

Visualisation in Adult Education

A Recommendation Document









Project: See What I Mean - A Visual Dictionary Project

Project number: 2020-1-FI01-KA204-066646

Coordinator: Innoventum Oy

Juhonkuja 7, 80260 Joensuu, Finland

www.innoventum.fi

Layout: Storytellme

www.storytellme.pt

More information: https://visualdictionary.eu/

Attribution-ShareAlike 4.0 International (CC BY-SA 4.0) Licence:

Partnership:











cannot be held responsible for any use which may be made of the information contained therein.

TABLE OF CONTENT

| INTRODUCTION | 1 | | | |
|--|----|--|--|--|
| VISUALISATION IN ADULT EDUCATION | | | | |
| THE VISUAL DICTIONARY | | | | |
| IMPRESSIONS FROM PILOTING | 6 | | | |
| SURVEY RESULTS | | | | |
| Section 1: Profile of participants | 12 | | | |
| Section 2: Applicability of Visual Dictionary | 15 | | | |
| Section 3: Relevance of SWIM Methodology and Results | 19 | | | |
| Section 4: Sustainability of SWIM Methodology and Results | 27 | | | |
| Section 5: Partner's Experiences | 29 | | | |
| POLICY RECOMMENDATIONS | 33 | | | |
| Benefits of applied SWIM methodology to lifelong learning | 33 | | | |
| Lessons learnt and policy learning from experiences of the partnership | 34 | | | |
| Key recommendations for educators | 35 | | | |
| Key recommendations for learners | 36 | | | |
| Deductions and key recommendations for policy makers | 36 | | | |
| CONCLUSION AND OUTLOOK | | | | |
| ANNEX | | | | |



INTRODUCTION

The SWIM – See What I Mean project is a 24-month Erasmus+ project in the adult education sector. Six partner organisations from five EU member states (Finland, Austria, Poland, Spain, Portugal) have joined together to work on three main objectives:

- 1. To strengthen key competences of students and provide more effective opportunities to acquire and develop skills essential to remain competitive on the labour market
- 2. Build the language skills of adults through engagement with bespoke learning resources to support the continuous language and professional development
- 3. To introduce new approaches and opportunities to support professional development for adult educators, trainers and mentors.

To achieve these objectives, the partnership has developed 4 project results:

- 1. Guidelines for education professionals for creating and taking advantage of visual dictionaries in their work to achieve better learning results,
- 2. Visual dictionary resources, that have been tested in pilot phases to benchmark their benefits for the learners,
- 3. A modern, user-friendly online environment "Visual Dictionary Online Creator" to support these teaching and learning methods and host the resources produced
- 4. A recommendations document based on the findings acquired throughout the project.

It is important to extend the offer of high-quality learning opportunities tailored to the needs of individual people with low qualifications in the field of adult education. In today's modern economy, fast evolving needs of language learners require a swift response from the educational sector, teachers can not only use existing educational resources, but also be able to create and share their own personalised dictionary materials for the benefit of learners.

Hence, the target groups of the SWIM project are:

- Students in any level of training, especially in the process of learning a new language
- Adult learners to foster their competitiveness on the labour market through improved language and specific skills.
- Teachers/trainers/tutors that work with these students; SWIM provides them not only with a new digital and interactive toolset to enhance the teaching of a new language, but also guidelines on how to best apply the tools in their work.

This recommendation document is now the closing stone of a successful project. It summarises the theoretical key take-aways and practical lessons learnt through the experiences in the transnational project. Finally, policy recommendations are given that will establish the visual dictionary in formal and non-formal learning settings and facilitate a sustainable, long-term application of the project results across Europe.





VISUALISATION IN ADULT EDUCATION

EKOS, as a partner responsible for developing intellectual output 1, started its work from creating a Research template for collecting and analysing data on the use of visualisation methods in foreign language classes in order to serve all the partners as guidelines for conducting desk research. The document focuses on such issues as: framework for country research (including rationale and aim of the research, scope of research, methodology-data collection, population and sample- tips for research and writing and the template for country studies followed by several conclusions and recommendations.

In the framework of the template EKOS created a (1) **teachers' questionnaire**, which was distributed by all partners to foreign language teachers in their country. The survey was designed to gauge the knowledge of teachers in each country about visual methods and their use in language teaching, but also the limitations on their ability to use visual methods, and a (2) **template for a country studies**, which included six questions to all consortium partners summing up the up-to-date state of the art in their countries.

All project partners followed to gather information on the pedagogical theories in their countries and to collect examples of good practices related to the use of visual methods in language teaching in partner countries. The consortium reached out to 60 language teachers all together.

The data collected in the surveys was compiled into **the General Report** in which all the survey data collected by each partner was presented. The General Report, includes a brief summary on each question of the survey, describing the differences and similarities in the use of visual aids among teachers and their attitude towards Visual Dictionary. Thanks to these activities, partners were able to deepen our knowledge of the use of visual methods in teaching and good practices related to it, as well as compare how this situation looks like in different countries.

Analysis of the survey data helped to draw the following conclusions: teachers in all the countries mentioned that they prefer to use visual materials that they already have, or to look for available free materials on the Internet rather than creating them themselves. In all countries, traditional textbooks are still the most popular tool in the process of teaching foreign languages. However, current events related to the global pandemic have forced many teachers to introduce new technological solutions in their lessons, in addition to traditional forms of knowledge transfer. In all partner countries, the approach to language learning changes according to the age of students as young children learn languages naturally by playing. In later stages of learning, teachers focus more on grammar and other aspects of the language.

The general report also pointed out the difficulties associated with the use of visual methods in language teaching in some countries. These difficulties are most often related to the lack of appropriate equipment or Internet connection. Although the vast majority of teachers have a private laptop, and most students have a smartphone, schools are not so well equipped. Therefore, teachers who want to use digital tools often have to bring their private laptops to school and ask students to use their smartphones for teaching purposes during lessons.





Most of the good practices mentioned in our General Report focused on learning one foreign language, and there weren't many tools mentioned where, as in our Visual Dictionary, students can learn several languages at once, using one tool and working on the same material - for example, the same text sample, learning the vocabulary they need in several different languages. Most of the tools and practices also focused on general speaking skills, rather than focusing on specific areas - such as technical language, for example. Nevertheless, all of the best practices mentioned bring something new to the methodology of teaching a foreign language - showing that there is still room for improvement in this area - and unlike in other industries, people are really open-minded when it comes to trying new teaching methods. The General report was translated in all partner languages.

We also created **step-by-step**, easy-to-follow **guidelines** on how to create Visual Dictionary resources. The theoretical part of the guide focused on such topics as the role of Visual Dictionary as a digital tool in classroom, introducing gamification of visual resources in classes on the example of Visual Dictionary resources, legal frameworks of getting materials for Visual Dictionary, and included a quick overview of free to use and easily accessible graphic editors that can be helpful with creating own visual materials. The second part of the documents consist of practical guidelines on the topic of creating own VD resources. Guidelines are detailed and include such topics as: a quick steps to create a dictionary, overview on Visual Dictionary Library, creating new courses and editing its information, creating and editing new pages, tabs and hotspots, adding descriptions, embedding videos and including navigation and adding translations.

The **step-by-step guidelines document** was translated into all partner languages tested by all partners with their stakeholders (6 per partner) and came to use in the piloting sessions with teachers in all partner countries.

In addition to the written version of the guide, EKOS prepared **an instructional video** which explains how to use Visual Dictionary resources on the example from Visual Dictionary library and gives detailed step by step overview on all the aspects of creating own VD resources.

THE VISUAL DICTIONARY

Visual Dictionary is a web application that can be used to create a dictionary of words, phrases, and sentences. It can be used to teach people new languages or provide translations. The app helps users to learn the meaning of words and phrases through visual representations, adding multimedia such as e.g. video, and by implementing gamification and Text to speech functionalities.

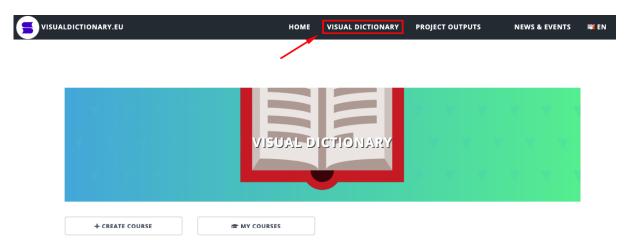
The creator is designed for people with any level of language proficiency. It provides a platform where users can share their own dictionaries with others and collaborate with them on learning material.



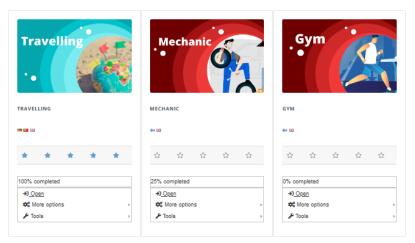


Tested and implemented web application Visual Dictionaries Creator is a tool that helps to create interactive visual dictionaries by providing a platform where users can upload images and organize them in a logical way by creating different thematically related scenes corresponding to the pages of the dictionary, and then adding hotspots containing vocabulary, descriptions and multimedia in the language of their choice.

The aim of the implemented tool is, above all, the possibility of the easy creation of interactive teaching aids for and by adult education professionals, other foreign language teachers, and as observed during tests activities for the students themselves. In addition to that it has been noted that Visual dictionary method can be used succefuly in special needs education scenario.



In the project cycle, 42 multimedia resources were developed and functional, not including several dozen test resources created by trained teachers and students during the pilot. The dictionary resources were designed with the help of teachers and students, making them ideal for use in the classroom or at home.



The development principles of this tool were based on the theoretical assumption that learning foreign languages would be more efficient when applying multimodal learning method and materials, i.e. materials that combine linguistic, visual and spatial ,and kineasthetic means. Thanks to this, students have the opportunity to work with authentic material, which, in addition to developing their language skills, shapes the ability to think critically. The multidimensionality of the message in this type of educational instruction reflects communication in the world around us.





