the user. When doing this, the teacher can create classes and add students to them. With a class of 27 students there may be no need to add all 27. How many students per class is up to the teacher. There is also possible to use the app with just a few students.

Five Steps in Using the App:

- 1) The teacher creates an anonymised login without adding background information or an e-mail address.
- 2) When logged in, the teacher names a class, and adds students to this class. These students and classes could be fictional and called whatever. Students may be added independently of special educational needs. This creates opportunities to contextualise how much of participation restrictions the class experiences in different settings.
- 3) The teacher chooses relevant area of participation to focus on. These are based on ICF chapters, such as D1 (Learning and applying knowledge), but also include some sub-areas such as "Basic Learning" or "Applying knowledge, for example, "Calculating".
- 4) Based on these areas, questions will be asked focusing on different areas; teachers will respond for which students this is relevant and, if needed, add written comments.
- 5) When finalising, the teacher can choose output on individual level or group level.
 - a. On an individual level, for the chosen outcome area, a scale measuring the success rate of participation, areas with relevance and suggested interventions based on the grid of practices from WP1.
 - b. On a group level, it is displayed as Pie-charts presenting the success rate of participation on the group level, followed by the suggested interventions based on the grid of practices. The Pie charts report the overall participation restriction within the class; so, for instance, if there are ten students in the class and four have difficulties with "Focusing attention", 40% of the pie chart would be one colour, and the rest, of the pie chart, would be another colour. Below the pie charts, there would be a couple of suggestions, and the teachers can tick if this suggestion is not applicable and if they already tried it. The suggestions are aimed at giving support based on strategies to continue working within the class without focusing specifically on the support needs of one individual.

Testing the Tool

The teacher training consisted of at least two sessions. During the teacher training, recommendations for additional improvement were identified; these were noted but not implemented directly. The focus for teacher training was dual: 1) to understand the framework of ICF and the implications of using a biopsychosocial focus on school context rather than a compensatory focus based mainly on information on the body. 2) Focus on how to use the tool and test it on fictive cases with support. Because of this teacher training, it can be argued that their perceptions of inclusion and adaptive environment might change. To test this, the teachers were given a brief questionnaire regarding inclusive school settings to respond to before and after the teacher training. How this training took place and what groups of teachers differed depending on countries. There was a dynamic process of creating and adjusting, altering aspects of the tool in collaboration with teachers.

Teachers participating in teacher training could now work with the tool in their schools. Due to data security issues, the app account and its information were restricted to the computer they used to create their account. Teachers could print the output summary to share with colleagues or use in discussions with parents. The outputs include pie charts of the selected areas and suggestions for how to work in the school environment.

The Aim of the Evaluation

I AM is based on transnational collaboration, Erasmus+ KA3, which is co-funded by the European Union. The project aims to create a tool to facilitate teachers' documentation and evaluation in the classroom, suggesting evidence-based methods for increasing participation in the classroom. This report is an evaluation of the effects of piloting the I AM-app.

To increase classroom participation, it is essential to focus on everyday practices in the school environment and find usable tools to engage all students. One part of this evaluation focuses on participation and inclusion, and the other on app usability. The app was created in collaboration with teachers, and during the work, focus-group discussions played an important role. The following two questions were raised:

Q1: Does the perception of inclusive education differ depending on the project, and can we see differences based on profession, experience, or country?

Q2: Do teachers find the I AM usable, and does this differ depending on country, experience, and profession?

Method

When evaluating teachers' perceptions, a few aspects are related to the data collection and details regarding teacher training and tool usage. More information regarding the motivation and the tool used can be found in the ethical considerations (WP2 I AM research group, 2023). This evaluation focuses on the tool's usability and the perception of inclusion. A participatory action design has been used. The teacher training is described in the background. Those in the comparison group did not have this training. These groups of teachers work as they typically do within their school system.

Participants

The initial plan was to involve 30 teachers from each country in the pilot and 30 additional teachers as part of a comparison group, allowing them to respond to the questionnaire concerning inclusive school settings. Therefore, the ideal number of teachers would be 120 in comparison, and in I AM, ideally getting them to respond twice, referred to as First and Second. The total response number was 119 in the teacher training group (I AM) and 98 in comparison. However, only 87 were complete, with 99 just the first time and 27 only the second time; five were unknown if they belonged to the comparison or test group. More comparisons are missing than would be expected. However, the pattern is more complex than that.

Table 1. Distribution of Responses planned, collected and divided by group and country.

	Total		Austria		Belgium		Germany		Portugal	
	Comp	I AM	comp	I AM	comp	I AM	comp	I AM	comp	I AM
Planned	120	120	240	30	30	30	30	30	30	30
Both time points	31	56	87	0	10	18	20	8	9	5
Just 1st time	51	48	99	30	12	12	8	9	17	0
just 2 nd time	15	12	27	2	3	2	6	11	0	0
Total nr of responses	97	116	213	32	25	32	34	28	26	5
Complete set	26%	47%	36%	0%	33%	60%	67%	27%	30%	17%

Footnote: percentage both/planned, comp=comparison

Based on the planned sample, 26 % had responses before and after, and the number for I AM was 47 % (see Table 1). We noticed that many teachers were only answering once. Usually, 40-43 % of planned teachers respond only to the first measure point, and approximately 10% only responded to the second measure. We received at least one measure point from 80% of the comparison group and 97% of the teacher training group (I AM). Reasons differed; in Austria, the teachers who participated felt they would instead give feedback in focus groups than respond a second time to a questionnaire. Comparison groups usually answered that they had already replied, as there were no differences between the first and the second time.

We see differences between countries. All countries had more significant issues securing responses from the comparison, especially twice. Austria had no complete cases, but a whole set responded to the first twice-second measures. Belgium managed to secure more full sets of comparison and teachers completing the teacher training (I AM). Portugal received five responses in the comparison group, and those five teachers responded twice. But overall, they had the least number of comparisons responding. One explanation for this might be the difficulties in knowing who responded and who did not; therefore, there was no possibility of knowing if people had answered twice, especially in the comparison group. The notion of making the questionnaire brief so it would not require so much time did not work either; as teachers experienced, they already responded and did not have more time. Given the procedure of not giving personal data in the questionnaire, rather than three questions with a response of acronyms used to combine the data points, there is a possibility that some measures, with several cases with just first- or second-responses, indicate individuals not being able to match.

Teachers Descriptions

Participants' demographics were divided by country, educational level, and role (see Table 2). Germany had highly educated teachers (with master's or PhD) as participants, but young with much fewer years of experience; most were special education teachers. In Portugal, some reported other roles than teacher or special education teachers; this was not the case in the different countries. However, they differ from Germany in that they have long experience, approximately 30 years, and most of them were teachers. Austria and Belgium report more teachers with a bachelor's and fewer with a master's or Ph.D. The length of experience is interim, with between 13-19 years depending on group and country. Austria differs from Belgium because more special education teachers responded in Austria, and more regular teachers responded in Belgium. Most participants have a complete teacher education (71.4%), and most work in public schools (85.7%). The difference between the countries is visualised in Figure 2. Teachers are more represented in Belgium and Portugal, with the distinction of experience and

education. Austria and Germany have more special educational teachers but a difference in academic level and experience, with Austria having more expertise and Germany having more education.

Table 2. Demographics of Teachers in different countries participating.

Country Group		Age M(SD)	Education(years)			Years exp.	Role (n)		
			3	4-5	More		Teacher	Spec. ed	Other
Austria	I AM	45.21 (10.20)	13	5	8	19.36 (10.64)	5	21	
	comp	45.72 (8.89)	8	18	9	19.16 (10.56)	0	31	
Belgium	I AM	36.50 (11.20)	27	3	4	13.15 (10.65)	21	11	
	comp	40.52 (10.36)	18	9	6	15.61 (10.02)	11	14	
Germany	I AM	27.12 (6.40)	8	0	18	2.31 (4.90)	5	19	
	comp	28.50 (10.05)	9	4	15	3.46 (4.83)	4	22	
Portugal	I AM	49.23 (8.17)	2	10	19	30.20 (3.35)	19	7	5
	comp	53.00 (5.30)	0	0	4	30.20 (3.35)	4	0	0
Total	I AM	39.82 (12.39)	50	18	50		50	58	5
	comp	39.42 (12.14)	35	29	33		23	67	0

Footnote: comp= comparison. Bachelor=3 years, Diploma, graduate=4-5 years.

Simplifying this, we can see that the participants from different countries differ (see Figure 2). Based on these demographics, the conclusion is that there are differences between countries, specifically regarding experience and roles, emphasising those being general teachers and those being special education teachers. As we can see, there are differences between the distribution of professions in the I AM population. The difference in age and education is not as pronounced between teachers participating in I AM and those who did not.

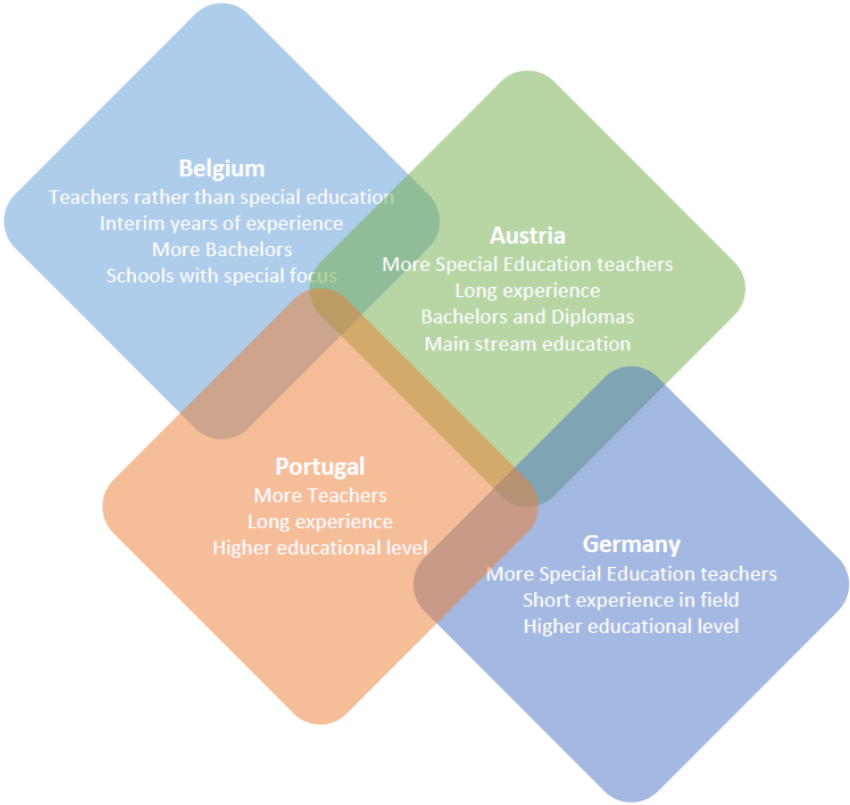


Figure 2. The difference in demographics between the four settings of teacher training.

Instrument

The questionnaire used in the project had one part that all participants responded to concerning the participation of every student in school and one questionnaire only teachers involved in I AM answered about the relevance and usage of I AM.

