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Intellectual Output 2

Curriculum Design



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Introduction

Intellectual Output 2 will constitute the **Curriculum Design** for IRENE project and contains the model to develop learning contents and guidelines for Intellectual Output 3, which is the educational platform of the project.

It aims to achieve the uniformity of the modules, so the material which is going to be produced is the same throughout the partnership both in content and in format. The project addresses adults who have learning difficulties, including migrants, so the material should not be more than A1-A2 level.

The **educational project** is a fundamental product to ensure the overall effectiveness of the project.

Regarding the training paths, it describes:

- the **cognitive objectives**, that is the learning outcomes accomplished by using the platform. Users will have the opportunity to upgrade their knowledge on several different languages starting from a beginner level (e.g. letters, sounds, etc.), they will enhance their knowledge about every partner country's culture, they will meet innovative and less demanding ways of learning, and they will find a non-stressful way of evaluation which will give them the opportunity to go over any material they want again,
- the **structure** of the platform, that is the four basic sections (Pronounce, Study, Explore, Learn Together) which will be designed to include the educational material,
- the **didactic materials**, i.e. the contents of the four sections and their format,
- the **evaluation** of the developed contents through suitable material.

As a first step, partners define the descriptive model and the characteristics of the educational content to be produced in order to guarantee uniformity and adaptability to the platform and guarantee the greatest simplicity of use and the greatest possible involvement with reference to the target group.

Once the model is established, each partner collects and develops different contents, articulated and finalized to the different modules of the platform, which are:

- the words to listen and pronounce to be implemented in the "Pronounce" section,
- the didactic contents needed in the sections "Learn" and "Explore" (Game environment), with reference to the 4 active and passive skills of comprehension and oral and written production and the communication structures and the levels of the Common European Framework of Reference (CEFR).
- what stimuli to propose and how to structure the section "Learn together" in order to stimulate the exchange between peers.



Also, this output includes the **Educational Guidelines** that aim to facilitate teachers to:

- **optimize** the motivation, involvement, and training success of the e-learning platform users,
- **encourage** interaction between learners and participants in the social network,
- **supervise** the community of the "Learn together" module,
- **customize** the contents to meet the learning problems of learners.

The educational project IRENE is innovative as it foresees the design of online teaching modules focused to facilitate the learning of European languages by adults with SLD, through the use of immersive teaching set in a virtual reality with speech recognition and synthesis.

The expected impact of the output is more effective learning and increased involvement of adult learners with SLD, including migrants.

The identification of a model for the development of the different types of content and the subsequent design of the standardized educational paths allow greater transferability of the teaching modules in other training activities.

Remember that:


Intellectual Output 2 is the description of the sections and Intellectual Output 3 is their technical implementation in the IRENE platform (as described in IO2). The two must not be confused! They are interlinked but they are different parts of development.

1. Main conclusions from desk research


The research issues show a great variability of the reality concerning SLD adults due to the different legal frameworks of each state. The presence or absence of public services or private organizations dealing with disabilities and learning difficulties may also affect the situation. The analysis of the legal framework in the partners' countries shows no specific attention is paid in workplaces and in lifelong learning paths, with only few exceptions. There exists a substantial lack of specialized services in the diagnosis of learning disorders in adulthood.


Language aptitude, native language skills or affective variables such as anxiety, motivation and personality are considered possible causes in problems related to the learning of a foreign language. The results of the research across the partners' countries outline similar problems and needs in people with SLD (dyslexia in particular) and language learning difficulties at different ages and at different steps of their learning paths and lives. Dyslexia is an invisible condition that can often be mistaken for unwillingness, indifference, or inability. The diagnosis of dyslexia in adults can represent a trauma or a moment of personal awareness and empowerment, offering the opportunity to give a name and a meaning to a discomfort felt but not identified so far. The possibility of an early diagnosis is more and more frequent. People may avoid serious challenges in adulthood, only if difficulties have been correctly identified and dealt with at an early stage.