The visual vocabulary method supports multimodal learning and can appeal to all learning styles. Students receive a lesson using more than one way to receive instruction. In multimodal learning, the teacher will apply visualization to enrich the lecture and create a multimedia resource that accompanies the lesson.

Furthermore Visual Dictionary Creator includes gamification features that will make learning languages much more accessible and more engaging for students, it includes easy games to test student knowledge - the platform has a function that allows testing proficiency in mini-games by matching words with a picture or writing down a right word in blanks. The idea behind this approach is that the reader can see the word in context and better understand what it means.

COURSES > SUPERMARKET

Thanks to the use of multiple scenes and the ability to navigate between them, visual dictionaries are also a great tool for people who want to expand their vocabulary but do not know where to start because they do not know what the types of words are related to particular topic and how they can use them in sentences.

Each course includes a variety of images on which hotspots are placed. The hotspots show the vocabulary and – depending on the view mode – give the chance to type the words (fill the blanks) or match the vocabulary item to the according hotspot. The courses also have sub-pages that can be reached

Checkout area | Fruit and vegetables section | Frozen food section | Coalry products section | Vegetables |
Fruits | SUPERMARKET |

@ Linguist Interest

@ Linguist

@ Ling

by clicking the tabs available on the top of the page or navigating through internal links.

The creator allows reuse by making copies and personalizing them complying with the rules for re-use. Reuse instead of duplication promotes sharing of existing copyright material rather than reproducing it.

The user can make copies of the Visual Dictionary, and add or modify annotations to the image to adapt the image for use in different contexts, for example, the teacher modifying it in a way that is more relevant to the his target group.

Visual dictionaries are an example of valuable resources that must be integrated into a catalogue or index (Collaborative Library) in order to be found and appreciated. Annotated images offer more value than the base image because the image's characteristics are assigned intellectual or authorial content that provides value beyond the image itself. Vocabulary is part of the content. To index an annotated image and other information - metadata - about the image (subject, keyword, format, creation date, copyright, etc.) must be catalogued.

The use of this type of method ensures the simplicity of quickly describing the image with the necessary information. Advanced software (such as Photoshop,Gimp, Ilustrator etc.) capable of generating simple annotations requires a high level of skill and knowledge to navigate the complexity of options and functions to accomplish what is ultimately a simple task. Moreover, the systems and methods available so far don't promote interactivity with the user, neither in their results nor in the





presentation. Thus, simplicity and interactivity are still unmet goals in the process of effectively describing visual digital content despite technological improvements. Visual Dictionary tools based on these principles and having the above-mentioned functionality have the potential to be a solution to this problem.

As discussed above, the approach is reflected in the functionality of the Visual Dictionary Creator using the described design methods and features.

IMPRESSIONS FROM PILOTING

In order to test the results created during the project and ensure their good quality different piloting sessions took place in the 5 different countries participating in the project (Finland, Portugal, Poland, Austria and Spain). These pilots were divided in two parts:

The first one was destined to language teachers and educational professionals and engaged at least 10 participants in each partner country (20 in Spain). These participants pilot the Visualisation for Professionals Guidelines.

The second part involved at least 20 students in local test groups in each partner country (40 in Spain). In this session the Visual Dictionary Learning Resources was shown and tested with these groups of participants. In order to reach this number, this pilot session was sometimes split into different sessions with different numbers of participants.

The main objective of both pilot sessions was to check the utility of the tool and of the different resources created in real practice. Therefore, it was very important that all participants completed all the different assessments contained in the resource so each participant's improvement and the usefulness of the resource could be checked afterwards.

In the case of **EKOS** teachers' pilot phase they decided to divide the pilot into two events, as it was hard to meet the schedule of the 10 teachers at once. The first pilot was conducted online in the form of two Zoom calls with two teachers each. Both calls lasted more than two hours and included a presentation of the platform and the resources, a workshop on creating a resource and asking participants for both verbal and written feedback - in the form of a questionnaire.

The second event took place in the VET school in Przemyśl in the form of a face-to-face workshop. The participants of these events were language teachers teaching different languages at various levels from different schools of Rzeszów and the VET teachers from the nearby city of Przemyśl. The first online call was with experienced VET teachers and the second one with young English teachers with few years of job practice. Both groups were experienced in using different types of visual aids in classes.

The first pilot was conducted online in the form of three Zoom calls in December meanwhile the second pilot took place in Przemyśl in June. About the methodology and procedure of the events,





they started the pilot session with a presentation of the platform and resources created by EKOS, followed by a workshop on creating a resource and asking participants for both verbal and written feedback (in the form of a questionnaire). The resources used were Garden flora, Beekeeping, Garden infrastructure, Flower arrangements, Garden designer tools.

In the events teachers were able to create their own resources, but simple ones because it requires much time. The resources created had two photos, with a hotspot to check how to add a photo, customize a hotspot and add navigation between photos.

About personal experiences and difficulties, there were four teachers having troubles with getting access to create their own resources, needing to contact the technical partner to solve the situation, except this the events went smoothly. All the teachers had a positive reaction to the new tool and were lively and interested in using it.

In the students' pilot phase EKOS contacted the Director of the Vocational School – CKZiU in Przemyśl directly and talked to him about the project and the SWIM Visual Dictionary platform idea a few times during the project development. As he was lively and interested in the idea, EKOS treated his students from Landscape Architecture classes as a target testing group (16-19 years old). When dictionaries were ready EKOS led classes and let students test the resources. This pilot took place on 20th March 2022.

EKOS started the classes with a short presentation and showed one dictionary resource and its features using a projector and after that let them check the resources themselves. As the pilot took place in school computer lab, each student had access to the PC.

About the procedure, EKOS prepared a computer lab before students came in by opening the platform and a survey on each computer and opening a PPT presentation using projection beforehand.

The students seemed to be interested in the possibilities offered by the visual dictionary. They paid attention to its expansion. They seemed to like this learning tool and were interested in checking different kinds of dictionaries on the platform.

About problems or difficulties, only some technical problems with registering. Some students tried to log in before registering first and some of them tried to log in with the phone number function which was not working at this moment, but they succeeded using mail.

In the case of **JAITEK**, thanks to different conversations with a teacher who was very helpful during the whole creation process of the platform and the resources, he agreed to try with his students some resources that were specially created for his lessons. The two piloting sessions started with an introduction of the platform by the teacher to his students. The platform was presented on the whiteboard using the projector. After that, each student started trying the resources individually using the center's laptops. The participants were selected by the teacher trying the resources in his English lessons. About the participants, they were 47 participants studying the fourth level of Secondary Education. The pilot took place in a school in Coslada, a city in the autonomous community of Madrid in two different lessons, the 1st and 4th June. Each of the pilots lasted one whole session of approximately one hour.





About the methodology, this piloting session started with an introduction of the platform by the teacher to his students. The platform was presented on the whiteboard using the projector. After that, each student started trying the resources individually using the center's laptops. They first completed the pre-assessment and then they tried the resource more in depth. After that, they completed the post assessment. The same procedure was followed for each of the two resources created for these specific groups.

Jaitek, with the help of the teacher participating in this piloting session, created two specific resources ("Body Language and gestures" and "Types of Holidays") which were tried by students during the piloting sessions.

In addition to this event, during the lifetime of the project, Jaitek partners promoted the project among second language students and VET learners. This was done through the circulation of pamphlets and the use of different video conferences and face to face conversations. This allowed Jaitek members to pilot some of the resources with two VET students too. In this case, students tried two different resources, "the city" and "the human skeleton" also trying the matching and fill in the blanks functionalities of the visual dictionary.

Moreover, some other resources were piloted with university students from Education degrees and masters and language centers students.

Concerning teachers, Jaitek piloted the resources mainly with Secondary Education teachers. As it has been stated before, one of these teachers showed great involvement from the beginning of the project and collaborated in the creation of some of the resources. The Visualisation for Professionals Guidelines and the platform were also piloted with 5 more Secondary teachers, two Primary teachers and one University teacher, all of them belonging to the field of Language Teaching. Moreover, these results were also piloted with several language center teachers. During these piloting sessions, some teachers highlighted the great usefulness of the project and its different results and gave some suggestions, such as the possibility to include examples of the different words in use within the different resources.

About **DECROLY**'s teacher pilot, the center got in touch with the center's managers and teachers via mailing and orally. The participants of the session were teachers who are in some way involved with the English language: teachers who work on European projects or teachers who teach subjects in English. The total number of participants were 11 teachers, their profile is VET school teachers from different departments: marketing, management, IT and tourism. Their level of experience is different: all of them have minimum two years of experience and there are some who have been teaching for many years. The date of this event was 2nd June at Decroly's facilities and it last 1 hour and 30 minutes.

About the methodology, Decroly's partners introduced the tool and explained what the project is about. Secondly, they asked and guided the participants to sign up on the website using our own code. After that they took a look at several resources that our partners had created, explaining how the resources are made. After they got familiar with the tool, they tried to create some new resources giving them time to create their own, explaining every step and important issues they had to know. Lastly, the questionnaire for participants was shared so they could give us some feedback.





The resources tested at the event were Office Supplies, Tourist Office, Types of Holidays, Travelling... In addition, participants had the chance to create their own resource (Office Computers, El Hotel, Nóminas, Deportes, Sales Assistant, Protocol and Etiquette).

As feedback, participants saw the tool as an interesting way of teaching, they thought it could be very useful in class. They liked it and showed interest in the learning process. In general, the pilot phase has been very dynamic, it is easy to show it and people tends to find it attractive.

About the students' pilot session, it was shared with Decroly's own students during the regular lessons and through their Microsoft Team's channels. Decroly's partners include the use of the application as an extra activity of the course. The tools used to develop the session were Microsoft Teams and Gmail to share the questionnaires. The participants of the events were Decroly's own students and they also could carry out the pilot phase in a non-formal education center called Nakama.