Questions to Match Responses

We wanted to match the first- and second-measure points to each other without knowing who responded. Four questions were used to create a code. "Day of your birthday (just the number), First two letters of your mother's name. First, to letters of your father's name. First two letters of the city where you were born. For example, that could create a code looking like 18MOCHKR.

Background Questions

Type of school, country, age, years of experience, and level of education (bachelor to PhD or other). Another question concerned their role at school, whether they worked as teachers, special education teachers, or others. Most worked as teachers or special education teachers; therefore, any other classification concerning others was irrelevant.

The Inclusion Scale- Participation of Every Student in School

The instrument *Participation of every student in school* consists of 40 statements on a 4-point Likert scale from Agree Totally (4) to Not at all (1). Two instruments inspired the scale (EASNIE, 2017a, 2017b) (Appendix 1). The statement in the questionnaire was divided into the areas "Welcoming atmosphere," "Inclusive social environment," "Inclusive physical environment," "Interaction and language," "Student-centred learning environment," "Pedagogy for all students," "Curriculum development," "Partnership and collaborative work," and "Support for teacher and other school staff."

All variables in the questionnaire were related to different aspects of the ICF, emphasising that the scale measures the environment and some elements of student participation in school. As environmental factors necessary for facilitating the frequency of attending and intensity of involvement might differ, all statements were sorted based on the five A for participation (Maxwell, 2012; Simeonsson et al., 2001): *Availability, Accessibility, Affordability, Accommodability, and Acceptability*.

As this scale has not been used previously in this setting, the first step is to look at variable variability, conducting an explorative factor analysis to identify if any of the theorised models fit the variables or if other underlying constructs exist. The second step would be to create indexes and describe the data. Individually, no variable shows abnormal distribution; they all have an acceptable symmetry within +2 and -2 (Hair et al., 2010). As the purpose is to decompose data into fewer constructs, a Principal component analysis is chosen. When choosing a PCA with varimax rotation and based on our theory of the 5 A:s and the scree plot supporting a 5-factor solution, we ended up with a KMO of .92, indicating an adequate sampling and is considered close to perfect. Acceptability, focusing on students' engagement, explained the most variance; the five factors cumulatively explained 56.29 %. All scales had acceptable Cronbach alpha scores.

Table 3. *Explanation of the 5 A:s, with Availability closer to 'being there' and Acceptability closer to 'involvement'.*

Lv	Description	Nr Item	% of var	A (1 st -2 nd)	Example of items	Description
1	Availability	5	5.57	.85-.84	"Digital technology is available and accessible for all students."	These questions concern material and resources
2	Accessibility	8	6.66	.90-.89	"Learning activities are based on students' interests and ideas."	This scale focuses on learning and progress as well as documentation and assessment.
3	Affordability	6	4.73	.82-.82	"Staff are supported to share knowledge and reflect with colleagues as a form of professional."	This scale focuses on staff and their training, discussions, and partnerships.
4	Accommodability	6	4.41	.79-.72	"The school curriculum enables learning opportunities for all students."	Focus on curriculum and the physical space.
5	Acceptability	14	34.92	.91-.91	"Every student engages in activities and interactions." "Students and adults interact and are kind to each other."	Focus on every student and peer. Clear rules and behaviour expectations are consistently applied and communicated.

Usability of I AM

The Usability scale consists of 13 questions, with the possibility to comment on each question. A Likert scale was used from 1= Not at all to 4=Agree. Examples of questions were "The information included in the I AM tool is relevant to describe student's learning and participation" and "The I AM Tool is a suitable instrument to share and discuss with parents." Teachers had the opportunity to comment on each question.

When conducting a Principal component analysis, an adequate KMO of .93 and no extraction points below .5, Extracting two factors explaining together 66.26 %—the first factor explaining 58 %. The rotation indicated that all questions except those concerning missing areas in the I AM tool loaded well together. Including all 13 items in a Cronbach's alpha gave a value of .92, and dropping the variable regarding missing areas increased it to .95. However, the questions were chunked into subthemes to describe usability as Relevance, Simplicity, Planning, and Communication.

Procedure

The pilot implementation was conducted in four locations. Countries and schools differ in policy, structure, and organisation, so a simplified design might still have been implemented differently in each country, with a similar initial strategy, contacting schools to invite them to teacher training about the project. In addition, find teachers for the comparison group who are not a part of the project to fill out the questionnaire. For some participating countries, such as Austria, having the Municipality as a project member, identifying schools was more straightforward than for Germany and Belgium, who needed to work harder with these parts. Portugal connected teacher training to education at the

university and gained access to teachers participating in their teacher training. However, they had more challenges when it came to finding additional teachers for the comparison.

The project has incorporated a participatory action design in developing the tool; this was done not as part of teacher training but in focus groups, where teachers participated by using the APP, commenting on their wishes and the need for adjustments. The number of focus groups differs between countries, and any eventual data collection from these focus groups is not a part of this report.

Participatory Action Research

Participatory Action Research (PAR) was used as an overarching research approach to apply and guarantee the stakeholders' inclusion in the multi-method research design (Cornish et al., 2023; McIntyre, 2007). Participatory action approach generally aims to include marginalised children, adolescents, and adults as co-researchers in scientific research. "Collaborative processes aimed at improving and understanding their worlds to change them" (McIntyre, 2007, p. IX). Regarding the I AM project, PAR attempted to close the policy-practice gap caused by highly abstract scientific documents that fail to apply participatory measures or engage effectively with practitioners.

Based on and exemplified by the WP2 activities, the following section presents the application of PAR. The project identified administrators, teachers, and students as central stakeholders to achieve the development of the I AM tool. One school in Vienna was identified as innovative in terms of inclusion development and thus invited to support the participatory development and research process and function as a co-research institution. At this school, the University of Vienna research team installed and guided two reflective teams comprising teachers (Team 1) and students (Team 2). In general, Team 1 worked on teachers' pedagogical practices and established diagnostic practices at school. Team 2 worked on the impact and effect of diagnostic practices on learning processes. It sheds light on students' emotional, social, and academic needs to fully participate in their learning environment. Both teams carefully reflected current pedagogical practices on both a structural and a school-based level. To guarantee scientific validity, the piloting teams worked closely with the teachers in focus group discussions (see. Section Focus Group Discussions).

After the first cycle of FGD, the findings were matched with the results from WP1, aiming to adapt practices following the ICF-CY's main approach. A first draft version of I AM was developed collaboratively. The second cycle of the FGD focused on validating the I AM draft version. It followed the PAR approach, considering constant reflections and exchange processes among diverse stakeholders. This version was piloted in one school in Austria, Belgium, Germany, and Portugal and reflected on FGD in each country.

Teacher Training

During the app's development, a paper version of the I AM was first made and discussed with teachers, and based on their feedback, an APP was created. As ICF is a large classification support in how to think when implementing ICF and how to use the tool, teacher training was necessary. The app was created in Portuguese, German, and English. An essential part of the pilot concerned teacher training for understanding ICF and its framework and, based on that, work with the APP. The structure of teacher training was similar to national adaptations. The first meeting introduced the philosophy of the ICF, the tool, getting to know or understand it better, and understanding the difference between taking part, participating, and trying it out. Participants also completed the questionnaire for the first time during the teacher training. At the second teacher training session, teachers could start trying and working more with the tool, asking questions about it. During some of the teacher training sessions, focus group discussions were held. Additional focus groups with a transnational focus were held at the end of the pilot.

Focus-Group Discussions

Following the principles of participatory action research, one co-research institution with two reflective teams was installed in Austria, including 21 stakeholders (ten administrators, seven teachers, and five students) in the co-researching teams. The participating teachers acted as gatekeepers for the students, Team 2, respectively.

The focus group discussions varied between 35 and 70 minutes. The teams meet either online or at school due to the COVID-19 pandemic. For the first cycle, a semi-structured interview guide provided guiding principles to discuss the relevant issues in developing the I AM tool. As the second cycle narrowed down the first findings to discuss the applicability of the first I AM tool draft, a more focused interview guide provided guidance and comparability according to the international conduction (Barbour, 2007).

Ethics

All ethical considerations regarding this project have been thoroughly discussed and follow the ethical guidelines within the countries conducting the data collection. Creating cross-national projects always raises questions concerning procedures and data management. Legislation and implementation might differ. European countries have similarities in legislation. I AM has handled these by creating a WP for an ethical framework for I AM (WP2 I AM research group, 2023).

There has been an ongoing discussion about data management. One concern is that teachers should be able to use the tool without sharing sensitive data that should only be stored locally on their computers. Working with locally stored data makes it challenging for teachers to collaborate, and this critique has been explicit. However, in this project, this requirement was deemed relevant. When creating a user, the teacher doesn't need to provide personal information other than a username. Teachers can create a new account without retrieving the previous one if they don't remember their account information. In the I AM project, the data collected focuses only on the questionnaires submitted by teachers and the feedback collected from focus groups. The data collected includes only the necessary information, and the project does not contain any information regarding the teachers' gender since it wasn't part of the research scope.

Table 4. *Brief description of the procedure nationally*

	AUSTRIA	BELGIUM	GERMANY	PORTUGAL
START AND FINISH	Nov. 2022- May 2023	Nov. 2022- May 2023	Dec. 2022- May 2023	Jan. 2023- May 2023
TEACHER TRAINING	Starting in Nov 2022 and ending March 2023 Two groups, two sessions each; the second was transnational with German-speaking colleagues	End of Nov. Q & A January and discussions March to May. Three training sessions	Three groups starting March 2023, two occasions. One session was transnational with German-speaking colleagues.	On two occasions, the 13 th and 20 th of January.
INCLUSION IN TEACHER TRAINING	Teachers from 15 different schools have primary, secondary, and special needs variations.	In the teacher training, 30 teachers at two different schools.	Teachers, teacher-students, and people teaching single subjects, all with previous experience in school	Invite all teachers through contact e-mails and formal and informal networks. Volunteering to participate, certified by the Scientific Pedagogical Council for advanced training.
COMPARISON GROUP	Online input sessions on ICF included the questionnaire, inviting teachers not part of the piloting. When sending out the questionnaire, people filled it out one but not the second time.	A total of 47 teachers were invited. Participated in the first part of the teacher training, introducing the project, and the ICF framework.	Consisting of persons with teacher education, previously or currently working in a school, or finalising teacher training.	Contacted teachers from a master's degree program in School administration, all of them regular teachers
FOCUS GROUPS	2 in December and January Transnational German March 20 th With Portuguese April 3 rd	Transnational March 20 th Online Focus Groups May 2 nd and 4 th	Transnational March 20 th	Transnational Portuguese April 3 rd . Focus group 19 th May
IMPORTANT NOTES.	Requesting bilateral meetings with teachers from other countries More precise descriptions of intervention titles Links to National Teaching Support plans.	Later start than planned, The need for additional support. Two schools were chosen to participate, both I AM and comparison from these two schools. These schools had supported other schools with inclusive support.	Organisational difficulties relating to gatekeepers. Teachers who were already very advanced in their inclusive mindset participated. The comparison and I AM groups received input on participatory research and diagnostics; the I AM group was introduced to the project and the tool before the survey, and the comparison group after the survey.	