June 2019

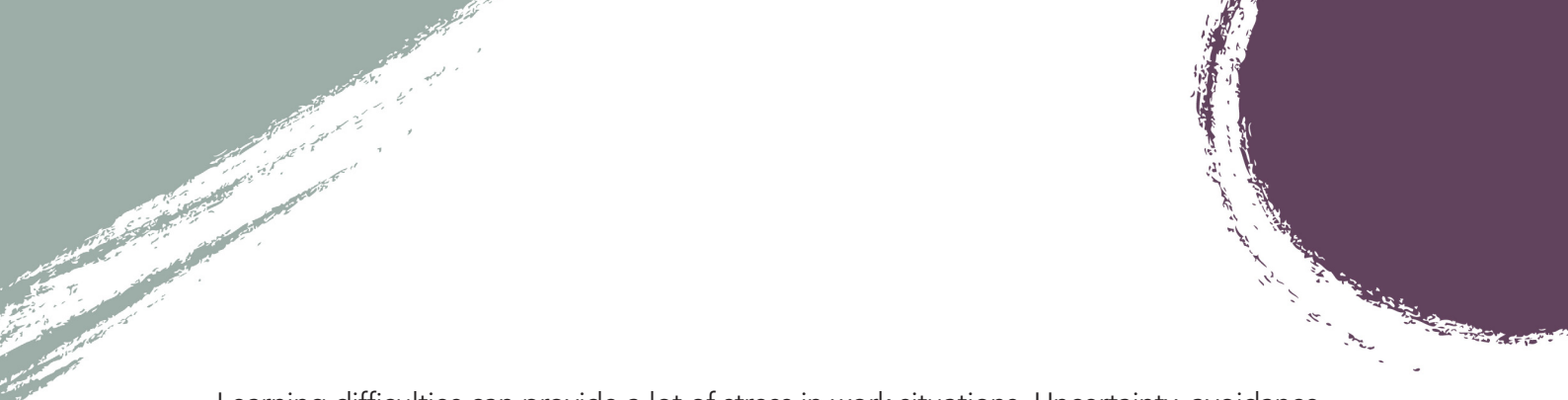

IRENE

Learning difficulties in adulthood and Foreign Language acquisition:
European shared experiences to support and develop the IRENE innovative approach
Original English Version: download at <http://irenelearning.eu>



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Learning difficulties can provide a lot of stress in work situations. Uncertainty, avoidance behaviour, stress and burnout are often the result. It appears that employees with severe dyslexia have difficulty to perform at a proper level and even have difficulties finding or keeping a job. Language learning and in particular gaining fluency and accuracy in the written language is very challenging. Difficulties in the mother tongue extend to difficulties in FL or L2 learning. So, learning a FL needs a specific support to overcome difficulties in spelling, reading and writing. SLD affect adults' work opportunities and we can ascertain a lower participation in labour market, aggravated by the current crisis. Nevertheless, no specific attention is given to SLD in workplaces and in lifelong learning courses.

From the existing researches we know that adults learning a FL need to be involved and to feel the possibility to apply the learning contents in their daily life. SLD adults learning a FL need above all to experiment positive learning experiences and success in what they are doing otherwise they feel disappointment and low self-esteem. They also need to learn coping strategies. Difficulties in perception, discrimination and production of sounds encountered in the mother tongue usually move into the study of a foreign language. In this respect, a suitable intervention takes into account the development and reinforcement of the learner's capacity to discriminate and produce sounds of a foreign language (FL/ L2). This is also true for the teaching of spelling which remains a major difficulty in dyslexic learners. As regards written language fonts, colour background and structure of materials must be adapted to suit the needs of dyslexic learners. Dyslexic adults reveal difficulties in the acquisition of an adequate vocabulary due to phonologic memory deficit and difficulties in word retrieval. Difficulties in learning a foreign language may vary depending on the specific features of mother language in comparison with the second language. SLD adults need to receive clear instructions. To decrease tension and create the best conditions for learning, an environment is necessary where errors are permitted.

A common standpoint is that all teachers involved with learners with special needs must adopt a holistic approach. They must take into consideration the environmental, educational, cognitive, social, emotional, economic, health, functional and vocational aspects of the learners. They have to create a positive learning environment, being inclusive and taking care of diversity in the classroom, collaborating with other teachers. Trends in FL teaching concentrate on the necessity to give attention to visual formatting.