The number of participants were 30 students from different profiles, VET students (Administration and Finance, Management Assistance and IT). The event took place on 23rd and 26th May at Decroly's facilities.

About the methodology of the session, to start Decroly's partners made an introduction of the application and project. Secondly, they asked their students to create an account on the website. Then the teachers presented to their students some of the resources, letting them navigate around them. Finally, teachers tried to do the matching pairs and filling blanks options as an activity with their students.

About the student's feedback, students really liked the usefulness of the application. They found it entertaining, as a game, not as a duty. The impact has been quite positive, students were involved in the activity. As a minimum problem, students could not find the assessment option when using a resource.

Storytellme promoted the students' pilots through teachers from different schools, Colegio do Vale, Colegio Guadalupe e Centro Helen Kellen. A total of 19 students participated in the session. These students were from the 2nd and 3rd cycle (corresponding to 5th, 6th, 7th, 8th and 9th grades).

The piloting was held online and took place on 6th July and had a duration of 30 minutes. It started with a presentation of the project and the Visual Dictionary Platform. Then the different resources, specially the Solar System resource, were introduced and explained and students had the opportunity to try them and their different functionalities. For instance, younger pupils were asked to use the matching option while the older ones were asked to use the filling the blanks option.

Concerning the piloting phase with teachers, teachers from Colegio do Vale, Colegio Guadalupe and Centro Helen Kellen were selected and contacted to try the different project's results.

The pilot, which had a duration of approximately 60 minutes, took place on the 6th July and a total of 8 language teachers from the 2nd and 3rd cycles (corresponding to the 5th, 6th, 7th, 8th and 9th grades) participated in the session.





The pilot started with a presentation of the project and an introduction to the Visual Dictionary platform. Different resources which were already created were shown ("Circular economy", "Water cycle", "Solar system" and "Animals") and teachers were also shown how to create their own resources and create different hotspots in existing resources. Moreover, at the end of the pilot, everyone was provided with the Step-by-step guidelines for creating a Visual Dictionary. Teachers found it a very useful tool to create their own resources and to meet the interests and needs of their students.

In Austria, the piloting was divided into multiple sessions that took place online via Zoom, often in one-on-one settings. Additionally, educators were asked to test the Visual Dictionary on their own in a self-directed learning setting with available tele-support by the project partners.

In Finland, the project partner **Innoventum** was mainly tasked with the technical aspects of the project; namely the creation of the visual dictionary platform. In addition to this, Innoventum also piloted the platform and its materials with local special needs teachers at Luovi Vocational College. Innoventum and Luovi organized two workshop piloting sessions in the spring of 2022 to test the technical and content issues of the online platform.

The purpose of these sessions was to assess the validity and usability of the platform in terms of the teaching and learning needs of special education. Also, the viewpoint of gamification as an educational tool was considered, as well as delivering the practical skills to use and update the platform suited to the needs of the teachers and the students.

The decision to pilot the platform and its materials on special needs vocational teachers was based on the notion that in Finland language learning is comparatively advanced in relation to other EU countries. Instead, the contribution of the visual dictionary -platform to special needs vocational learning was identified and pursued by local special needs vocational teachers. It was recognized that the platform would be an aid in learning vocational vocabulary as well as attaching practical skills to the learned language. Therefore, the piloting was done from this perspective of the target groups.

Moreover, during the piloting the vocational teachers recognized the usefulness of the platform to educate their students on day-to-day skills, such as learning the names of the tools they use in their studies and where those tools are located within the classroom setting. These skills are an addition to the basic skills learnt by using the platform to navigate through everyday situations, such as getting a haircut, visiting the pharmacy, going to the gym or traveling to a foreign country. With the online platform, the target group representatives have been given a secure environment in which to teach and learn skills related to vocational development.

The platform also encourages the practical testing of these skills in everyday communication; from informal conversations to trade-language, which will give learners confidence in themselves and their competences.

As for the technical aspects of the platform, most of the graphic material has been designed by utilizing simple and accessible tools, such as Adobe XD, Gimp, Canva and other websites with free vector graphics. Accessibility of presenting and understanding information has been given particular thought considering the special needs of the target group in Finland. For example, the language has





been simplified and the combination of image, text and sound increases the understanding of the source material.

The teachers were given face-to-face guidance on how to use the platform in their teaching and they provided the project team with specific feedback from their point of view. During the piloting the teachers pointed out specific needs relating to accessibility, which were addressed between the workshops. All in all, the pilot testing recognized the strengths of the platform as well as identifying issues for further development. The special needs vocational teachers provided valuable testing data on content and usability of the platform, which is vital in terms of realizing the visual dictionary as an accessible and versatile learning and communication tool.





SURVEY RESULTS

During the development of this Recommendation Paper, the partnership reached out to relevant target groups and stakeholders and collected their final feedback on the project results. The SWIM methodology and results were assessed in relation to their relevance to the adult education and general education sector, their applicability in professional life of educators and their sustainability and mainstreaming potential. Finally, a SWOT analysis has been implemented.

Besides the target group members, the project partnership has also been asked to share their opinions and insights.

To collect the results, two questionnaires have been developed: one for internal use and one for external use. The questionnaires were structured in the following sections:

- 1. Profile of participant
- 2. Applicability
- 3. Relevance
- 4. Sustainability & mainstreaming
- 5. Partners experience (only for partnership)

The questionnaire for external participants spanned across 33 items, most of which were rating scales or multiple-choice questions. Neutral answer options were offered to assure that participants have the chance of answering neutral in case the question did not apply to them. Usually, the rating scales had 5 answer options, in which the best option was to state that they "absolutely" agree (max. 5 points). The minimum was 1 point to indicate that they do "not at all" agree. Eight items were open ended and asked the participants to insert a comment.

The questionnaire for partners included the same items as for external participants and seven additional questions asking specifically about their experiences and lessons learnt during the project. Hence, the questionnaire for internal use spanned across 40 items.

Both questionnaires were prepared as Google Forms. While the questionnaire for partners was only available in English, the questionnaire for external participants was duplicated and offered in the national languages. The questionnaire draft that served as the basis for the Google Forms is attached in the annex section of this document.

The following pages present the obtained results in sections according to the quality dimensions relevance, applicability and sustainability plus the profile of participants and the experience of partners. In the next chapter, the results are summarised and deductions are made.



Section 1: Profile of participants

The surveys have been sent to a minimum 5 stakeholders/target group members in all partner countries: Austria, Finland, Spain, Poland, and Portugal.

About 79% of the participants were adult education professionals. 7% were school assistants, 7% primary school teachers and another 7% were adult education providers. None of the participants self-classified as adult learner.

In the partner's questionnaire, representatives of all six partner organisations answered the questionnaire. They have not been asked about their personal background, but of the nature of their organisation. Three partners indicated that they are and SME, one as an educational centre in VET and two as associations.

This question about the background of participants is relevant to properly interpret the following

7%
7%
7%
79%

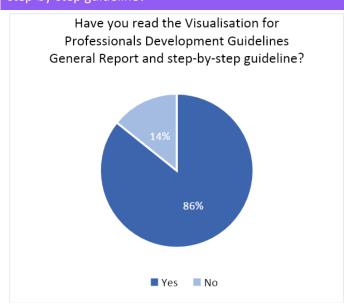
Adult education professional
Primary School Teacher
Schoolassistant
Adult education provider

What is your professional background?

answers according to their background and potential to use and apply the SWIM methodology in various contexts in the future.

The following questions completed the profile of participants as they asked about their familiarity with the SWIM methodology and project results. The graphs show only the results of the external participants, since they are more diverse than the answers of the internal partnership (which are exclusively at 100%).

Have you read the Visualisation for Professionals Development Guidelines General Report and step-by-step guideline?



The majority of the external participants have read the first project result of the SWIM project and can answer reliably about its quality. 14% did not read the guidelines as of the implementation of this survey.

In opposite, 100% of all project partners have read the IO1 Visualisation for Professionals Guidelines General Report as well as the step-by-step guideline.



Have you registered in the Visual Dictionary Platform?

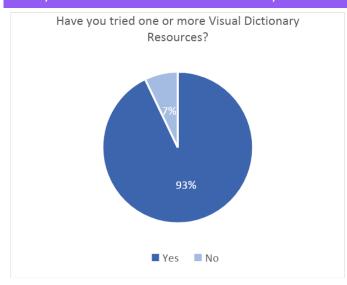


All participants of the stakeholder questionnaire have registered as users in the Visual Dictionary platform.

All partners have also registered as users in the Visual Dictionary platform.

This means that all participants of both surveys were able to give reliably answers about the relevance, applicability and sustainability of the SWIM Visual Dictionary.

Have you tried one or more Visual Dictionary Resources?



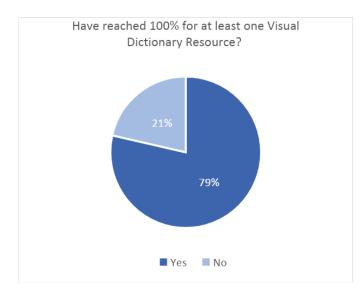
93% of the participants of the stakeholder questionnaire have tried one or more Visual Dictionary resource.

A 100% of all partners have tried one or more Visual Dictionary resource.

This means that almost all participants of both surveys were able to give reliably answers about the relevance, applicability and sustainability of the SWIM Visual Dictionary resources.

Have reached 100% for at least one Visual Dictionary Resource?

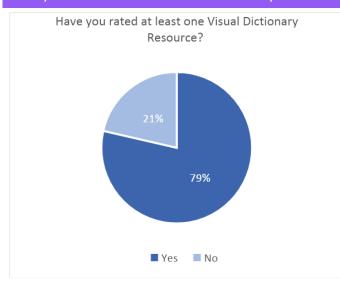




79% of the participants of the stakeholder questionnaire have completed a Visual Dictionary resource. 21% did try a resource, but did not fully complete it.