Result

We want to answer two questions regarding inclusive education and the tool's usability. The first question concerns if there is a difference in perception of inclusive education, measured as the 5 A:s, in IAM. And if this differs depending on experience, education, or country. The second area we wish to address concerns the usability of the tool. The usability will be disseminated concerning the survey responses by teachers participating in the teacher training and by focus groups.

Perception of Inclusive Education

What effect did the training have on teachers' view of inclusive education in their school based on the 5 A?

Table 5. Mean for the first and second measure total sample.

	First (n=216)				Second (n=87)				t-test
	mean	SD	min	max	mean	SD	min	max	
Full scale	2.95	.44	1.64	4	2.95	.38	2.32	3.97	ns
Availability lv 1	2.87	.62	1.17	4	2.92	.55	1.67	4	ns
Accessibility lv2	3.02	.57	1.15	4	3.02	.49	1.88	4	ns
Affordability lv3	2.83	.59	1.2	4	2.82	.55	1.4	4	ns
Accommodability lv 4	2.94	.55	1.33	4	2.90	.47	1.5	3.83	ns
Acceptability lv 5	3.09	.46	1.43	4	3.11	.41	2.36	4	ns

Scale 1-4

There are no differences between before and after measures when not considering the group. The difference in mean values is similar. They determine whether schools have used the tool and had the training or the organisation.

As shown in Table 6, the groups are small, especially the comparison groups. When comparing mean values, we see a slight increase in the mean for intervention, except for Affordability, and a slight decrease in the comparison group, except for Affordability. Divided per country, we find that values of Acceptability measuring the contextual value closest to involvement increased in the intervention group in Austria. However, we do not have a comparison group in Austria. Germany stands out concerning others as their intervention group rated Affordability higher in the second time measure than in the first measure point for the intervention group. We find a difference in Austria and Germany, in different dimensions, but both these countries had more special education teachers responding.

Table 6. Means and Standard deviation for IAM and comparison divided by country.

	IAM n=56					Comparison n=31				
	1st		2nd		t-test	1st		2nd		t-test
Whole sample	m	Sd	m	Sd		m	Sd	m	Sd	
Full scale	2.93	.48	2.94	.37	ns	3.00	.41	2.97	.38	ns
Availability lv 1	2.91	.58	2.92	.56	ns	2.95	.61	2.92	.56	ns
Accessibility lv2	2.96	.63	3.03	.48	ns	3.06	.50	2.99	.51	ns
Affordability lv3	2.81	.65	2.78	.56	ns	2.83	.54	2.88	.54	ns
Accommodability lv 4	2.87	.64	2.88	.45	ns	2.96	.50	2.93	.44	ns
Acceptability lv 5	3.09	.50	3.10	.42	ns	3.21	.44	3.13	.39	ns
By country										
Austria	n=10									
Full scale	2.80	.48	2.95	.40	ns					
Availability lv 1	2.48	.60	2.68	.57	ns					
Accessibility lv2	2.89	.84	3.2	.45	ns					
Affordability lv3	3.04	.40	2.86	.56	ns					
Accommodability lv 4	2.65	.65	2.82	.65	ns					
Acceptability lv 5	2.94	.53	3.17	.38	-2.50*					
Belgium	n=20					n=18				
Full scale	3.04	.49	2.98	.43	ns	3.19	.42	3.08	.43	ns
Availability lv 1	3.15	.50	2.95	.66	ns	3.23	.52	3.13	.56	ns
Accessibility lv2	3.24	.49	3.10	.48	ns	3.21	.49	3.04	.60	ns
Affordability lv3	2.7	.80	2.73	.64	ns	3.04	.57	3.04	.63	ns
Accommodability lv 4	2.93	.65	2.95	.37	ns	3.06	.55	2.93	.47	ns
Acceptability lv 5	3.2	.46	3.18	.48	ns	3.37	.42	3.28	.41	ns
Germany	n=9					n=8				
Full scale	2.71	.48	2.89	.39	-1.90 †	2.73	.28	2.85	.27	ns
Availability lv 1	2.46	.53	2.67	.43	ns	2.48	.59	2.60	.50	ns
Accessibility lv2	2.81	.81	3.08	.56	ns	2.92	.50	3.0	.34	ns
Affordability lv3	2.64	.65	2.96	.65	-3.28**	2.48	.39	2.73	.28	ns
Accommodability lv 4	2.76	.61	2.74	.51	ns	2.69	.42	2.90	.50	ns
Acceptability lv 5	2.87	.31	3.02	.24	ns	3.06	.41	3.00	.25	ns
Portugal	N=17					N=7				
Full scale	2.98	.47	2.92	.30	ns	2.78	.17	2.76	.18	3.15*
Availability lv 1	3.11	.44	3.15	.36	ns	2.67	.31	2.67	.31	ns
Accessibility lv2	2.76	.45	2.82	.42	ns	2.75	.38	2.8	.40	ns
Affordability lv3	2.91	.57	2.69	.42	ns	2.64	.17	2.56	.26	ns
Accommodability lv 4	3.0	.65	2.92	.38	ns	3.03	.32	3.0	.29	ns
Acceptability lv 5	3.15	.57	3.01	.46	ns	2.83	.22	2.79	.17	ns

n= number of participants responding twice, *p=.05, **p=.01, † p>.09

Table 7. Mean and comparison depending on the teacher's role

	I AM (n=28)					Comparison (n=12)				
	1st		2nd		t-test	1st		2nd		t-test
Teachers	mean	SD	mean	SD		mean	SD	mean	SD	
Full scale	2.98	.53	2.86	.33	ns	2.95	.36	3.00	.30	ns
Availability lv1	3.07	.54	2.90	.46	1.95 [†]	2.79	.53	2.88	.55	ns
Accessibility lv2	3.01	.57	2.90	.40	ns	3.10	.39	3.16	.39	ns
Affordability lv3	2.69	.83	2.59	.52	ns	2.68	.53	2.87	.51	ns
Accommodability lv4	2.90	.67	2.80	.36	ns	2.90	.47	2.96	.38	ns
Acceptability lv5	3.25	.51	3.13	.45	ns	3.26	.48	3.15	.39	ns

	I AM (n=24)					Comparison (n=14)				
	1st		2nd		t-test	1st		2nd		t-test
Special education teachers	mean	SD	mean	SD		mean	SD	mean	SD	
Full scale	2.92	.42	3.07	.40	-2.05*	3.05	.49	2.96	.48	ns
Availability lv1	2.83	.57	2.96	.68	ns	3.05	.71	2.99	.62	ns
Accessibility lv2	2.93	.73	3.21	.53	-2.83**	3.13	.57	3.02	.50	ns
Affordability lv3	2.98	.38	2.99	.56	ns	2.91	.63	2.83	.60	ns
Accommodability. lv4	2.89	.62	3.07	.43	ns	2.99	.58	2.90	.55	ns
Acceptability lv5	2.98	.41	3.11	.40	-2.18*	3.16	.41	3.08	.40	ns

Footnote: *=.05, **=.01 or less. [†]= almost .05

When dividing it depending on the profession, we see that the three relevant dimensions in Germany and Austria still matter for special education teachers. One additional relation for teachers to experience is a reduction in Availability. Despite no difference depending on years of experience, we see in Figure 2 a change in the ratings of Accessibility and Affordability for more senior teachers—rating activities more in line with children's interests but rating the support and time as less. Young people might rate the Availability higher later.

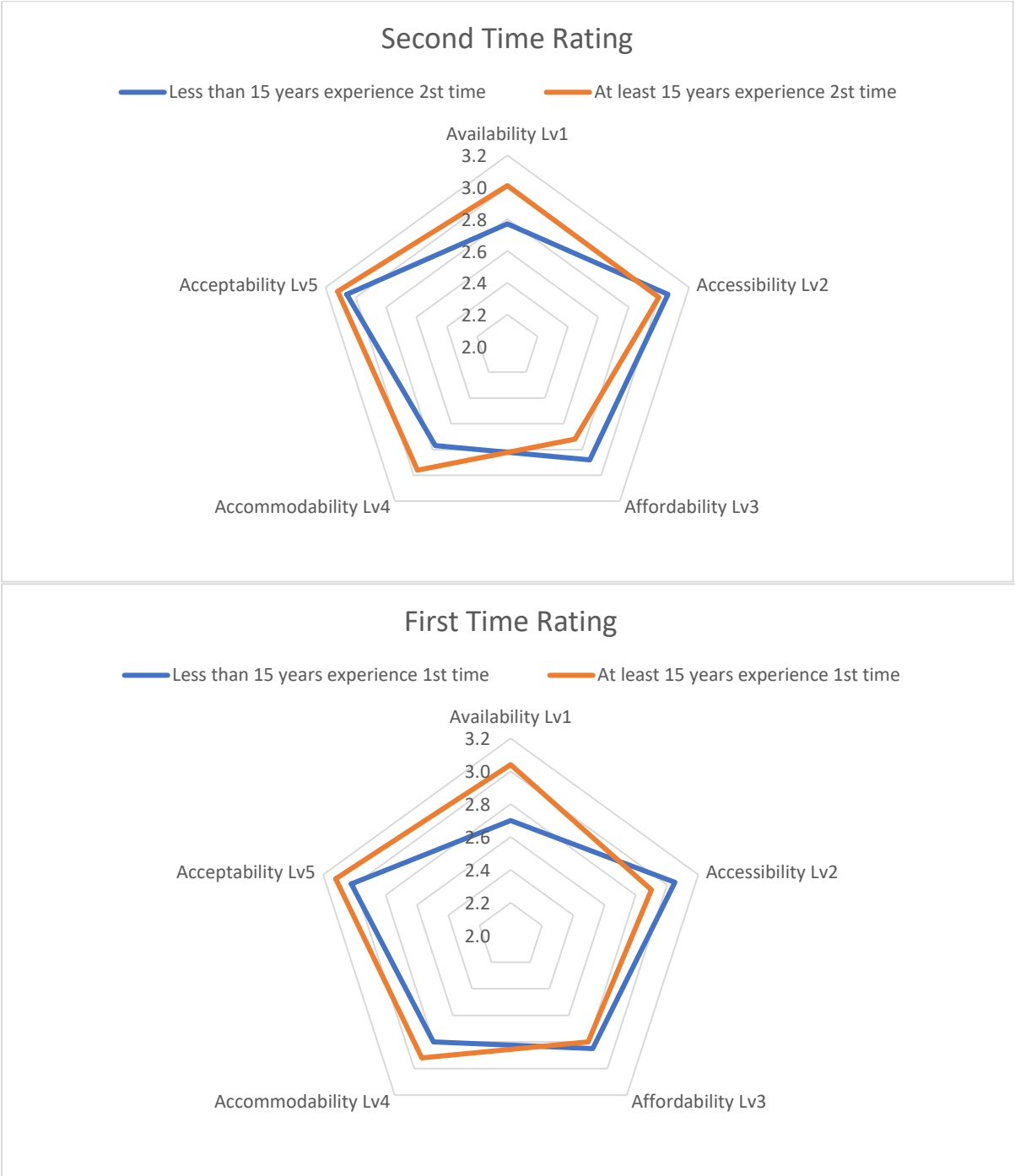


Figure 3. Rating before and after regarding inclusive setting in the I AM group depends on having more or less than 14 years of experience.