ICT tools enable SLD students to work at their own pace, to achieve a higher accuracy in the work done and are found non-judgemental and non-threatening. On the other hand, sometimes cost and time remain two critical factors. ICT tools are used via visual, sensory, or auditory methods. Allowing a variation in the teaching methodologies that are suitable to the single learner and to individuals with special learning needs. They encourage learners to be autonomous. Dyslexic students seem to learn better when e-learning is mixed with more traditional approaches, with face-to-face interaction. Interaction in e-learning sessions may be guaranteed through the involvement of a human tutor who can give many kinds of instructions or demonstrate how to perform certain actions. As sessions progress, the tutor contributes significantly less as a result of the increased autonomy of the learner.

2. Presentation of the four sections

The platform which will be designed based on the desk research findings and addressing to people with SLD should be developed in the four sections below. Every section will contain information and material from every partner in their native language and English, whenever it is necessary, which will be used by the platform users, whether individuals or educators with learners, in order to accomplish their communication goals in specific situations.

SECTION 1. PRONOUNCE

In the first section, the learner will have the opportunity to learn and experience the pronunciation of individual words in order to come in contact with the sounds of the target language. They will also have the opportunity to test some of them and be given feedback. From this section, the material with gathered words will come up and they will be used in the material of the next sections.

In order to accumulate the words for the "Pronounce" section of the e-learning platform, all partners must identify 500 of the most used words in their national language and populate the excel spreadsheet, as per the example.

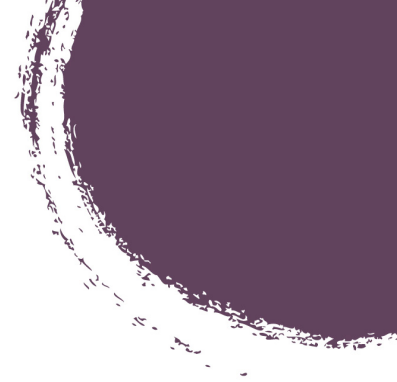
These words must not include articles and should contain as many sound combinations as possible, to ensure phonetic richness and representation. The platform will include short videos with people pronouncing each one of these words.

The full tables with the words chosen from every partner language according to the above criteria can be found in Annex 1.

A	B	C	F	E	I	M	N	O	P	Q
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SECTION 2. STUDY

All the educational material of the following sections will be uploaded and be interactive on VIFIN platform because it guarantees simplicity of use and involvement with reference to the target group. We have to remember that the biggest percentage of platform users are going to be people with language disorders, especially dyslexia, therefore any kind of writing tasks should be avoided and the more simple its use, the more efficient the outcomes. The platform will initially be made available in the languages of the partner countries



of the project and can be enjoyed online at any time and place, through computer stations or using mobile devices. The instructional language of all the study lessons will be in English as a default, but with the option of translating the content into any of 80 different languages, via the click of a button. This section contains teaching modules on grammar and vocabulary via diversified media, real-situation dialogues, quizzes, and interactive exercises with focus on both comprehension and production. This section will be divided in five chapters, each of which includes five sections with a specific topic and certain goals. They will focus on different language elements and the learning outcomes for the platform users will also vary for every chapter.

However, before the beginning of the learning procedure through the defined chapters, it would be useful to include an introductory part in the platform. This introduction is necessary for both types of users (educators and learners) because it shares information about the Erasmus+ program within which this course was developed, about the story of the character that represents the user on the platform and about the country of the target language which is the place of interest for the whole story. This will give the participant the opportunity to experience this course even more lively and identify with the character developed for the sections.

The linguistic material and elements that will be decided for the platform should cover topics concerning the introduction of oneself to others by giving personal information, the daily communication needed for everyday procedures, including shopping, ordering, asking for things and exploring a place, and ways to express an opinion on several topics of discussion, e.g. phrases, expressions etc. Accordingly, every chapter will be devoted to a certain environment in which dialogues will be developed by the main characters of the story in each case. It will include audiovisual material, rules and explanations of vocabulary and grammar content, exercises, and quizzes for the evaluation of the knowledge obtained. Every unit in the chapters will begin with the description of the learning objectives of the unit, then there will be a video with a conversation in the target language for the user to come in a first contact with the language. Continuing, educational material in the form of rules, tables and examples will be available, followed by exercises based on the educational content learned in the above part, and at the end of every unit there will be a short quiz for the user to take and thus assess his/her knowledge so far.