In opposite to this, a 100% of all partners have completed a Visual Dictionary resource.

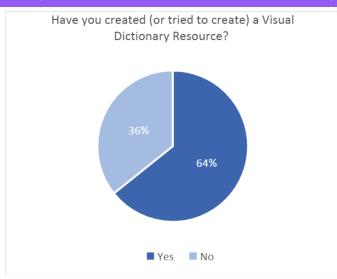
Have you rated at least one Visual Dictionary Resource?



Similar to the question before, 79% of the participants of the stakeholder questionnaire have rated at least one resource in the Visual Dictionary Platform. 21% did not rate a resource.

In opposite to this, a 100% of all partners have rated at least one resource, most even rated all resources they have tested.

Have you created (or tried to create) a Visual Dictionary Resource?



64% of all participants of the external survey created or tried to create at least one Visual Dictionary Resource. 36% did not try it and did not request a specific link from the partnership that would enable them to become a creator.

In opposite to this, 100% of all partners have created visual dictionary resources.

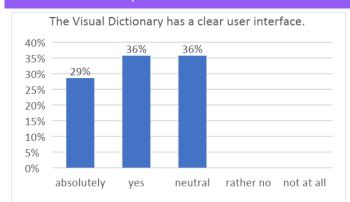




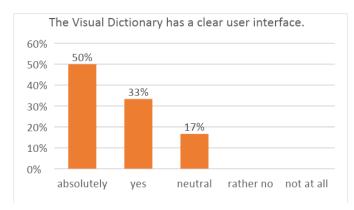
Section 2: Applicability of Visual Dictionary

In this section, eight items asked participants to estimate the applicability of the Visual Dictionary using rating scales. The result graphs for external participants are presented in purple, while the results of the partner survey are presented in a contrasting colour of orange.

The Visual Dictionary has a clear user interface.

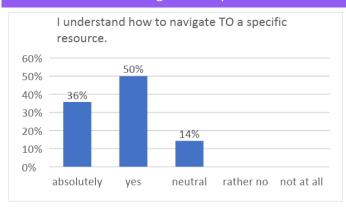


The majority of all external participants (64%) agreed that the Visual Dictionary has a clear user interface. Of these, 29% absolutely agreed and 36% agreed. 36% gave a neutral answer.



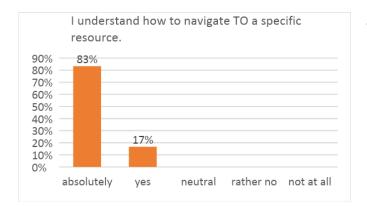
Partners answered differently. Here, 50% of all participants indicated that they find the user interface absolutely clear. Additional 33% find it clear and only 17% gave a neutral answer.

I understand how to navigate TO a specific resource.



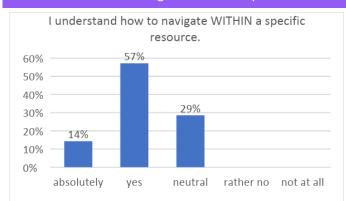
All participants were able to navigate to specific resources and switch from one to another. 86% had no problem at all and 14% were able to, but needed a bit more attention to do so.



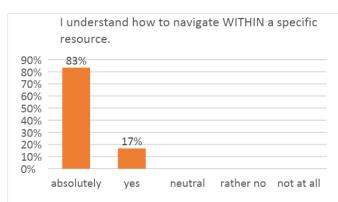


All internal participants had no trouble navigating to specific resources.

I understand how to navigate WITHIN a specific resource.



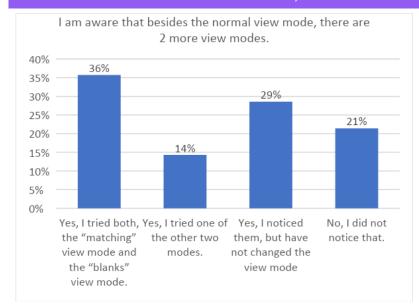
71% of external participants had no problem navigating within a specific resource. 29% gave a neutral answer. Since the resources feature different structures, the navigation changes depending on the logic behind the learning setting.



All partners understand fine or perfectly fine how to navigate within specific resources.



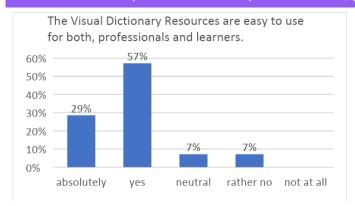
I am aware that besides the normal view mode, there are 2 more view modes.



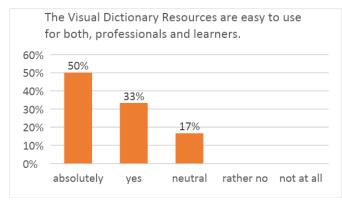
Half of all external participants have tried at least two view modes. The majority (36%) has tried all three view modes. 29% have noticed the other modes, but have not tried them. 21% did not notice the different view modes.

100% of all partners have tried both view modes.

The Visual Dictionary Resources are easy to use for both, professionals and learners.



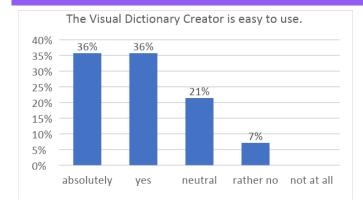
The vast majority (86%) thinks that the Visual Dictionary resources are helpful and easy to use for learners and professionals alike. 7% are not sure and 7% said that they rather not agree.



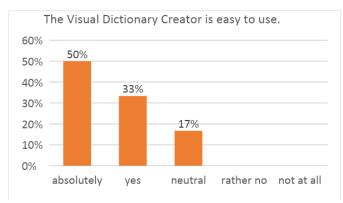
83% of all partners agree that the Visual Dictionary is easy to use for learners and professionals. 17% are neutral.



The Visual Dictionary Creator is easy to use.

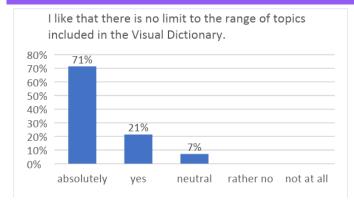


72% of all participants agree that the Visual Dictionary Creator is easy to use. 21% are neutral and 7% do rather not agree.



83% of all participants agree that the Visual Dictionary Creator is easy to use. 17% are neutral.

I like that there is no limit to the range of topics included in the Visual Dictionary.



Almost all external participants enjoy the unlimited possibilities of the Visual Dictionary, only 7% gave a neutral answer.

100% of all partners agreed that they like that there is no limit to the range of potential topics.



If I could change something about the Visual Dictionary, it would be...

External participants:

nothing

Nothing

No

nothing

-

I am fully satisfied so far for me everything is fine

User interface

Create a repertoire of images so as not to search for them on the internet

Easier to use

Provide a clear indication when a resource is finished.

Add links to other resources like OED

There should be more navigation features like go back to the main page.

Navigating the menu should be clearer. I think there should be a greater segregation of topics on the menu. Sometimes it is difficult to find a specific topic. In addition, there should be yet bigger variety of exercises.

Partners:

Course language selection setting

Introduce the tool "Search" in the resources'

section

a more detailed manual to learn how to use

visual dictionary

Include some other activities related to the word context to help students memorise it

better

I would improve navigation between pages (like one button to go back to main page on

each page of the resource)

it very visibly in the creator.

to include more instructions for end users. However, there is already a step-by-step guideline, so it would be good to place/link

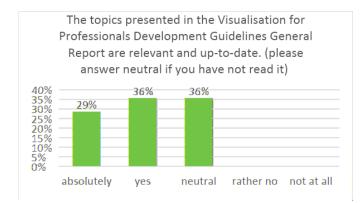
The feedback provided helped shaping the final version of the Visual Dictionary. At the time of the creation of this Recommendation Paper, many of these points are either already implemented or not feasible within the SWIM project. Key points will be mentioned again in the following chapter.

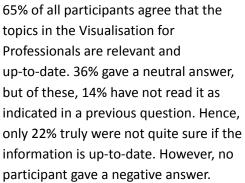
Section 3: Relevance of SWIM Methodology and Results

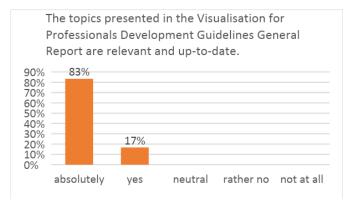
In this section, eleven items asked external participants and partners to evaluate the relevance of the SWIM methodology and results. Included in this section is a SWOT analysis that investigates the strengths, weaknesses, opportunities and threats. The items in this section feature a more diverse answer scheme.

The topics presented in the Visualisation for Professionals Development Guidelines General Report are relevant and up-to-date. (please answer neutral if you have not read it)



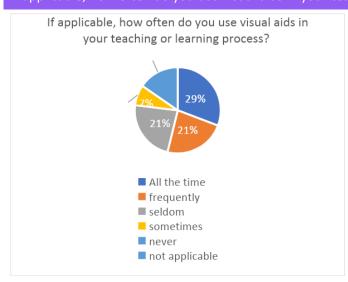






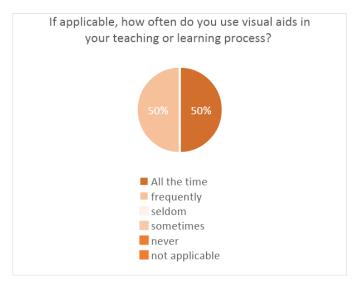
All partners agree that the first intellectual output is relevant and up-to-date.

If applicable, how often do you use visual aids in your teaching or learning process?