As the number of teachers with short experience became more dependent on the country, a division into somewhat equally sized groups reduced any difference depending on experience as we can see the younger rate Availability lower than those with more extended backgrounds and the teachers with 15 years or more rate their Affordability, especially in the second measure point a bit lower.

Usability of the I AM APP

There are more participants the first time than the second time; for example, 28 teachers responded to the usability scale in Austria at the first measure point but only ten on the second, there were 34 from Belgium and 20 the second time, 26 from Germany the first time but only nine the second time. In Portugal, 29 responded the first time and 17 the second time. This attrition the second time means that comparisons are usually limited in variation. The relation between the first and second times in Austria and Germany, countries with few respondents two times lack variance ($r=.91$). For countries where more teachers responded twice, we have the opposite relation with ($r=-.14$ to $r=.195$).

Table 8. *Usability is divided by the country.*

	Austria		Belgium		Germany		Portugal	
First measure point	M	SD	M	SD	M	SD	M	SD
Usability total scale	2.88	.68	2.28	.57	3.00	.33	3.40	.35
Relevance	2.85	.70	2.33	.62	3.06	.34	3.14	.39
Planning	2.82	.70	2.11	.75	2.91	.38	3.43	.52
Simplicity	2.96	.68	2.52	.55	3.00	.47	3.36	.43
Communication	2.77	.76	2.09	.69	3.02	.50	3.41	.48
Second measure point								
Usability total scale	3.28	.43	2.15	.62	3.12	.46	3.45	.37
Relevance	3.33	.35	2.24	.64	3.17	.50	3.37	.48
Planning	3.33	.52	1.97	.72	2.96	.61	3.37	.41
Simplicity	3.18	.60	2.38	.74	3.17	.41	3.44	.38
Communication	3.30	.48	1.85	.75	3.11	.78	3.38	.45

The number of people responding is low, but we can see that Austria rates higher usability in the second point of measure and Belgium rates usability lower in the second time. Indicating that teachers in Austria became more positive, while that was not the case in Belgium. Germany and Portugal are stable. Portugal rates the overall usability higher than the other countries, and Belgium rates it lower. When testing the differences between countries, we see that Belgium differs from the other countries in first and second time. Countries vary depending on whether they find it a good tool for planning or if it is simple. Given that four is the maximum, the second measure, when many have tried, is rated as usable, with room for improvement.

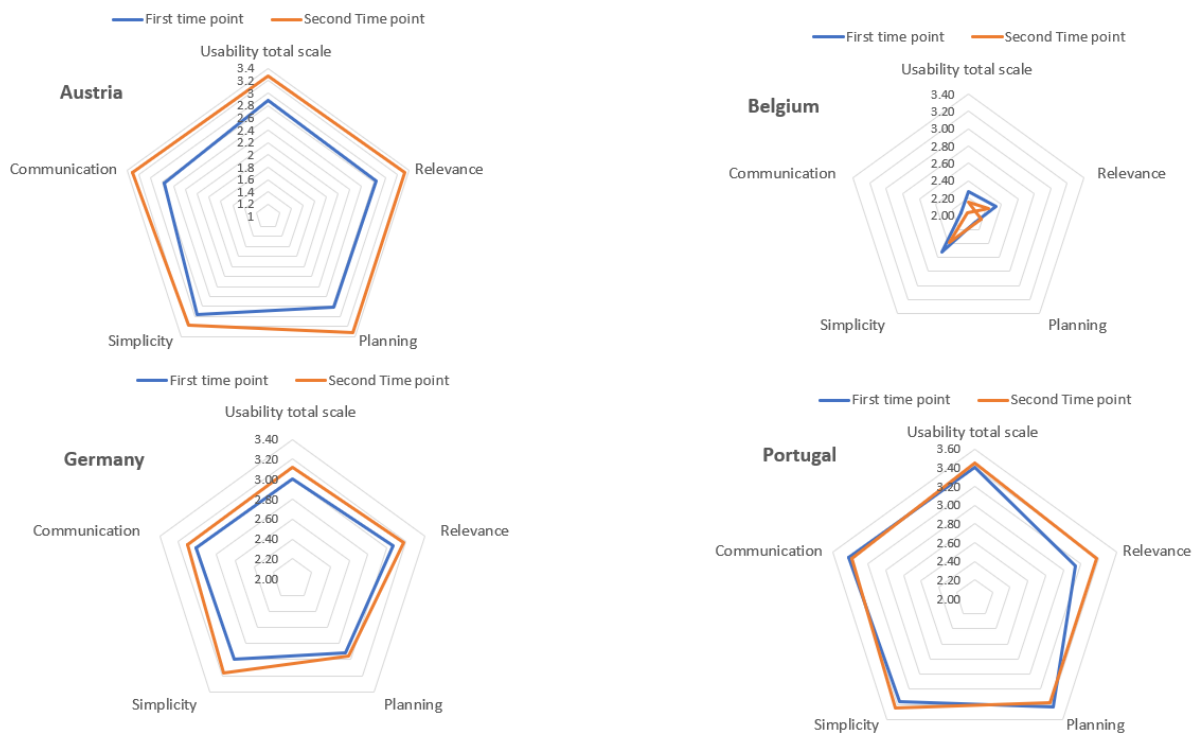


Figure 4. Usability first and second measure point by country.

In Table 9, the usability measures are reported by country and profession. What we can see is that Belgium is more critical and considers that there are missing areas in the IAM tool. Specifically, teachers rate the usability regarding whether all information exists and whether it can be used to plan and support students.

The 13 questions in the usability scale were divided into four areas of usability, focusing on relevance, planning, simplicity, and communication with others. There is no difference in the country’s responses before and after measures. However, Belgium differs from the other countries with an overall lower usability rating.

Table 9 *Utility by country and profession.*

	Austria		Belgium		Germany		Portugal	
	Teacher	Special ed.	Teacher	Special ed.	Teacher	Special ed.	Teacher	Special ed.
First measure point								
Relevance	2.60	2.88	2.45	2.14	2.95	3.05	3.08	3.38
Planning	2.53	2.89	2.16	2.15	2.60	2.95	3.53	3.39
Simplicity	2.85	2.94	2.54	2.55	2.50	3.11	3.32	3.58
Communication	2.70	2.76	2.19	2.00	2.70	3.08	3.47	3.17
Total scale	2.72	2.89	2.35	2.23	2.65	3.05	3.42	3.43
Second measure point								
Relevance	3.00	3.38	2.04	2.71	3.75	3.00	3.36	3.45
Planning	3.00	3.42	1.93	2.06	3.17	2.89	3.39	3.40
Simplicity	3.50	3.22	2.14	2.92	3.00	3.17	3.43	3.55
Communication	4.00	3.25	1.82	1.92	2.50	3.17	3.32	3.60
Total scale	3.33	3.32	1.99	2.53	3.17	3.04	3.45	3.55

In addition to the difference between countries, we see that teachers and special education teachers rate usability differently within the countries. Looking at relevance, we see that special education teachers in all countries, but Belgium rates this higher. They also have an even higher when having the opportunity to try it. We see the same pattern for planning, with special educators rating this higher and, usually, even higher when trying it out. Except for Belgium, which rates it lower than teachers, and this rate is reduced when allowed to try it. The increased usability of the app is visible, except in Belgium.

Open Ended Responses

The four categories used in the usability scale (relevance, planning, easy to use, communicable) were used when dividing the open-ended responses based on the country and whether the comments were positive or negative (See Appendix 3). Some comments, such as language and time needed, were more prevalent than others.

Relevance

Belgium and Portugal mention positive aspects of relevance, such as providing information about learning and participation, facilitating teachers' need to reflect that it covers all areas, and giving a range of options. All countries provide negative or constructive feedback concerning relevance. These focus on more general criticism that it is difficult to use a student perspective it is missing. It also focuses on more technical aspects, such as repetitious and domain-specific criticisms; for example, some underdeveloped areas, such as math or social and emotional problems, need to be presented more.

Planning

All countries but Austria give positive feedback concerning planning, such as the need to be analysed in collaboration, considering individual needs, or help getting information about it. Some emphasise this is more useful for mainstream schools or younger teachers with less experience. Negative comments concern general aspects such as the fact that it is hard to use the tips and information in everyday teaching, too much information is not optimally structured, and it is hard to understand the value.

Easy to Use

All countries had some positive comments concerning the ease of using the app. Portuguese teachers reported it intuitive, easy, and suitable for different age groups. In other countries, aspects such as an app facilitate making information systematic and have lower thresholds. When given time, it becomes easier and well-integrated. These aspects indicate that technical aspects are related to the simplicity of using the scale and the language. The negative comments also relate to similar topics, such as time-consuming language, creating additional work, and needing to be optimally structured. Alternatively, it is more domain-specific, with responses not tailored to the individual child.

Communicable

All countries mention positive aspects concerning communication. The possibility of using the tool to communicate selected parts with parents, and parents could gain insight into their child's learning level. Through the report, it is possible to explain the work carried out with the student and their development in a simple way. The technical solution with local storage created a negative response, but many emphasised the possibility of communication with other teachers if they could share. However, others said that it allows the exchange of information, is practical, and saves time. Portugal did not have any negative comments concerning communication. Other aspects include difficulty communicating in this format with parents from disadvantaged backgrounds; alternatively, if parents

misunderstand, the relationship with teachers risks being compromised. Some focus on the complexity of language and the need for linguistic adaptations.

Focus-group Discussions

During the collaboration with teachers, focus group discussions concerning the usability of the app and its implications were made. These discussions can be divided into before or when the tool is introduced and first tested and when teachers can try them at home. When introduced, the feedback based on these discussions revolved around the themes: *Expectations, Criticism, Suggestions, and Praise*.

When Introduced

Expectations

The expectations of the teacher are what the I AM could be used for; for example, by changing relationships to inclusion during study, I AM could be used as an opportunity for further practical training. Other expectations could concern the need for tools for support, primarily digital—alternatively, an enthusiasm for valid measuring instruments.

Criticism

The criticism could be divided into general criticism, language, technical, and domain-specific. The criticism and suggestions for change are often entwined not in how they are expressed but in the topics; for example, English is not a low threshold, or there is too much information to fill in and too much input.

General criticism: Another criticism, for example, is that there needs to be more concretisation. The educators would like more concrete tips for action, preferably step-by-step rather than evidence-based, more general suggestions. All those subject teachers found it difficult to answer questionnaires for the whole class.

Technical: Linking to different accounts was emphasised as necessary for collaboration and communication. The language was brought up many times, both in terms of English and some concerning the terminology used.

Domain-specific: There are aspects of needing interventions focusing on specific disabilities, such as emotional problems or hearing difficulties, and interventions focusing on motor skills. There is a need for areas to be divided by age groups or developmental levels. The suggestions are too global, not considering the individual child. There is a need to break it down into even more detailed levels. It is not possible to use it with children with multiple difficulties. Another example concerns topics within the ICF: For some domains, such as communication, four different skills in one question create ambiguity; alternatively, it is unclear what major life areas include.