More specifically, the titles of the chapters and their content could be based on the following activities that offer an attractive opportunity for the development of a foreign language to a learner:

Chapter 1

It may include environments (e.g. a café, a bar, a restaurant) where the user of the platform will be able to learn and practice small talk, greetings, ways of ordering and paying, and how to introduce themselves or others and share personal information, such as occupation, hobbies, family etc.

Chapter 2

This chapter may include expressions for asking directions or help, apologizing, accepting or declining several things (e.g. an invitation), and based on these situations more specialized expressions can be added concerning more specialized situations, such as a visit to a doctor, a job interview, volunteerism, or how to get around.

Chapter 3

In the third chapter more content will be added to enhance the learner's ability to have a longer and broader discussion on several things that are usually discussed among new acquaintances. These topics could be someone's home and origin, school and education in every country, culture and economy. Based on these topics, more material can be created about booking activities and facilities, predictions, and customs.

Chapter 4

Ways of talking about special occasions might be included in the fourth chapter. Vacations, holidays, birthdays, the weather, trips and other activities can be the main target of practicing in this chapter.

Chapter 5

Finally, when the learner will be more familiar with the language, practice on talking about more abstract topics can be included in this chapter. Health, memories, aspirations, dreams, beliefs are only some of the topics about which the learner should know how to express themselves, at a beginner level at least.

SECTION 3. EXPLORE

Regarding section 3, on the e-training platform which employs 3D reality, the learners will be asked to apply their language knowledge and skills acquired in the previous sections and solve given tasks. This kind of practice will be achieved through a story that will be created from every partner because it must include names, places of interest and generally cultural characteristics from every target country and language. A story is something that provides a context, gives a narrative character to the learning procedure, and provides hints to a culturally different environment in comparison to one's own. This story will take place and evolve in places where people move in their daily routine because the users must get in touch with informal verbal communication that serves certain operational purposes, as it becomes obvious from the categorization of the chapters and the material in every unit.

The background of the story involves a main character that decides to go abroad on a one-week Erasmus+ exchange program. This main character is a third level student who comes from each of the partners' countries and decides to visit a city in another country, among the partners' countries, taking the opportunity to explore a new place through this exchange program. Each country will have a native person, going to a partnering country, that is:

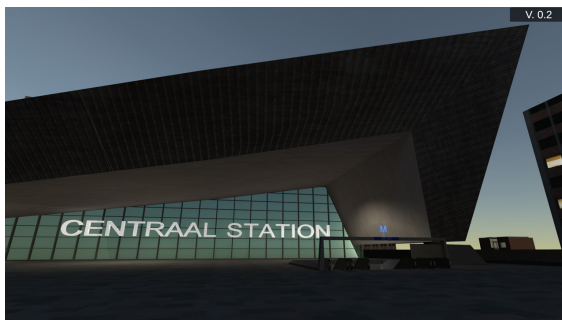
- Irish person goes to Italy
- Italian person goes to Holland
- Dutch person goes to Spain
- Spanish person goes to Greece
- Greek person goes to Austria
- Austrian person goes to Denmark
- Danish person goes to Ireland.

The student will stay with a host family in the city they visit. They are delighted with this exchange and opportunity as they recently met another student back in their hometown, they became good friends and they travelled around the country and visited many wonderful places while they were in the visitor's hometown. Now, this student that has already gone on an Erasmus+ program is the person that is going to host the main character during his/her exchange visit. They kept contact and this is why the main character decides to email their friend about his/her visit and to organize sightseeing in the host's hometown. The main character has studied hard with the IRENE ADVENTURE Language and culture platform and has gathered some information about some famous places that they would like to visit.

First of all, every partner must give a description of the protagonists in every scenario, apart from the main character who will be represented by the user of the platform. The main character is not the only character of the story. The story will progress in several environments so several characters will interact with the protagonist for several reasons.