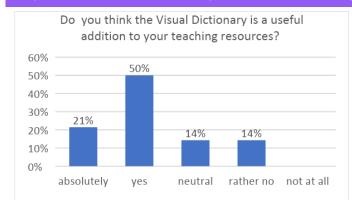
More than half of the participants (51%) use visual aids frequently or all the time in their teaching or learning process. Another 21% occasionally use visualisation techniques and 7% only sometimes use them. 14% say this does not apply to them as they are neither teaching or learning in formal or non-formal contexts.





Partners on the other hand use visual aids all the time or frequently in their teaching and learning process.

Do you think the Visual Dictionary is a useful addition to your teaching resources?



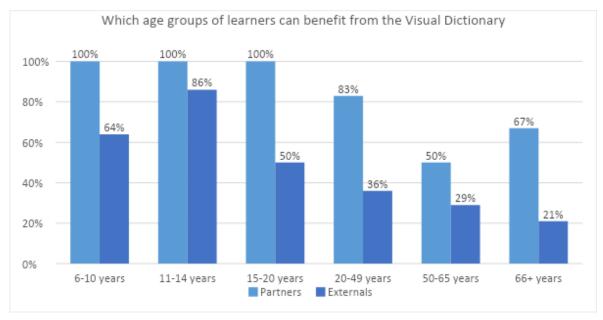
71% agree that the Visual Dictionary is a useful addition to their teaching resources. 14% say that they are rather not useful, but the same 14% said earlier that they do not use visual aids of any kind. 14% gave a neutral answer, as they only use visual aids on occasion.

100% of the partnership think that the Visual Dictionary will prove to be useful in the future.

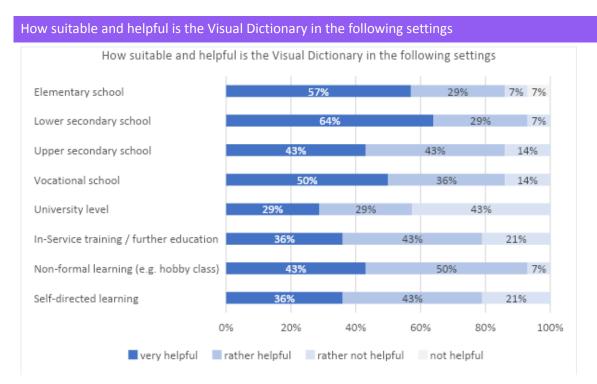
Which age groups of learners can benefit from the Visual Dictionary?







The graph above shows the comparison of the estimations of partners and external users. While partners estimate that the Visual Dictionary can be used by all age groups, the external particiapnts see the most use in 11-14 year olds and younger. The older the learners get, the less benefit is estimated by external participants. Partners agree that the most benefit may be found in young users from 6-20 years (during formal school education) and most of the adult life. Also seniors 66+ may benefit from using the Visual Dictionary as learning resource.



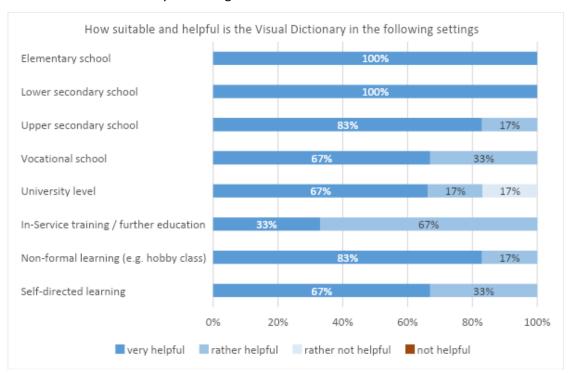
The graph shows how the external participants rated the usefulness of the Visual Dictionary in different learning settings. The highest potential is estimated in the lower secondary school, followed by elementary school and interestingly for non-formal learning settings such as hobby





classes. Upper secondary school and vocational school are close follow ups alongside self-directed learning and further education settings.

In the graph below, the same item was rated by partners, who see the highest benefit in formal learning settings for young people: elementary, lower secondars and upper secondary. Non-formal learning settings are also rated high, however in contrast to the external participants, the further education receive relatively low rating.



SWOT ANALYSIS 1: Where do you see the strengths of the Visual Dictionary approach?

External participants:

It is interactive platform

in its creation of the subjects being able to have what you need at any time.

Robotics and programming

it is a very useful tool for teaching

The use of images to teach languages is more attractive to the students than using

words or sentences.

The idea

Diversity, gamification

is very appealing

It's the combination of both word and

picture

Stimulates understanding

Visualisation is always helping to memorise and understand the vocabulary; the

Partners:

Possibility to use the resources with

different target groups, especially special needs education in Finland

Images help to relate elements with their own name

appealing

The use of images can be a good tool to reinforce students learning, since they help them memorise concepts more easily.

It encourages students learning process and makes learning easier and more interesting

The flexible and open methodology allows a broad and targeted utilisation of the creator

tool and - consequently - an accessible

learning tool for learners.





interesting thing are the diverging possibilities to train the vocabulary. You can learn foreign languages by yourself, it allows you to practice professional vocabulary In the possibility of resource development and access to a wide audience

In one key message:

The strength of the Visual Dictionary are the diverse and flexible visualisation opportunities to facilitate the learning process.

SWOT ANALYSIS 2: Where do you see the weaknesses of the Visual Dictionary approach?

External participants:

There are many app quite similar I don't see them

it takes a long time to create a resource It can require a lot of time to the instructor to create a big resource.

How it works

No clear indication of successfully completed courses, no "reward" for achieving 100% for teachers with less ICT skills I can't find any because I haven't tried it long enough Harder to express more advanced and abstract concepts

The weakness is in the first row the necessity of digital skills both at the students and at the teachers, which is not always provided.

It's monotonous

There are many similar projects like kahoot, quizlet, duolingo and many more In the possibility of resource development and access to a wide audience

Partners:

Time for developing the resource

A weakness of the tool could be that It does not have a bank of photos or images. You are the one that have to look for them at first I was a little lost but as soon as I understood how it worked I got to work

The creation of resources could be time consuming for some teachers

It requires technological devices in classes I see no weakness at the moment.

In one key message:

The weakness of the Visual Dictionary is that the creation of the resources requires the educator to invest time and to possess a more than a basic level of ICT skills.

SWOT ANALYSIS 3: Where do you see the opportunities of the Visual Dictionary approach?





External participants:

Primary school

I see opportunity in all areas of education. the students appreciate using images

instead of words

It could include a bigger set of languages until complete it with all of them.

If there is many nations In same group Individual learning

it is easy to use and useful for language teaching

Primary school, middle school Create individualised approach

A multiple-language-dictionary can be used in plenty of situations, I can imagine a conversation between workers speaking only a basic level of the language of their conversation partner and helping themselves by using the dictionary in real time to show and explain the professional vocabulary.

It could be very useful for vocational schools Generally, is a good idea but needs a few improvements.

Partners:

The Visual dictionary approach can be used by teachers and the learners themselves in an active way namely creating their own visual dictionaries

I really believe that the tool can be very helpful at schools

is an excellent working tool

It can be expanded to every single topic and every single educational stage. Users could create astronomy, anatomy, sports or any kind of resources. Moreover, these resources can be created taking into account every single level or students' previous knowledge.

It can make learning new languages more natural and fun

The visual dictionary and creator provide an added value for learners and teachers/trainers all over Europe.

In one key message:

The opportunities of the Visual Dictionary are its flexibility and versatileness that allow a meaningful utilisation in a broad variety of learning settings for many different target groups.

SWOT ANALYSIS 4: Where do you see the threats of the Visual Dictionary approach?

External participants:

People choose this app in the creation and control I cannot find any threats

If the tool is not well disseminated by the local and national authorities it can be

forgotten

If you have an app, it can work

If everybody can add resources, there might

be some errors

convince teachers that it is not too much work to create your own resources

Partners:

Maintenance and moderation of new resources

At first, a lot of users will have to create their own resources if they want to learn a specific theme. This could be a loss of time and motivation from the users

getting teachers to experiment

Some teachers are not willing to dedicate a

lot of time to create new resources.

Therefore, a huge effort would be needed to create a complete library of resources.





It's really time-consuming to create such a tool for different languages but it's a great idea for those who have visual experience. Not sure

The challenge is, as at every digital solution, the difficulty to get a proper Internet access and a well-functioning device, in some cases and environments.

Teacher may not be eager to devote time to create their own dictionaries and search for free to use pictures

For the dictionary to meet the expectations of potential users.

Moreover, some resources could include mistakes or could be incomplete.

Teacher may not want to devote enough time to prepare resources

The challenge is to disseminate and promote the visual dictionary and to properly communicate its added value to the target group. This will be especially important even after the project's official end.

In one key message:

The threats of the Visual Dictionary are that educators may not want to invest the time to create their own visual aids.

What do you like best about the Visual Dictionary resources and/or creator?

External participants:

The creation

the way of creating resources is very intuitive

The variety of topics

You can use it many ways

Variety of languages and topics

we can use for any resource

That students can create their own visual dictionaries.

That it gives creative freedom

I like the nice pictures and the real photos, and the possibility to add a new one took by myself.

I like that you can use dictionaries created by others and the diversity of the resources. I like the illustrations and that the community can develop the dictionary.

Partners:

Interactive activities four main methods of multimodal learning; visual (images), auditory (TTS feature), reading and writing (blanks activity) and kinaesthetic (matching pairs). Visual dictionary method helps to apply this model of learning (VARK) to create diverse learning content to engage learners.

It gives you a lot of freedom and it is very use to use

we can create resources on the themes we want and with the degree of difficulty we understand

It is a strong tool that will give teachers' more opportunities to work with vocabulary in the classroom

You can get really creative while preparing the dictionary, it's way more fun than learning list of words by heart The flexibility





Do you know a comparable tool or resource collection? If so, please let us know

External participants:

Genially

I don't know

No

No

It reminds me of Kahoot

No, I don't Kuvakom app

-

no

Google lens but I believe it's not the same.