Language: The criticism concerning language did come back many times; it concerned both the wording and the terminology used and the fact that suggestions concerning evidence-based practices, these references are from English literature.

Suggestions for Improvement

These discussions revolved around using the app and making it more user-friendly. Aspects concerned the layout, the technical aspects, being able to log in, and creating the account. Concerns revolved around the language of the suggested intervention, that these were in English, and that the suggested interventions were the same for multiple identified areas. Examples could be shortening the sentences to have a more accessible language, naming the questionnaire, or working with the layout differently.

Some tips could be that it is tempting to use only children with problems or classes with problems, which would miss the target due to the information overload. This information overload inhibits implementation for children, or the tip should be step-by-step.

Other aspects concern interventions or suggestions of when to contact social support services or address health professionals. It also includes aspects related to health services and medical staff—alternatively, it regards support for facilitating the use of the tool and who should be responsible for this.

Praise

Praise concerned comments such as great digital impressively fast data transfer or helpful to reflect on your actions. A nice combination of theory and practice, it is helpful for classes that could be better known.

After Testing the Tool

The discussions held after teacher training was finalised, and teachers returned to their schools and tested the material. There was an apparent discrepancy between how Portuguese teachers presented the material and how German-speaking teachers presented the material.

Portuguese Teacher Feedback

The Portuguese teachers are more positive and give examples when they exemplify negative aspects concerning technical and domain-specific issues. While there are fewer comments concerning expectations, there are some; primarily, the focus is practical but positive, often focusing on and mentioning the ICF; they also do not use it generally more specifically when needed.

Criticism: A technical concern is that it is impossible to access from other devices. Other comments concerned specific groups of students, for example, that it is difficult to work with mixed classes or that the strategies do not work with gifted students. Other criticism related to workload: The amount of documentation is immense, including reported minutes, and in addition to the measure, we must assess the evidence.

Suggestions for Improvement: The report template could be improved; it could be helpful to detail the frequency signed to each item. The final report could also be a checklist since sometimes the strategies repeat themselves.

Praise: The Portuguese teachers found the tool to facilitate communication in the team. The database form was practical, giving valid information, especially concerning the strategies used. “One of the advantages of I AM is that it is a database, which makes the work more practical. Other teachers can access the information from the two and find it useful and valid”. “Working with the I AM tool on the student was very enjoyable, and I found interventions at the class level that made a difference.”

When looking through the comments, teachers with experience in the ICF and the conceptual model in education based on ICF can quickly identify and navigate the domains.

German-speaking Teacher Feedback

For the *German-speaking teachers*, the distance to ICF was more significant, and they seemed to struggle more with how to use the tool and, therefore, felt more overwhelmed. Thus, the usability and added value seemed lower for this group. The focus was primarily on criticism during the feedback from two online exchanges.

Criticism: The duplication of work and the output watch was not concrete enough; this could work in a mainstream school. It was not easy to use because the added value could not be seen. Although the theory behind the tool is good, the concrete application takes time and effort. It would be great if the

output were a database of materials and methods or institutions' given names and addresses so the teacher could contact them and exchange information. Some argued that every teacher already implements these tips in everyday life and that the tips were disappointing. Perspectives have not changed after using the tool. An issue was that tips and resources were written in English rather than German.

Suggestions for improvement: The need to share and communicate data is clear. Teachers want different teachers to add to the same group of students. The impressions of the teachers could be brought together so that a holistic picture of the student emerges.

Praise: The German-speaking teachers only partially reject the idea of an ICF-based digitalised tool but do not find it helpful enough. The basic idea was good. The coverage is not too bad, but the tips for special schools need to go into more depth. In theory, the tool is good. The diagrams were good.

Discussion

This project has developed and implemented an innovative method in the form of an assessment tool, the Interactive Assessment App "I AM," to foster and facilitate inclusive education, using the ICF framework as a common language to promote shared values through building bridges between countries, between professions and theoretical backgrounds. The project aimed to promote inclusive education and training, foster the education of disadvantaged learners, support educational staff in addressing diversity, and reinforce diversity among education staff. We intended to highlight the perception of inclusion and the impact of using a conceptual framework new to most educational contexts, together with developing a tool focusing on participation and the school environment rather than deficiency. Promoting inclusive education and training and fostering the education of disadvantaged learners, including supporting educational staff in addressing and reinforcing diversity among education staff.

The perception of inclusive education

The first research question we wanted to answer concerns the perception of inclusive education. The second concern is differences in using the I AM app related to teacher training. No significant differences were found between the initial and subsequent measures, but a detailed breakdown revealed noteworthy patterns. The study employs the 5A:s framework (Availability, Accessibility, Affordability, Accommodability, and Acceptability) to gauge perceptions of participation and environmental factors supporting inclusive education (Simeonsson et al., 2001; Maxwell, 2012). For instance, Austria showed increased acceptability of inclusive practices in the second round, possibly due to a small sample size, i.e., those more positive responded twice. Similarly, German teachers experienced enhanced Affordability and a general scale increase. Conversely, teachers rated Availability lower during their training, while special education teachers rated Accessibility and Acceptability higher.

Acceptability remains consistently high, but a closer look reveals fluctuations during teacher training. Accommodability showed no significant change, while Availability saw small, non-significant increases in Austria and Germany but a reduction in Belgium. Teachers reported decreased availability post-training, indicating heightened awareness of barriers to participation. Accessibility increased among special education teachers, suggesting improved opportunities for individual attention. Affordability, concerning teacher and staff support, gained prominence by introducing the I AM tool. Notably, Germany reported increased Affordability from the first to the second attempt, indicating a recognition of the need for communication support and tools to foster inclusion.

To create involvement for more students, the necessity of being there is essential, and that happens through Availability and Accessibility as well as through teachers' Affordability. When it comes to environmental factors closer to students' involvement, the teachers' agreement is high. They do agree concerning the necessities of Accommodability and Acceptability. Acceptability, the environmental facilitator closest to involvement, also measures aspects everyone can agree upon, such as "every student engaged in activities and interactions" or "every student's voice is heard." It's not a surprise that teachers participating in this project, many of whom are already involved in inclusive practice or interested in it, rate very high.

The Usability of the App

The second question asked the teachers about their perception of the usability of the I AM and if they noticed any differences. The data for this part of the study included a questionnaire with both closed and open-ended questions, as well as the different discussions that were part of the participatory action research. The survey covered four topics - relevance, planning, ease of use, and communication ability. Upon analysing the ratings, it was observed that some countries, such as Austria and Germany, had similar ratings the first and second time. The teachers in these countries found the scale more usable the second time when they had more time to use it. On the other hand, teachers from Belgium were more negative, while teachers from Portugal were overall positive. The sample size of those responding twice was small. Still, it was observed that Portuguese teachers with previous experience with ICF's inclusive mindset and language found the tool more user-friendly. The Belgian teachers, who work more with inclusion and already have many tools, did not find the app as relevant. However, they could see that teachers with fewer resources or experience might find it helpful. It was also noted that the mindset and familiarity with the ICF framework played a role in how useful the tool was perceived, especially amongst special education teachers, except in Belgium.

Based on the open-ended responses to the scale and the focus group discussions, it was found that German-speaking teachers had difficulty understanding the app's relevance. However, teachers in Belgium noted that the app provided valuable information and opportunities for reflection. As the Belgian teachers had more experience working inclusively with support, they could see the app's relevance, but not for themselves specifically. The Portuguese teachers found the app to be relevant for themselves specifically. It became clear that understanding the tool's relevance was important when using it for planning. The Portuguese and Belgian teachers could see that it could be useful, one from the perspective of using it and the other from the standpoint of others benefiting from it. The Austrian and German teachers emphasized the need for more hands-on, practical suggestions instead of evidence-based articles providing suggestions.

The suggestions were more scientific than hands-on practical, making it challenging for the teachers to identify important intervention tools. They needed to be able to read and understand English scientific literature, which was a major obstacle. Another obstacle was the time required to get into the mindset, respond to the app's different questions, and then interpret the suggestions. Even though the Portuguese teachers also struggled with this, many appreciated the identification of relevant literature.

The most positive aspect of the app, despite some concerns, was communication. However, it frustrated teachers that it was only available for local storage. Other than that, it could be used to visualize communication with others. The focus group discussions also provided more nuanced criticism and expectations. When teachers are included in the participatory action research process, they are more likely to identify flaws, such as technical issues that need to be fixed or the use of language. Domain-specific criticism was more prevalent during training than after, and the German-speaking teachers were more pessimistic, expressing more significant challenges than the Portuguese teachers, who indicated ways they had tested the app and its values and downsides. Given the fact that

parents and students weren't directly involved, the fact that this was possible to use for communication with these groups does indicate an impact for this group as well.

Relating the usability results to the 5 A's, we see that it concerns much of the Affordability dimension of environment, time, language, and the relevance of the topics in the app. The teachers did find the app available and accessible when given the teacher training. However, they wanted accommodations, making it easier and shareable between computers and accounts. The relevance aspect also concerns the acceptability of using this instrument. Here, we do see a difference between the teachers, who found the Accessibility and the Adaptability of the tool sufficient and, therefore, also had a higher acceptability of using the tool. In using it, these teachers also adapted it to their situation. They chose activities and students to use the tool for. Teachers who experienced extensive challenges in using the ICF framework and the app and had not previously been introduced might have overworked, i.e., including more information than needed in the app, creating a barrier to accessibility. Accessibility could also include the time it takes to create the classes and add information concerning students in classes. The ICF covers many areas, and not all are relevant for all situations. The questions of why, what, how, and who (Hollenweger, 2016) are essential when choosing why and what to do; however, this takes training. This situational model was also used as a guiding tool for us when designing this pilot, and it emphasized the need to do this participatory together with teachers.

This project faced common challenges in the educational system, including ensuring students' inclusion in the everyday classroom environment. When looking at the results, it is generally assumed that all students are accepted and should be included. The ICF-CY (WHO, 2001, 2007, 2023) has been commended for application at the policy level, and in this project, some countries have worked more with awareness-raising activities in relation to ICF than others. Portugal and Belgium had previously worked on the policy level with the ICF, and we found that teachers in mainstream schools in Portugal had a more inclusive mindset. In Belgium, the pilot was not done in a typical mainstream school, including students with disabilities. Belgian teachers had more experience working inclusively with support, and they could see the app's relevance, but not for themselves specifically.

We used the interactive framework of ICF (2001), focusing on functioning concerning the body, activity, participation, and environmental factors. We were aware of the challenges in introducing a conceptual framework focusing on participation and environmental factors rather than compensatory strategies and that this framework requires a new mindset. Approaching a new mindset takes time and energy and is related to teachers' feelings of having the necessary support and resources to adopt it, which is related to affordability.

Schools and homes share responsibility for children's well-being and development. This role is only sometimes horizontal, with teachers having a professional position and parents needing help to choose their collaboration. Creating a tool, therefore, needs to facilitate the communication between school and home, especially concerning students needing additional support concerning their well-being and development. While the initial idea was to include the perspective of the home, teachers participating in the development of the app felt it necessary to be allowed to develop a project from their perspective first. The aspect of sharing information and facilitating communication between professionals and the home is, therefore, an important notion. In the final discussion of the project group, the possibility of students sharing their experiences was also brought up.