A description must be provided for these characters, taking into consideration the environment they move in and their relationship with the story, the main user, and others. Both personal information, such as gender, name, age, and appearance characteristics must be given because avatars for every character will be created for the visualization of the story on the platform (see samples below). The description should be as detailed and relevant as possible in order to represent all the cultural elements that must be transmitted through this section.

The whole story will be developed in certain places where the main character will have the opportunity to check their knowledge of the target language from the Pronounce and Study sections through the everyday phrases/expressions they will have to use on the platform. Since it is necessary to practice an informal type of language, some regular places that people visit in their daily routine have been chosen for the Explore section: the train station where the main character arrives, a café they visit with the host, a shop to buy some products, and the host's house. Moreover, every partner must suggest two places of interest that are worth visiting in their city. These places will be included in the plot of the story as the points of reference for the sightseeing of the characters.





SECTION 4. LEARN TOGETHER

For the last section of the platform, a community with people who are interested in SDL, either as learners or as educators, will be created to communicate with other interested parts aiming at exchanging knowledge, experiences, and even resources.

The “Learn together” section will have features aimed at building and managing a social network. This social network will consist of learners who aim at mutual knowledge and cultural exchange and desire to find a tool corresponding to their abilities and meeting their demands in the field of learning. In addition, educators, and especially foreign language teachers, will also be given the chance to share resources and experiences related to SLD. Both kinds of users will be trained on the platform possibilities and they will be able to use it either for personal gain of knowledge or as an educational tool in their teaching curriculum.

3. Educational Guidelines

The classroom, whether we refer to a native language learning or a foreign language teaching classroom, is a dynamic environment. Students from different backgrounds with various abilities and differentiated personalities need to co-exist and collaborate in this environment. If you want to be an effective educator, you are required to develop and implement creative and innovative teaching strategies in order to respect every learner's needs since there is no 'one size fits all' solution. Visualization, cooperative learning, inquiry-based instruction, differentiation in teaching, use of technology in the classroom, behavior management, professional development are some of these strategies that are adopted and implemented in every kind of lessons and for every kind of subject. The question is if and how these strategies can be effective in learning and teaching foreign languages to SLD students¹.

In many classrooms, independently of the targeted learning outcome, students with Learning Difficulties (LDs) are met. *"It is estimated that between five and ten per cent of any given population have some degree of learning difficulty."*² Learning a foreign language is one of the areas that are affected in a great degree by learning difficulties and they comprise challenges that can make language acquisition even harder.

It should not be assumed that people with LDs are not able to learn a foreign language. However, they will need a compensating strategy to be taught taking into consideration the learning difficulties these learners encounter. Therefore, students with LDs may need a personalized and modified approach to learning.

One of the most demanding tasks and major concerns among educators or teachers in a classroom with LD students is striking a balance between accommodating their needs and not holding back the rest of the class. It is important not to make any distinctions among students nor to mention that there is targeted material for an individual or a group of students.

By creating a **positive learning environment**, educators will have the opportunity to point out what students can achieve. Instead of focusing on things that the students cannot achieve or meet great difficulties in, they should try to develop the areas that learners can find success in because this will help to boost self-esteem and trust themselves and their skills more in the future.

Set objectives & structure. If the teacher starts every lesson by making the session's objectives and activities clear and specific, students will be helped to prepare and be ready for the learning procedure. Moreover, if this lesson structure is standardized, students with LDs can benefit from regularity and repetition.

Inclusion and diffusion of **positive rules** in the classroom can prevent students from behavioral problems. Thus, a list of concrete rules that states the positive actions expected from students and praising positive actions can really help with appropriate behavior in class.

¹ <https://www.quizalize.com/blog/2018/02/23/teaching-strategies/>

² <https://www.englishclub.com/learning-difficulties/teaching-strategies.htm>



LD students are considered to be distracted more easily and more often. Noises and any other **distracting factors** should be eliminated from a positive learning environment. In this way, students will definitely be more focused and effective during lessons.