However, it can be used for language

learning as well.

Not that I remember

Not at all; I can't find another dictionary with more than 2 languages, or with self-defining exercises, or with a possibility to interact.

no

Partners:

google drawings, thinglink

It could be comparable with Kahoot (saving distances) as the user is the one that create

the resources

nc

Genially offers the option to create

interactive resources, being it a possibility to

create similar resources

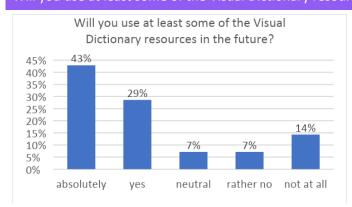
no

No

Section 4: Sustainability of SWIM Methodology and Results

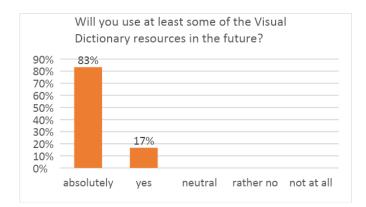
In this section, six items asked participants and partners about the sustainability and mainstreaming potential of the SWIM methodology and results.

Will you use at least some of the Visual Dictionary resources in the future?



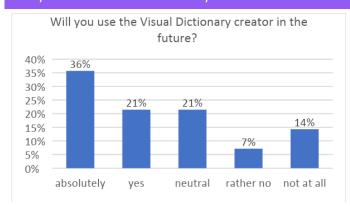
The majority is planning to use at least some of the resources in the future (72%). 21% said that they will not use the Visual dictionary, relating to the 21% that earlier indicated that they do not use visual aids at all. 7% gave a neutral answer.



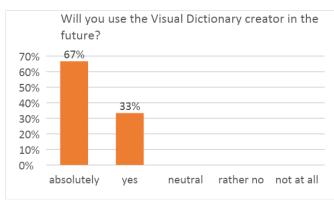


All project partners plan to use the Visual Dictionary resources in the future.

Will you use the Visual Dictionary creator in the future?



Similar to the question above, 21% will not use the creator in the future since they are not required to create learning resources in general. More than half (57%) will however create learning resources in the future using the Visual Dictionary tools. 21% gave a neutral answer.

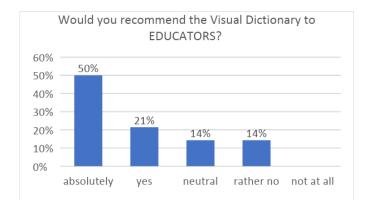


All partners plan to continue to use the Visual Dictionary creator in the future.

Would you recommend the Visual Dictionary to EDUCATORS?



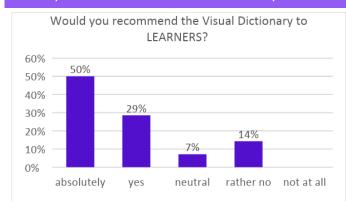




71% would recommend the Visual Dictionary to educators, 14% are not sure and another 14% would rather not recommend it.

100% of the partners absolutely agreed that they would recommend the Visual Dictionary to educators.

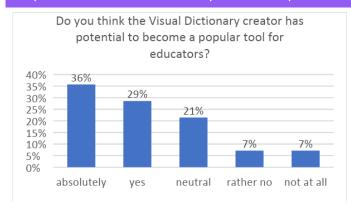
Would you recommend the Visual Dictionary to LEARNERS?



79% would recommend the Visual Dictionary to learners, 7% are not sure and 14% would rather not recommend it.

100% of the partners absolutely agreed that they would recommend the Visual Dictionary to learners.

Do you think the Visual Dictionary creator has potential to become a popular tool for educators?



The majority (65%) thinks that the Visual Dictionary can become a popular tool for educators.

100% of the partners absolutely agreed that the Visual Dictionary creator has potential to become a popular tool for educators.

Section 5: Partner's Experiences

In this final section, only representatives of the partnership were asked to share their experiences and lessons learnt. Seven items, mostly open-ended questions, gave them the opportunity to go into detail. The key points will be summarised and deducted into recommendations in the next chapter.

In your opinion, what is the key factor to facilitate the broad use of the Visual Dictionary?





Digital tool empowering users to create own resources, multimodal learning method.

It's easy to be used at class, images can make learning a funny process

to show educators the potential of visual creator and the advantages of using it

The creation of a strong library of useful, complete and trustworthy resources

I would say that that the key factor there is its potential to keep young people interested in learning

Targeted promotion towards teachers/trainers as well as learners.

What have you learned as a professional and/or as organisation during the SWIM project? Were you able to enhance your competences/offers? If so, how and to what extent?

The experience gained during the Swim project has contributed to:

- an understanding of the special needs education environment and needs of the learners
- gave an opportunity to explore possible applications of technology in education
- increased understanding of the needs of adult educators
- increased motivation to undertake further development of Visual dictionary
- a better understanding of how the school curriculum can be adapted to this tool
- the opportunity to include the Visual Dictionary method in future course applications
- the chance to 'try out' the solution in real life scenario.

As it is my first international project, first of all I have learnt to cooperate with people from different countries and to work as a team as I usually do it by myself. I have improved my ability of team-working and my English level. I feel satisfied with the development of the project and with the partners that I have worked with

Working on this project and with these partners was very enriching. Namely, the sharing of knowledge between partners with different realities and the knowledge acquired during the training action in which we had the opportunity to learn about other platforms, which can be used both in day-to-day life and in teaching, and learn how to use them.

As a professional, I have discovered the importance of using images in the Second Language Classroom. Moreover, the creation of the different Visual Dictionary resources has also helped me to develop specific digital competences related to the creation of interactive resources in a new tool. Finally, the SWIM project has also helped me to develop some teaching competences and discover new methodologies.

As an organisation we have enhanced our IT competences, especially in the field of creating and editing graphics, we learned a lot about few graphic editors and learned how to use vector graphics. We also enhanced our English vocabulary a bit while preparing our resources - in professional areas as a beekeeper tools.

Please name 3 key recommendations you would like to give EDUCATORS and PROFESSIONALS in the adult education sector:

1. Visual Dictionary method fosters multimodal learning and has a potential to appeal to all learning styles. Students are provided with the lesson by using more than one way of receiving instruction, so that they learn more effectively, as has been proven by numerous studies. In multimodal learning, the teacher will apply visualization to enhance the lecture and create a





multimedia resource that accompanies the lesson. This interactive teaching style breaks the monotony and strengthens overall learning.

- 2. Avoiding the potential overload associated with multimodal learning. If the lesson becomes too complex, students will begin to miss the bigger message. Overload results from clogging lessons with too much material or modalities at once. It is better to create resources that are shorter and more condensed, and avoid large material in which students begin to lose focus.
- 3. Teachers should implement the strategic orientation and organization of their students when using visual aids created with the help of the Visual Dictionary. Otherwise, there is a risk that the information will not reach the students. Each modality will work in conjunction with the other to create an educational resource where words, images, and multimedia have their purpose within a logical structure. Auditory and visual cues that are separated by too much time or space in a lesson will lose their relevance. With proper organization and focus, multimodal lessons engage memory and encourage thought.

In my opinion If you want to become an educator you need to work on two skills that are fundamental from my point of view: patience and understanding.

Another recommendation I would give is to always try to improve the way you teach your classes, they always can be more attractive or interesting and nowadays there are plenty of tools to do it.

Related with the previous ones, the last one would be to listen to the students. This is the best way to improve in this sector and in my case, to be happy with it. If you are able to listen to them and understand them you will know how to be a better educator.

It's practical, appealing and gives you the freedom to create whatever you want

Use a wide variety of tools and methodologies while teaching and try to avoid using only theoretical lessons and provide students with opportunities to use that language naturally (conversations with native speakers).

Incorporate the use of images in all the resources created

Incorporate the use of visual dictionaries to work with vocabulary

I would recommend them to make their resources visually attractive, to translate already existing resources to their language in order to build up the library for their students and to name all the details on the photo even if its not so much related to the main topic of the resource (they may make not topic-related hotspots in different colour)

- 1. Think of topics/sub-topics that can be visualised and prepare visual dictionary ressources to spice up your lesson.
- 2. Use copyright-free images from pixabay, pexels or unsplash or your own photos.
- 3. Make sure to test your ressources before you sent it to your learners.

Please name 3 key recommendations you would like to give adult LEARNERS who are learning a new language

1. Use of collaboration and exercises to strengthen learning. Lessons should be specially designed to be interactive. As a student, you can also collaborate with others and work in pairs or groups. The overall aim is to use as many different ways of learning as possible to master your chosen vocabulary.





- 2. Learning is enhanced by repeating the same or similar vocabulary in many different ways using fill blanks and matching pairs activity and TTS pronunciations. When concepts are repeated, there is a greater chance of retaining information.
- 3. The Visual Dictionary Resource can also be used as homework or as a revision of previously learned material.

It is never late to learn something new

Be patience, you won't be an expert in a couple of days, to learn a new language it requires time and work

Be curious, It is the best way to learn

The same resource allows you to learn vocabulary from more than one language, it is appealing and students can choose the topics they like best.

Try to use images to memorise words and concepts

Try to use different applications and tools and try to be in real contact with the language by using it in natural contexts.

Be constant and do not give up if you do not see improvement

I would recommend them to use different view modes to check their knowledge, not to only follow one order of the pages but to 'wander around' in the dictionary looking for some interesting words, and to have fun using it

- 1. Be curious and asks questions (either to your teacher or to Google)
- 2. Try to find strategies that help you memorise vocabulary or grammar rules that work for you
- 3. Don't give up when it gets difficult and keep on trying!





How will you continue to use and promote the SWIM project results?