In this part of usability, there are many positive and negative points; for example, the possibility of focusing on functioning rather than skills creates positive sensations for communication and concerns. Overall, the results using the app were concerned communicable.

Limitations

The strength of this project with a participatory action design including teachers when designing and piloting the app created some limitations, such as difficulties receiving a second response on the questionnaire. Also, the ambition to involve students and parents/caregivers in the project was decided to be omitted by the participating teachers who wanted it to be their project in this initial phase of developing the tool. Involving the teachers to a higher degree than intended when planning the project made the field trials and the implementation take longer than estimated. However, the value of including and having the teachers involved means more than the challenges it brings in planning and implementing a project. What we lost in internal validity, we gained in external validity.

Another limitation was the fact that we did not find extensive differences between our first and second measure points concerning perceptions of inclusive education. Even if we used instruments that had been created to facilitate the dissemination of educational practices, our scale had a ceiling effect, and the respondents rated very highly in general. The high ratings concerning the perception of inclusive education and usability could be explained by teachers interested in participating and, per se, interested in inclusive education. Another reason might be that too few responded, especially those not participating in the teacher training. Our assumption is that this comparison group documented and evaluated students in the typical way in their organisation, but it is not certain if that was the case. The time between the first and the second measure point was short, and the discussions in focus groups concerning satisfaction were similar to the discussions during teacher training; they provided individual examples of using the I AM, aligning with the examples given during the final conference. Initially, the plan was to allow for more time, but in the end, delays due to the time needed for field trials, especially during a pandemic, made time short and might have influenced the results. The non-responses, both the second time and in the comparison group, made inferential statistics difficult. We often had to be satisfied with descriptive data and more straightforward analyses.

There is always a challenge to know if teachers in different countries need the same amount of teacher training, the same type of information, and if the format for the training fits. The notion was that all countries should have two training sessions, one introducing the framework and the ideas behind it and one dwelling on the app and discussing its usability. However, in some countries, there was a need to have additional support through telephone, e-mail, or an additional workshop; this, however, depended on individual needs, in line with having a participatory action design. The teachers also wanted to speak with teachers from other countries, which was facilitated using Zoom. Given that countries and organisations differ, and samples also might differ, comparing transnational data creates a challenge concerning validity and reliability. We have handled this by using both questionnaires and focus group discussions. Regarding the comments given in the open-ended questions and comments given during focus group discussions, they align, creating ecological validity to our results.

Conclusion

The development of inclusive school systems remains one of the central challenges for education systems worldwide. It is highlighted at the international level through significant international conventions and documents, like the United Nations (UN) Convention on the Rights of the Child (United Nations, 1989) and the Salamanca Declaration (UNESCO, 1994), and in the Sustainable Developmental Goals (SDG) (UN, 2015) and lately in Europe in discussing inclusion indicators in the European Parliament (Šveřepa, Nov 2023). Nevertheless, inclusion is still a complex and controversial issue, and inclusive practices are often not sufficiently implemented due to a lack of awareness and knowledge on different education systems, i.e., international, EU and national policy levels to implementation in the processes in the classroom. One level that is of utmost importance and where it demands appropriate support and assistance is initial and further teacher education and training. The biopsychosocial ICF

framework, focusing on functioning in everyday life in school, indicates that environmental aspects are necessary to include to facilitate participation rather than using compensatory strategies and a deficiency-based model for support. When implementing the ICF framework, it is important to embrace the educational policy of the countries. If the system for evaluating and following up focuses primarily on compensatory strategies, it will create barriers to an inclusive mindset.

Inclusion does not only refer to learners with special educational needs but also to respecting diversity and promoting opportunities for all students by meeting their social and academic needs. Using the ICF in educational settings fits well with working practically and on policy-level when emphasising participation and functioning. It provides a language that can be shared between professional groups and transnationally across language barriers. Moreover, the digitalisation of society creates opportunities to share solutions and systematise data, and, in this context, ICF facilitates discussions and collaborative problem-solving, strengthening teachers in creating more inclusive settings.

The created 'Inclusive Assessment Map - I AM', can be used to enable an approach to inclusive education that moves away from a traditional, deficit-based thinking, and towards a functioning-based way of capturing the involvement of a child in their environment. The innovative tool effectively allows teachers and educators to adapt school environments to be more inclusive. Teachers are key actors in the field of education.

Lessons learned from the project are that using a new conceptual framework to design and pilot a tool focusing on participation and inclusion is a complex undertaking. Educational systems and the mindset about inclusion differ in different countries. In some participating countries, the ICF framework was well known and used in the education system, whereas in others, it was known to a smaller extent. The participating countries also have different ways to approach inclusive education. In some countries, there is a shared vision for inclusive education systems highlighting that "all learners of any age are provided with meaningful, high-quality educational opportunities in their local community, alongside their friends and peers" (EASNIE, 2023), while in other countries inclusion is regarded in different ways. Irrespective of country and school, some challenges are common in the educational system, including ensuring all students are enabled and feel included in the classroom. One of those challenges for teachers is dealing with large class sizes and balancing general structures and individual needs, which is necessary to create an inclusive classroom environment.

It takes time and effort to bridge existing gaps in knowledge and competence concerning inclusive education. When introducing something new in school, it is of great importance to communicate the purpose of the innovation in a way that makes it interesting and worthwhile for the teachers involved. Regarding the differences in knowledge and mindset in the different countries of the I AM project, they needed to be introduced in different ways compatible with the experiences and perceptions of inclusion in the different countries. This means to make explicit what is implicit in engaging teachers in developing and using a tool to identify social and physical contexts and to identify need strategies moving towards inclusion. The aim of this project was to design an ICF-based tool together with teachers, which placed a great demand on teachers' motivation, time, and support. They needed to know and comprehend "what is in it for us". One important lesson learned is that the administration and school boards need to be involved in carrying out projects like the I AM, knowing the extra demand on teachers, which was evident in some of the participating countries. Involving the school boards facilitates upscaling implementation. Ultimately, the way of proceeding towards inclusive school environments demands that policy at the highest level create room for encompassing inclusion in the national system, structure, and curricula, as well as in the financing of education at all levels, allowing a shift in paradigm from the formalised learning approaches towards individualised learning environments.

Another lesson learned was that it is important to raise awareness of how to work inclusively—in this case, providing a tool meant to enable teachers to work inclusively in their classroom. We concluded that “It is only a tool”, not a way to change the whole environment or do something totally different. It is important to realise that teachers need to feel that the I AM app is one of many instruments in their toolbox and that they have agency in their own classroom. One of the objectives was to create clear and communicative guidance, and the tool was considered communicable with other professionals as well as parents. One way of using the tool suggested at the final meeting of the project was to use it together with other teachers, parents/caregivers and/or the students as a basis for reflecting on the inclusiveness in the classroom, which is in line with the aim to create ways to communicate and enhance students participation in their learning environment, and to make the teachers participating in the teacher education also to become the informer to colleagues and head teachers, creating an upscaling through ‘spill-over’.

The tool has to be made open to maximise access and ensure that the I AM tool is available as widely as possible; the app currently exists in English, German, and Portuguese. English guarantees transferability to multiple countries, and the focus on ICF creates a transferability between systems, as do the evidence-based suggestions. Doing this will ensure that the tool can be used and developed further by countries and public bodies and will have an active life beyond the project’s timeframe.

To make the ICF applicable for teachers by developing the innovative ‘Inclusive Assessment Map - I AM’, they must embrace a new way of assessing student needs based on functioning in everyday life and not a diagnosis. It presents a new way of approaching teaching and learning - shifting the paradigm from streamlining and formalised learning approaches into which children have to fit. Instead, education and learning are geared towards the individuals’ successful learning outcomes and to derive needed adjustments to meet the inclusive needs of all students. The next step in strengthening pedagogical assessment by focusing on participation and environment would be to develop the tool further, looking at the experiences and suggestions from the teachers in different countries. Studying the tool’s implementation as a further step would be interesting.

Finally, planning, implementing, and evaluating this project in the international group in collaboration with teachers in different countries has generated many new ideas about benefits, advantages and difficulties in developing innovative ways to advance theories and practices focusing on inclusion in education. One of the key elements in this endeavour is to share a comprehensive framework familiar to all participants. ICF can serve as a common language and framework if it is well-anchored for all participants. It can create a sustainable link between theory, policy, and practice in line with inclusive education aspirations.

On the European level, the upscaling of the project’s main output, the I AM tool, has the potential to strengthen the European identity and active citizenship by creating a more inclusive education system. An indirect upscale result of the project will be increased economic productivity and social participation as members of our society who were previously excluded become more productive and involved.

References

- Amor, A. M., Hagiwara, M., Shogren, K. A., Thompson, J. R., Verdugo, M. Á., Burke, K. M., & Aguayo, V. (2019). International perspectives and trends in research on inclusive education: a systematic review. *International Journal of Inclusive Education*, 23(12), 1277-1295.
<https://doi.org/10.1080/13603116.2018.1445304>
- Augustine, L., Lyngnegård, F., & Granlund, M. (2022). Trajectories of participation, mental health, and mental health problems in adolescents with self-reported neurodevelopmental disorders. *Disability and rehabilitation*, 44(9), 1595-1608.
<https://doi.org/10.1080/09638288.2021.1955304>
- Badley, E. M. (2008). Enhancing the conceptual clarity of the activity and participation components of the International Classification of Functioning, Disability, and Health. *Social science & medicine* (1982), 66(11), 2335-2345. <https://doi.org/10.1016/j.socscimed.2008.01.026>
- Barbour, R. (2007). *Doing Focus Groups*. SAGE Publications Ltd
<https://doi.org/10.4135/9781849208956>
- Bertills, K., & Björk, M. (manuscript). Inclusive Physical Education (PE) environments – PE teachers' views on how they facilitate participation for secondary school students with disabilities. In: Björck-Åkesson, E., Wilder, J., Granlund, M., Pless, M., Simeonsson, R., Adolfsson, M., Almqvist, L., Augustine, L., Klang, N., & Lillvist, A. (2010). The International Classification of Functioning, Disability and Health and the version for children and youth as a tool in child habilitation/early childhood intervention - feasibility and usefulness as a common language and frame of reference for practice. *Disability and rehabilitation*, 32(S1), S125-S138.
<https://doi.org/10.3109/09638288.2010.516787>
- Björklund, A.-C., Granlund, M., Santacroce, S. J., Enskär, K., Carlstein, S., & Björk, M. (2021). Using ICF to Describe Problems with Functioning in Everyday Life for Children Who Completed Treatment for Brain Tumor: An Analysis Based on Professionals' Documentation. *Frontiers in rehabilitation sciences*, 2, 708265-708265. <https://doi.org/10.3389/fresc.2021.708265>
- Castro, S., & Palikara, O. (2018). *An emerging approach for education and care : implementing a worldwide classification of functioning and disability*. Routledge.
<https://doi.org/10.4324/9781315519692>
- Cornish, F., Breton, N., Moreno-Tabarez, U., Delgado, J., Rua, M., de-Graft Aikins, A., & Hodgetts, D. (2023). Participatory action research. *Nature Reviews Methods Primers*, 3(1), 34.
<https://doi.org/10.1038/s43586-023-00214-1>
- Dunst, C. J. J. (2020). Parents' Interests and Abilities as Sources of Young Children's Everyday Learning Opportunities. *Journal of family strengths*, 20(1). <https://doi.org/10.58464/2168-670X.1421>
- European Agency for Special Needs and Inclusive Education, (2017a). *Inclusive Early Childhood Education Environment Self-Reflection Tool*. (E. Björck-Åkesson, M. Kyriazopoulou, C. Giné and P. Bartolo, eds.). Odense, Denmark
- European Agency for Special Needs and Inclusive Education (2017b). *Raising the Achievement of All Learners: A Resource to Support Self-Review*. (V.J. Donnelly and A. Kefallinou, eds.). Odense, Denmark
- EASNIE. (2020). About Us. European Agency for Special Needs and Inclusive Education.
- EASNIE. (2023). About Us. European Agency for Special Needs and Inclusive Education.
<https://www.european-agency.org/about-us>
- Granlund, M., Imms, C., King, G., Andersson, A. K., Augustine, L., Brooks, R., Danielsson, H., Gothilander, J., Ivarsson, M., Lundqvist, L.-O., Lyngnegård, F., & Almqvist, L. (2021). Definitions and Operationalization of Mental Health Problems, Wellbeing and Participation Constructs in Children with NDD: Distinctions and Clarifications. *International journal of environmental research and public health*, 18(4), 1656. <https://doi.org/10.3390/ijerph18041656>