Project will be promoted to local adult education teachers, and VET schools I will use the tool in my classes

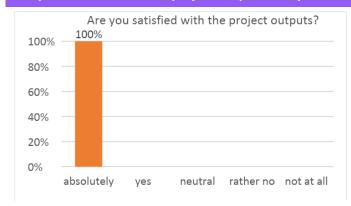
Through dissemination to schools, teachers and on social media.

I would expand the target since it is possible to create resources for every single topic and educational stage. For example, it could be an interesting resource to incorporate in the first years of Primary Education since students would feel motivated to work with images and would learn faster thanks to the association between words and images.

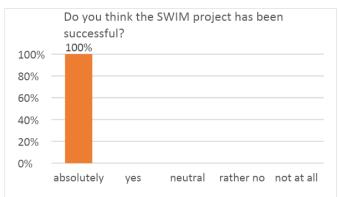
I will recommend using it in several high schools in the region, and to befriended foreign language teachers

We will promote the project on our website and social media channels as well as in related events. I personally will use it in my future work as a trainer. Our KA1 VET learners will be provided with the resources we created before they start their Eramus+ mobility abroad. Hence, we plan for a long-term utilisation of the project results. The WBL_GOES_VIRTUAL project already features the SWIM visual dictionary as one of 30 best practice learning software tools.

Are you satisfied with the project outputs? Do you think the SWIM project has been successful?



All partners agree that they are absolutely satisfied with the project outputs and they think that the SWIM project was successful





POLICY RECOMMENDATIONS

The previous chapter provided and in-depth look into the results of the external and internal survey that was implemented in the final months of the project. Since its implementation, the Visual Dictionary and other SWIM results have been revised a final time before publication, hence a lot of the collected feedback is already put into practice as of the publication of this Recommendation Paper.

This chapter will now deduct the key points from the overall project progress and survey results and present:

- Benefits of applied SWIM methodology to lifelong learning
- Lessons learnt/policy learning from experiences of the partnership
- Key recommendations for educators and learners
- Deductions and key recommendations for policy makers

Benefits of applied SWIM methodology to lifelong learning

In a nutshell, the SWIM methodology entails to use tailored visualisation aids in formal and non-formal teaching and learning settings, specifically in the context of language learning.

This and the previous surveys amongst the target group showed that each educator has their own individual approach to which extent they usually incorporate visual tools in their teaching process – reaching from black and white graphs, to coloured illustrations and photos, videos and physical objects. It highly depends on the learning setting in which they act and on the group of learners they try to reach. Another important indicator is the time the educators have available for preparing their lessons – the more time resources, the more motivation to invest time in preparing tailored visual aids.

Visual aids are extremely effective as the human brain is able to recall images significantly better than a simple list of words or vocabulary lists. Combining visual aids with interactive elements that allow the learner to experience learning content actively instead of only consuming it passively, amplifies the learning effect even more.

The Visual Dictionary and its complementary products serve exactly this purpose and provide an interactive digital learning environment that allows educators to create tailored learning resources for their classes.

The use of the Visual Dictionary is absolutely free of charge and easily accessible for any interested party.

In the context of lifelong learning, the Visual Dictionary can serve as learning tool in formal and non-formal settings as well as in self-directed learning settings. In the target group survey, the majority of internal and external participants see the most sustainable and future potential in the utilisation for young persons aged 6-20 years, with a peak for those aged 11-14 years. This overlaps with the estimation that lower secondary school as well as elementary school seem to be the most interesting application contexts for the Visual Dictionary.





On the other hand, self-directed learning contexts alongside non-formal learning settings such as hobby classes – which are usually targeted at adult or even senior audiences – were also rated as extremely suitable opportunities for utilising the Visual Dictionary and its resources.

Lessons learnt and policy learning from experiences of the partnership

The SWIM partnership consisted of 6 partners from 5 EU countries: Finland, Austria, Portugal, Spain, Poland. Over the course of the 24 months Erasmus+ project, the partnership not only worked together to develop results, but also learned from each other's expertise and know-how. The partners also acquired new knowledge, skills and competence through the direct contact with the target groups of the SWIM project and learned more about current teaching methods in the EU countries. Partners state that this exchange of knowledge and the immersion into different realities in the partner countries was extremely enriching on personal and professional level.

One key lesson that was learnt by the partnership was how to work and cooperate in international teams – this includes intercultural learning experiences as well as improved language learning on project internal level.

The usefulness of visual aids has always been known on intuitive level, but only through the in-depth immersion during the SWIM project, the partners have realised their full impact and importance for learning a second language. The intense work on the Visual Dictionary resources also allowed partners to enrich their vocabulary in various thematic contexts.

Another crucial component of the SWIM project and the development of its resources was the digital and technical aspect of it. While the coordinator Innoventum took the lead in all digital developments on programming level, all partners contributed by testing the online tool and its elements, by translating it in an interactive, live-editor and by continuously providing feedback on things that worked well or that needed improvement.

As a consequence, the partners report that they enhanced their specific technical ICT knowledge and skills during the work on the SWIM project. Creating new Visual Dictionary resources is now very easy for external users because the partnership tested the whole process many times during the development. Now, it is rather easy for educators who possess basic ICT skills. At the time of the official launch, the partnership furthermore produced a detailed step-by-step guide in written format as well as in video format with subtitles in all languages. This will allow educators an easy stepping stone into using the Visual Dictionary.

Another key lesson learnt by the partnership is that they improved and enhanced their ICT skills and knowledge by working on the SWIM project and through developing a user-friendly relevant tool for educators in formal and non-formal learning settings.

Finally, the partners also learned to operate graphic editors to create tailored and suitable illustrations for the Visual Dictionary. During the LTTA event in Poland the partners were also introduced to compatible online learning apps that can be used complementary to the Visual Dictionary.





The take away for the internal policies of the partner organisations can be summarised as follows:

- Transnational projects provide valuable opportunities to enhance intercultural competences and to improve the English language level of the participating staff.
- The cooperation and professional exchange across national borders enrich the professional competences of all involved persons and allow holistic synergies that benefit the organisation as a whole.
- The involvement and engagement of external participants in multiple EU countries –
 especially when they are experts in their field of work provide in-depth knowledge and
 expertise on professional practices in other countries and, hence, outside the box and usual
 routines.
- The SWIM project proved to be a successful cooperation opportunity that deepened the
 relationship with relevant organisations in other EU countries and served as a valuable
 opportunity to evolve the specific pedagogical, technical, intercultural and language
 competences of the staff involved.
- The SWIM products are transversal and extremely relevant resources that will serve the staff and the partner organisations in their future work. The SWIM Visual Dictionary already serves as a best practice example in other related EU projects.
- The SWIM products are highly valuable and beneficial tools and will continue to be promoted in the national and international networks of the project partners.

Key recommendations for educators

In the survey and during the implementation process of the SWIM project, the partnership has collected key recommendations for educators, which are now summarised below.

- 1. Make sure that you have two key skills as an educator: patience and understanding.
- 2. Listen to the needs of your learners.
- 3. Enable and encourage active learning.
- 4. Keep improving yourself and stay up-to-date.
- 5. Mix tools and methodologies to stay interesting.
- 6. Use multimodal and multimedia learning as it has the potential to appeal to all learning styles, which makes it easier for your learners to grasp the contents. The SWIM Visual Dictionary is free to use and allows you to create tailored resources four your learners.
- 7. Use visually attractive resources. The human brain likes such as colourful pictures or symmetry and it will be much more likely to pay attention to the content conveyed. More attention equals more potential to memorise and learn!
- 8. Create a logical structure in your learning resources.
- 9. Avoid overwhelming learners. Think of the content and learning outcomes your leaners should achieve.
- 10. Stay safe and use copy-right free images (e.g. from pexels, pixabay, unsplash) or your own photos (but keep in mind the general data protection regulations!)
- 11. Translate existing resources in the SWIM Visual Dictionary library and use them for your purposes.
- 12. Test your Visual Dictionary resources, before you provide them to your learners.
- 13. Be happy © Your learners feel how you feel and if you are excited by the topic you are teaching, you will empower your learners to get excited about it as well.





Key recommendations for learners

In the survey and during the implementation process of the SWIM project, the partnership has collected key recommendations for learners who are learning a new language, which are now summarised below.

- 1. It is never too late to learn something new!
- 2. Be curious about the language or a new topic. Chose something that interest you.
- 3. Ask questions either your teacher, your peers or even Google! Having a question proves your interest and you will internalise the answer for sure.
- 4. Be constant, because learning something new and really internalising it needs time and effort.
- 5. Try different ways of learning the language read it, write it, listen to it, speak it and feel it!
- 6. Work with others exchanging with your peers helps to motivate you and learning together is much more fun!
- 7. Use images to memorise words and concepts.
- 8. When using the SWIM Visual Dictionary, try different view modes as they help you to repeat the vocabulary in different learning modes.
- 9. Repeat your lessons. Language learning and enhanced vocabulary comes from being confronted with the same words over and over again until they are firmly anchored in your brain and ready to be used by you when speaking or writing.
- 10. Find learning strategies that help you to memorise vocabulary and grammar rules
- 11. Try using your new knowledge and language skills in real life and natural contexts.
- 12. Be patient with yourself. Do not give up when it gets difficult and keep on trying!

Deductions and key recommendations for policy makers

Policy makers are the ones who shape the formal and non-formal learning context in which the educators and learners act. It has been mentioned previously that some educators do not have the time resources to prepare specific visual learning aids that go beyond the minimum requirements. The following recommendations for policy makers are now deducted from the target group survey and the lessons learning in the SWIM project.