- Gustafsson, B. M., Gustafsson, P. A., Granlund, M., Proczkowska, M., & Almqvist, L. (2021). Longitudinal pathways of engagement, social interaction skills, hyperactivity and conduct problems in preschool children. *Scandinavian Journal of Psychology*, 62(2), 170-184. <https://doi.org/https://doi.org/10.1111/sjop.12700>
- Hair, J. F., Black, W. C., & Babin, B. J. (2010). *Multivariate Data Analysis: A Global Perspective*. Pearson Education. <https://books.google.se/books?id=SLRPLgAACAAJ>
- Hollenweger, J. (2013). Developing applications of the ICF in education systems: addressing issues of knowledge creation, management and transfer. *Disability and rehabilitation*, 35(13), 1087-1091. <https://doi.org/10.3109/09638288.2012.740135>
- Hollenweger, J. (2016). Synchronising activities instead of distribution tasks. *Foundations and models of a situational analysis of inclusive practices*. . In K. A, J. Wick. C. Kosorok-Labhart (Ed.), *Networks in education Vol 9 Cooperations in the context of school heterogeneity* (pp. 33-52). Münster & Waxmann.
- Huus, K., Olsson, L. M., Andersson, E. E., Granlund, M., & Augustine, L. (2017). Perceived needs among parents of children with a mild intellectual disability in Sweden. *Scandinavian journal of disability research : SJDR*, 19(4). <https://doi.org/10.1080/15017419.2016.1167773>
- I AM research group, W. (2023). Ethical framework for the “inclusive Assessment Map”-
I AM research group, W. (2023). Research Report, Framework for implementing pedagogical assessment
- Imms, C., Granlund, M., Wilson, P. H., Steenbergen, B., Rosenbaum, P. L., & Gordon, A. M. (2017). Participation, both a means and an end: A conceptual analysis of processes and outcomes in childhood disability. *Developmental medicine and child neurology*, 59(1), 16-25. <https://doi.org/10.1111/dmcn.13237>
- Mahoney, W. J., Yontz, R., Warlick, J. C., Lynch, E., Villacrusis, M., & Wesley, R. (2013). Enhancing Participation by Fostering Positive Relationships With Adults With Developmental Disabilities. *Developmental Disabilities Special Interest Section Quarterly / American Occupational Therapy Association*, 36(3), 1.
- Maxwell, G. (2012). *Bringing more to participation Participation in school activities of persons with disability within the framework of the International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY) School of Education and Communication*]. Jönköping.
- Maxwell, G., & Granlund, M. (2011). How are conditions for participation expressed in education policy documents? A review of documents in Scotland and Sweden. *European journal of special needs education*, 26(2), 251-272. <https://doi.org/10.1080/08856257.2011.563610>
- Maxwell, G. R., Granlund, M., & Augustine, L. (2018). Inclusion Through Participation: Understanding Participation in the International Classification of Functioning, Disability, and Health as a Methodological Research Tool for Investigating Inclusion. *Frontiers in education (Lausanne)*, 3(41). <https://doi.org/10.3389/feduc.2018.00041>
- McIntyre, A. (2007). *Participatory Action Research*. In (pp. 1). SAGE Publications, Incorporated. <https://doi.org/10.4135/9781483385679.n1>
- Moretti, M., Alves, I., & Maxwell, G. (2012). A systematic literature review of the situation of the International Classification of Functioning, Disability, and Health and the International Classification of Functioning, Disability, and Health-Children and Youth version in education: a useful tool or a flight of fancy? *American journal of physical medicine & rehabilitation*, 91(13 Suppl 1), S103-S117. <https://doi.org/10.1097/PHM.0b013e31823d53b2>
- Samuels, A., Dada, S., Van Niekerk, K., Arvidsson, P., & Huus, K. (2020). Children in South Africa with and without Intellectual Disabilities’ Rating of Their Frequency of Participation in Everyday Activities. *International journal of environmental research and public health*, 17(18), 6702. <https://doi.org/10.3390/ijerph17186702>

- Sanches-Ferreira, M., Monica, S.-M., Alves, S., & Simeonsson Rune, J. (2017). The use of the ICF-CY for supporting inclusive practices in education Portuguese and Armenian experiences. In S. Castro & O. Palikara (Eds.), *An Emerging Approach for Education and Care Implementing a Worldwide Classification of Functioning and Disability* (pp. 53-69). Routledge.
- Savolainen, H., Malinen, O.-P., & Schwab, S. (2022). Teacher efficacy predicts teachers' attitudes towards inclusion - a longitudinal cross-lagged analysis. *International Journal of Inclusive Education*, 26(9), 958-972. <https://doi.org/10.1080/13603116.2020.1752826>
- Simeonsson, R. J. (2000). Early Childhood Intervention: Toward a Universal Manifesto. *Infants and young children*, 12(3), 4-9. <https://doi.org/10.1097/00001163-200012030-00003>
- Simeonsson, R. J., Carlson, D., Huntington, G. S., McMillen, J. S., & Brent, J. L. (2001). Students with disabilities: a national survey of participation in school activities. *Disability and rehabilitation*, 23(2), 49-63. <https://doi.org/10.1080/096382801750058134>
- Šveřepa, M. (29th November 2023). *Inclusion indicators 2023 launch discussion in the European Parliament, 29th November 16:00*. inclusion-europe.eu. <https://www.inclusion-europe.eu/inclusion-indicators-2023-event/>
- The UNESCO Salamanca Statement. (2016, January 26). Retrieved August 02, 2017, from [The UNESCO Salamanca Statement](#)
- WHO. (2001a). *International classification of functioning, disability, and health : ICF. Version 1.0*. Geneva : World Health Organization, [2001] ©2001. <https://search.library.wisc.edu/catalog/999977181002121>
- WHO. (2001b). *International classification of functioning, disability and health. Fifty-fourth world health assembly: WHO*
- WHO. (2007). *International classification of functioning, disability and health : children and youth version : ICF-CY*. World Health Organization.
- WHO. (2019/2021). *International Classification of Diseases, Eleventh Revision*.
- WHO. (2023). *International classification of Functioning, Disability and Health (ICF)*. WHO. Retrieved 10th Nov from <https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health>
- United Nations. (1989). *Convention on the Rights of the Child. Treaty Series, 1577, 3*.
- United Nations (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development. Resolution Adopted by the General Assembly on 25 September 2015, 42809, 1-13*.
- Üstün, T. B., Chatterji, S., Bickenbach, J., Kostanjsek, N., & Schneider, M. (2003). The International Classification of Functioning, Disability and Health: a new tool for understanding disability and health. *Disability and rehabilitation*, 25(11-12), 565-571. <https://doi.org/10.1080/0963828031000137063>

Appendix 1. Questionnaires Everyday environment in school or classroom and usability of the I AM app

Questions for code generation					
We need you to enter a code to be able to compare data on a long term, without us being able to know who you are. Please answer the following questions to generate that code.					
Day of your birthday (just the number)					
First two letters of your mother's name					
First two letters of your father's name					
First two letters of the city where you were born					
Individual Characterisation					
Country: Austria Belgium Germany Portugal					
Age _____ years					
Highest level of completed education High school Bachelor Master Other					
Years Teaching experience _____					
Teacher education completed				YES	NO
School: Public Private Other					
What is your role at school?	Teacher	Assistant	Special education teacher	School leader	
Level of teaching in school		Primary	Secondary		
If secondary what subject/s _____					
Everyday environment in your school or classroom					
Based on your role, teacher, other staff or school leader mark and choose to either respond to the questions regarding the school environment as a whole or your classroom environment. At our school _____ In my classroom _____					
Welcoming atmosphere	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all	
How do you agree with the statements					
Every student feel a sense of belonging in school					
Every student attends all school activities					
Every student engages in the learning activities					
Students trust teachers					
Students and adults interact and are kind to each other					
Inclusive social environment	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all	
Every student engages in activities and interactions					
Peer interactions are facilitated					
Every student attend group activities					
Every student is enabled to engage in social activities					
Every student's voice is heard					

Appendix 1. Questionnaires Everyday environment in school or classroom and usability of the I AM app

Inclusive physical environment	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all
The outdoors environment is accessible for all students				
Furniture and equipment are adapted to suit all student				
Space is organised to encourage peer interaction				
Transitions between activities are facilitated for all students				
Digital technology is available and accessible for all students				
Adapted equipment and assistive technology is available when needed				
Interaction and language	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all
Students who are second language learners are enabled to communicate and be understood				
Clear rules and behavior expectations are consistently applied and communicated				
New technology is used for communication and interaction when needed				
Materials promoting communication and language are available for every student				
Student-centered learning environment	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all
Every student is enabled to engage in learning				
Every student asks questions and engages in discussions				
Students consistently receive individualised support for learning				
Learning activities are based on students' interests and ideas				
Pedagogy for all student	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all
Every student receives individual attention				
Every student's efforts and progress is acknowledged				
Every student's support needs are met				
Every student's learning is monitored and documented				
Learning is personalised for every student				
A range of learning resources and technologies are used in the classroom				
Curriculum development	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all
The school curriculum enables learning opportunities for all students				
The school curriculum enables teachers to adapt learning opportunities for every student				
The curriculum encourages social and academic learning				

Appendix 1. Questionnaires Everyday environment in school or classroom and usability of the I AM app

Partnership and collaborative work				
The school works in partnership with other agencies (e.g. health, social services) to provide additional support for students when necessary				
Support for teacher and other school staff	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all
Staff take part in activities that improve learning and achievement in the school				
Staff are supported to share knowledge and reflect with colleagues as a form of professional development				
Staff have access to support for well-being in time of stress				
Staff support each other				
Staff are provided with appropriate training to promote an inclusive learning environment				
Comments				
I AM tool Evaluation				
Please, rate how you perceive the I AM tool, after having participated in the teacher training. Score each of the following statements by identifying how much you agree with them. In case of a “negative” answer, please present the reason for your opinion.				
	Agree totally	Agree to a fairly great extent	Agree to a small extent	Not at all
The information included in the I AM tool is relevant to describe students’ learning and participation				
Comment				
The I AM tool includes key areas to be evaluated for educational purposes				
Comment				
The I AM tool provides relevant information about strategies to improve students’ learning and participation				
Comment				
There are missing areas in the I AM tool				
Comment				
The I AM tool can be used The IAM tool can be used to plan and allocate additional supports				
Comment				
The use of the I AM tool helps to adequate supports to students’ needs				
Comment				
The I AM tool is an instrument that helps to monitor changes in students’ learning and participation resulting from implemented intervention				
Comment				

Appendix 1. Questionnaires Everyday environment in school or classroom and usability of the I AM app

The I AM tool is a suitable instrument to share and discuss with parents				
Comment				
The terminology of the I AM tool is easy to understand				
Comment				
The I AM tool is a suitable instrument to use with students of all levels of primary and secondary education				
Comment				
The I AM tool is easy to use and fits easily in the existing work routines and daily dutie				
Comment				
The I AM supports collaboration and communication among teachers				
Comment				
After the teacher training, teachers have enough knowledge and skills to implement the I AM tool				

INCLUSIVE ASSESSMENT MAP - I AM Project



Co-funded by the
Erasmus+ Programme
of the European Union

PARTICIPATION OF EVERY STUDENT IN SCHOOL

We invite you to participate in a research project about a new tool to select appropriate educational support to students; below, you will find information about this project and your participation.

What type of project and why should I participate? As part of the ERASMUS+ Map I AM project, this pilot study aims to test a tool for teachers to identify possible classroom interventions and learn about the usefulness of the tool. We will study how teachers experience the tool and their attitudes towards school and inclusion.

To achieve this, we kindly ask you to complete this questionnaire regarding teachers and other school staff experiences. These experiences relate to 1) the everyday environment in their school or classroom in terms of social, physical and learning aspects and 2) the readiness to use the I AM tool and the perceived usability of it. It will take approximately 15-20 minutes to fill out the questionnaire.

In order to find possible changes regarding perceptions of school and school climate, we will ask you once more in 4 months after using the tool to fill in the same questionnaire. To identify your answers now and then without risking your confidentiality, we will start the survey with a few questions to create a unique code without us being able to know who you are. The second time you fill in the questionnaire the same code will be used.

What happens to my information? Your privacy will always be protected (i.e., the responses from participants will not be identified at any time since the responses to the first four questions will create a confidential code to identify responses from the same person without us knowing who that person is). When data collection is finalised and a dataset created, with responses from both time points, these initial questions will be deleted as further use of them are unnecessary in accordance with GDPR. Participants can contact the research project regarding their responses until the dataset is finalised. Therefore, anonymity, confidentiality and exclusive use of data for the present study are guaranteed. The research team of the project will have access to the data, which will be stored securely at the Escola Superior de Educação - ESE (Portugal), in a place with restricted access to the research team. Data will be shared with countries within the EU and EES but not third countries.

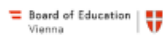
This study is conducted in multiple countries (Austria, Belgium, Germany and Portugal), and the feasibility of the study will be compared nationally, indicating that anonymised data will be shared with research partners within the Map I AM project.

Is my participation voluntary? Your participation is voluntary, and you can choose to withdraw your participation at any time. If you choose not to participate or wish to cancel your participation, you do not need to state why, and it will not affect your future care or treatment. If you wish to cancel your participation, please get in touch with the person responsible for the project (see below).

Do I have access to results? We ensure that participants have access to the study's final results if they wish to do so. The study results will be used for research purposes (dissemination in scientific events or journals), and the data will never be treated or presented on an individual level.

For any questions regarding the study, do not hesitate to contact the responsible team at iam@bildung-wien.gv.at.

Thanks for your collaboration!



There are 49 questions in this survey.

Consent

*I have read and understood all information provided about the study. I was guaranteed the possibility at any time to refuse to participate in this study without any consequences.



Yes



No

*I agree to participate in this study and allow the use of the data that I voluntarily provide, trusting that it will only be used for this research and the guarantee of confidentiality and anonymity given to me by the research team.



Yes



No

	Relevance	Planning	Easy to use	Communicable
Austria positive			Clarifying headings would simplify	Using selected areas to communicate with parents. Depending on the motivation of the teacher. Depends on all teachers willing to take part.
Austria Negative	Not enough on emotional problems Need to be more practical Student perspective is missing difficult to use	Too vague The transition to support plans is missing. Not sophisticated and concrete enough. Not applicable on socioemotional problems.	Too little technical support Difficult wording Too much work- too little output Difficult to use. Language difficult-some in English Harder for older students PDF not practical, needs to many clicks. Confusing headings and keywords.	Diagrams not usable for parent-teacher meetings. Too little information on socioemotional problems. Should be structured and processed more briefly Need linguistic adaption. Impractical.
Belgium positive	Provides information about learning and participation. Teachers needs to reflect to use it meaningfully and responsible.	Useful for better understanding the learning and participation needs of students. Need to analyze in collaboration taking individual needs into consideration. More useful for mainstream schools with less options Supportive for younger teachers. Should be used as part of a broader assessment process.	The I AM tool is rated as easy to use Require additional training and time becoming familiar with the applications	The use of standardized assessment criteria teachers not being able to choose It would if all have access can share Parents could gain insight into their child's learning level
Belgium Negative	Repetitive and missing perspectives. Imprecise and complicated. Participation varies on context and subject. Do not capture performance or creativity. Not innovative Increase focus on data-collection. Reduces teacher	No new ideas or suggestions. Often the idea given is logical or nothing new. Not applicable to all students, Unfair evaluation process. Not taking individual differences and abilities into account. In schools with many options for differentiating and adaptive this is less useful. Cannot share information between teachers. creativity is hindered.	Some things in English. locked to one computer created barriers for sharing. Many documents not available in German. It is time consuming and resource intensive. Misinterpretations when not all parts are available in German. Possible technical problems may affect the use of the tool and lead to additional time expenditure. You need to read each question several	Additional material is needed especially when communicating with others. cannot be used in this format. No connection between classes and shared class management. No interest, the tool can only be seen by yourself. Risk straining resources as it takes additional time. Removes possibilities for creative and spontaneous teaching. Material for teachers and school not parents. Might increase parents comparing circles, putting pressure on their children.

	<p>flexibility. No new tips or relevant tips. Not taking development into consideration. lack customization. Some areas underdeveloped such as math. too much focus on cognitive skills. Do not offer support.</p>	<p>You cannot filter out the needs. all students are offered the same support measures in the same areas. I imagined the suggestions in more concrete terms. Childrens needs are not accurately reflected and described observation sheets should be added. Hard to understand the value. Cannot be the sole evaluation criterion. Individual needs and personalities are neglected.</p>	<p>times to understand. You do not always have the time to fill this out. The answers are not tailored to the individual child or developmental level. Some students need individual adaptations, and the tool do not provide that. Integrating a new tool into everyday work is always a challenge. Creates additional work, no central document for the entire team caring for a student. Primary and secondary school children have different goals. The lack of sharing created barriers. It is written far to theoretically. Too much English. and not everything in German.</p>	<p>The language is too complex for parents. Can't share anything. It is not helpful. I prefer to talk to my students like this and together we can come up with a solution. Too theoretical for teachers. If parents misunderstand the relationship with teachers' risk being compromised.</p>
<p>Germany Positive</p>		<p>Helps getting information about it.</p>	<p>In the area of evaluation, the compressibility varies greatly. Some are easy to understand other complicated and need to be broken down. An App would be helpful to systematic low-threshold and time efficient use. Time consuming, especially at the beginning. After a training period, it was well integrated.</p>	<p>Individual areas or specific areas with guardians. Can be used as a good template for teachers to mark important information for discussions. Communicating using the tool would make sense if all teachers used it and they could share tips and ideas with each other. A basis yes, but to detailed for legal guardians.</p>
<p>Germany Negative</p>	<p>Too vague. Not specific enough. repetitive. Flood of information. Creativity is missing. Same answer to different problems. The socioemotional area missing. Duplicates. References rather than concrete tips.</p>	<p>More specific support measures for planning additional support descriptions. Hard to use tips and information in everyday teaching. Some information is vague or difficult to implement (time and money). Too much information and not optimally structured. changes in students are less</p>	<p>Requirements are sometime to high, the breadth of requirements within a category is too wide. Time intensive. Too many foreign words. Overloaded and not optimally structured. Some words not understandable at first due to their positive formulation. often unnecessarily complicated technical language</p>	<p>Too much information to share with parents. communication is up to teacher not team Too complex, foreign words for example. Too time consuming to make everyone use it. Data primarily relates to group so hard to use for individual students. It is very statistical. Hard for socially disadvantage people to understand I cannot see how. The language need to be adapted for</p>

		<p>visible. Not suitable for teacher with experience creating support plans. Complicated. No concrete examples</p>	<p>sometimes quite lengthy questionnaire and sifting through the solutions. Sometimes too detailed, so that entire areas do not seem relevant to groups of people.</p>	<p>communicating with parents. Parents from educationally disadvantage backgrounds would have difficulties understanding the graphics.</p>
<p>Portugal Positive</p>	<p>Covers all areas. No flaws identified. Present the biggest concerns of teachers. Describes student participation more specifically Platform supports and structures teachers' strategies. Predicts and contemplates different comorbidities. Provide some pertinent clues to apply in context. Makes you understand what is being/has been done wand what could still be done. Gives a range of options.</p>	<p>Helps you plan and if necessary, allows you to use support suggested. Gives clues about strategies that can be used. Gives clues to implement of the context. Suggest scientific articles to reflect and substantiate our pedagogical practices completes environmental factors and technological and personal support. Allows a comprehensive view of the student. Allows a global approach and continues over time. Provide sa range of options to Adapt the best intervention. Allows monitoring and subsequent updating of data.</p>	<p>Quite intuitive. Accessible and easy to apply Not consider difficult. Language is close to use in daily without losing objectivity. Suitable for different ages</p>	<p>All those involved are active and essential in the process of the student's comprehensive training. It allows sharing of strategies in line with the student's difficulties. Through the report, it is possible to explain in a simple way the work carried out with the student and their development. It does allow exchange of information. It can help with collaboration but sharing of links would improve that more. Information is accessible but the layout has to be modified. It is practical and saves time. It can be an extension of the activities carried out at home. It can be carried out in the presence of parents as a tool to support RTP. It is an easy-to-use tool accessible language can be used systematically, easily sharable.</p>
<p>Portugal Negative</p>	<p>Not all areas are relevant, especially for higher functioning levels. The area of expressions and physical education are missing.</p>	<p>Allocation subsequently depends on several environmental factors namely the existence of them. The tool does not allow comparison diagrams of same student/group.</p>	<p>It takes time and practice need to be familiar with ICF Transversal in some areas. More training/use time is required.</p>	