- 1. To assure that learning in formal and non-formal learning processes is successful, the learners have to experience learning content in an attractive and engaging way.
- 2. Modern teaching methodologies foresee the active involvement of learners in their learning process. Hence, theoretical frontal lessons in which the teacher lectures the learners and they passively consume the learning content are not state of the art anymore. Theoretical lectures may last only 15-20 minutes at a time and should allow for active involvement along the way.
- 3. Modern teaching requires the educators to utilise a range of teaching methodologies and tools. In an ideal setting, all senses of a learner are addressed. Consequently, learning content can be experienced through listening, seeing, reading, talking, touching and if applicable for example in culinary contexts smelling and tasting.
- 4. Visualisation of learning content is one of the most successful and easiest learning methods available. Educators in all EU countries use visual aids in their lessons, but they have different opportunities to do so. On one hand, standardised learning materials such as text books





- utilise visual elements. On the other hand, these often do not fully cover the needs of the learners and also of the educators.
- 5. To facilitate teaching and learning on a high qualitative level, it is crucial to motivate educators so that they can authentically engage their learners. An educator that is happy and content when they have clear framework in which they can act but have also the freedom to set their own focus and give the lessons their personal spin. Furthermore, learning is most effective when it resonates with the learners and meets their demands in terms of presentation and available time.
- 6. To assure that educators can deliver the best lessons possible, it is important to provide them with the necessary resources. On one hand, this relates to time resources, meaning that educators have sufficient time to prepare their lessons in accordance with their target group needs. Time resources also relate to the time the educators have to implement the training to their learners. On the other hand, the it relates to the supporting materials that are physical or digital resources.
- 7. Learning tools must be feasible. As a policy maker or education provider, one concern is always that the efforts invested must be within the available budget. There are many digital learning tools that are available at the moment, many of them are free of charge. The hidden costs of digital learning tools are the devices needed to access the content; devices that must be accessible for the educators and the learners.
- 8. Learning tools must be safe. On one hand, the users must be safe in terms of the content they consume in the tool (it must be suitable for the audience!) and the data they knowingly or unknowingly share. Hence, a suitable learning tool must be GDPR compliant. On the other hand, the educators using the tool must be safe as well in that regard, but furthermore by sharing only content that is not copyrighted by external parties.
- 9. Nowadays, many digital learning tools are available for free or to buy. However, to be absolutely sure that the tool is safe and feasible, the user has to read through the terms of usage and data regulations. The SWIM project that developed the Visual Dictionary resource is co-funded by the Erasmus+ programme of the European Union and consequently has to comply to strict data protection regulations by default. It is furthermore assured that the tool is a 100% free to use and will stay free of charge in the future. Naturally, the project and the Visual Dictionary offer information about data privacy regulations, but it is a trustworthy tool by design that can be utilised by any interested user in any educational context.
- 10. The SWIM project and its resources provide a solid and relevant repertoire and learning tools and guidelines that can be implemented on the spot. They are available in five languages (English, German, Polish, Portuguese, Spanish) and were tested in broad piloting phases in all partner countries before their official launch. The are fully customisable and allow educators to freely and flexibly create learning content tailored to the needs of their target groups.





CONCLUSION AND OUTLOOK

With this recommendation paper, the SWIM project finishes after 24 months. Looking back on the development process and at the final project results, the partnership is satisfied with the work done and proud to finish the project successfully.

The SWIM Visual Dictionary has become a high-quality, easy to use tool that empowers users to create their own resources as well as choose from an already available digital media library of finished resources in many languages.

Partners already started to promote the project results during the implementation, but they are also committed to continue disseminating the Visual Dictionary and the complementary products to relevant target groups now and in the future. The partner organisations furthermore committed to continue using the Visual Dictionary in their own professional work.

Target group members, stakeholders and partners agree that the Visual Dictionary is a useful tool and that they would recommend it to educators and learners. They said that the key strength of the Visual Dictionary are its diverse and flexible opportunities to facilitate the learning process. It is versatile and can be utilised in meaningful ways in almost any kind of learning setting – for children, adolescents, adults and seniors alike. Its broad application potential is suitable for formal education, non-formal and even informal learning settings. The main weakness and threat that was detected is that creating visual aids for educational settings is time consuming and that digital learning tools demand digital skills from both, the educator and the learner.

Consequently, it is the responsibility of the ones creating and shaping the frameworks of education to assure that learning can happen in a safe and suitable setting. For this, the educators need appropriate resources in terms of preparation time and implementation time as well as suitable teaching aids and learning materials for their learners. Policy makers and education providers are asked to assure that their education professionals can act in such a thriving space and create fruitful learning environments. More engaging lessons will lead to more successful learners and consequently to a more successful education provider.

The SWIM Visual Dictionary offers a trustworthy and high-quality learning tool that does not require much previous knowledge by the professional educators nor the learners. Guidelines and step-by-step instructions completely enable interested persons to create individual learning resources tailored to the needs of their target groups.

SWIM resources are already available free of charge, in different languages and they are accessible across Europe and beyond.





ANNEX

SWIM IO4 QUESTIONNAIRE

Thank you for participating in the SWIM survey!

In this questionnaire, we will ask you some questions about your opinions of the SWIM methodology and project outputs, especially the Visual Dictionary.

The answers will be collected in a Recommendation Document and serve adult educators to enhance their lifelong learning policies and offers with the SWIM Visual Dictionary resources.

Thank you for your support!

The SWIM Team

Section 1 – Profile of Participant

| PUBLIC | | PARTNER | |
|--------|---|---------|----------------------|
| 1. | Country: | 1. | Country: |
| 2. | Background (AE professional, AE provider, | 2. | Type of Organisation |
| | AE learner, other – specify) | | |
| | | | |

| 3. | Have you read the Visualisation for Professionals | |
|----|---|---------|
| | Development Guidelines General Report? | (Y N) |
| 4. | Have you registered in the Visual Dictionary Platform? | (Y N) |
| 5. | Have you tried one or more Visual Dictionary Resources? | (Y N) |
| 6. | Have you reached 100% for at least one Visual Dictionary Resource? | (Y N) |
| 7. | Have you rated at least one Visual Dictionary Resource? | (Y N) |
| 8. | Have you created (or tried to create) a Visual Dictionary Resource? | (Y N) |

Section 2 – Applicability

- 9. The Visual Dictionary has a clear user interface. (Not at all Absolutely)
 10. I understand how to navigate to a specific resource. (Not at all Absolutely)
 11. I understand how to navigate within a specific resource. (Not at all Absolutely)
- 12. I am aware that besides the normal view mode, there are 2 more view modes.
 - a. No, I did not notice that.





b. Yes, I noticed them, but have not changed the view mode.

c. Yes, I tried one of the other two modes.

d. Yes, I tried both, the "matching" view mode and the "blanks" view mode.

13. The Visual Dictionary Resources are easy to use for both,

professionals and learners. (Not at all – Absolutely)

14. The Visual Dictionary Creator is easy to use. (Not at all – Absolutely)

15. I like that there is no limit to the range of topics included in the Visual Dictionary.

(Not at all – Absolutely)

 ${\bf 16.}\ \ \hbox{If I could change something about the Visual Dictionary,}\\$

it would be ... (comment)

Section 3 - Relevance

- 17. The topics presented in the Visualisation for Professionals Development Guidelines General Report are relevant and up-to-date. (please answer neutral if you have not read it) (Not at all Absolutely)
- 18. If applicable, how often do you use visual aids in your teaching or learning process?
 - a. All the time
 - b. Frequently
 - c. Sometimes
 - d. Seldom
 - e. Never
 - f. Not applicable to me
- 19. Do you think the Visual Dictionary is a useful addition to your teaching resources? (Not at all Absolutely)
- 20. In your opinion, which age groups of learners can benefit from the Visual Dictionary? Select as many as you like:
 - a. 6-10 years
 - b. 11-14 years
 - c. 15-20 years
 - d. 20-49 years
 - e. 50-65 years
 - f. 66+ years
 - 21. How suitable and helpful is the Visual Dictionary in the following settings? (Grid: not helpful very helpful)
 - a. Elementary school
 - b. Lower secondary school
 - c. Upper secondary school
 - d. Vocational education
 - e. University level
 - f. In-Service training / further education
 - g. Non-formal learning (e.g. hobby class)
 - h. Self-directed learning





22. Where do you see the **strengths** of the Visual Dictionary approach?

(comment)

23. Where do you see the **weaknesses** of the Visual Dictionary approach?

(comment)

24. Where do you see the **opportunities** of the Visual Dictionary approach?

(comment)

25. Where do you see the **threats** of the Visual Dictionary approach?

(comment)

26. What do you like best about the Visual Dictionary resources and/or creator?

(comment)

27. Do you know a comparable tool or resource collection? If so, please let us know:

(comment)

Section 4 - Sustainability & Mainstreaming

- 28. Will you use at least some of the Visual Dictionary resources in the future? (Not at all Absolutely)
- 29. Will you use the Visual Dictionary creator in the future? (Not at all Absolutely)
- 30. Would you recommend the Visual Dictionary to educators? (Not at all Absolutely)
- 31. Would you recommend the Visual Dictionary to learners? (Not at all Absolutely)
- 32. Do you think the Visual Dictionary creator has potential to become a popular tool for educators? (Not at all Absolutely)
- 33. In your opinion, what is the key factor to facilitate the broad use of the Visual Dictionary? (comment)

Section 5 - Partner's Experiences

- 34. What have you learned as a professional and/or as organisation during the SWIM project? Were you able to enhance your competences/offers? If so, how and to what extent? Please be specific (min. 250 characters). (comment)
- 35. Please name 3 key recommendations you would like to give educators and professionals in the adult education sector: (comment)
- 36. Please name 3 key recommendations you would like to give adult learners who are learning a new language: (comment)
- 37. Are you satisfied with the project outputs?

(Not at all – Absolutely)

- 38. How will you continue to use and promote the SWIM project results? (comment)
- 39. Do you think the SWIM project has been successful?

(Not at all – Absolutely)

40. Is there anything else you would like to share?

(comment)