Usually, students with LDs need more time to complete tasks or actions. In this case, they should be provided with **more time** than other students and take over activities that are short and brisk. Teachers ought to design **smooth lessons** accordingly.

Multi-sensory learning. All senses must be activated in the learning procedure for students with LDs. By adopting such an approach with audio, visual and kinesthetic aids, they can substitute for channels that they may struggle to learn through³.

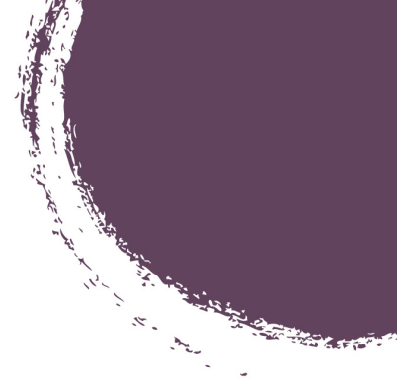
*"Foreign language study is an increasingly prominent part of education everywhere. Not only are high school students nearly always required to study a foreign language, but many lower and middle schools have added foreign languages to their curricula, whether as an enrichment or a requirement. And of course, it's more common than not that colleges and universities require foreign language study for graduation."*⁴ For students who face LDs, learning a foreign language can be a challenging and even stressful experience but at the same time an enriching one. But it ends up being rewarding when the student manages to have good performance in the language use.

For this reason, it is of paramount importance to locate students with LDs in a classroom and recognize when it is necessary to find solutions, adapt the lesson, modify requirements, and organize different tasks for these students. In this way, teachers and educators must be prepared to enhance these students and spend time on research that will benefit both sides.

Sometimes, learners with LDs find it difficult to keep up with learning even their native language. There are also cases of students who are quite or very competent and fluent in their native language but need to put huge effort in obtaining a foreign language, no matter how skillful they are on the equivalent parts of their native language. This seems quite complicated to accept and raises the question: how can learning disabled students be taught foreign languages?

³ <https://www.englishclub.com/learning-difficulties/teaching-strategies.htm>

⁴ <http://www.idonline.org/article/6065/>



According to Ganschow and Sparks⁵, there are two approaches to foreign language acquisition which are very effective with students with LDs and are differentiated from traditional ways of learning. It has been noticed that most of these students have phonological deficits in their first language. This is an indicator that they might encounter difficulties with being taught a foreign language, so the sound system of the target language must be very explicitly taught from the beginning. Sounds must be presented in a precise structure with many kinds of examples as input and be practiced regularly by the learner. If the learner manages to develop phonological skills in one language, then they will manage to improve their phonological awareness in other languages, too. A suggestion inferred by this technique is that the student first obtain and implement phonological rules and elements in the target language and then begin with the foreign language learning. Starting with recognizing phonemes, listening and repeating words, encoding and decoding language items, and generally practicing phonological skills when they are learning to read will enhance students' reading and language skills and future difficulties with foreign language acquisition will be dealt more easily.

The second approach proposed for language acquisition to be successful is to adapt the foreign language courses. Taking into consideration the way of learning, adjustments for LD students ought to be the first step to plan a suitable lesson. *"This means making such changes as reducing the syllabus to the essential elements, slowing the pace of instruction quite considerably, reducing the vocabulary demand, providing constant review and incorporating as much visual/tactile/kinesthetic (i.e. multisensory) stimulation and support as possible."*⁶

With all the progress noted in research and implementation of new ways of teaching, students with learning disabilities can have a labeled diagnosis more easily now than ever. This is something that can also help teachers and educators to be aware of the diversity in their classroom and find which strategies are motivating to engage and accommodate students' challenges, developmental levels, interests, skills, and physical needs. As a consequence, the inclusion for all students is accomplished and the most important goal for students to learn to their fullest potential will be achieved.

It is important to appreciate all of students' unique attributes and emphasize that everyone has strengths and weaknesses. Getting-to-know-you activities is a great way to promote cooperative, respectful, and active learning and participation in classroom. When students come closer and share common interests and hobbies, they have the opportunity to be included in companies and working groups, regardless of the difficulties they have in learning and their differences in progressing. Physical accommodations for the class by assigning seats to the students who need to be close to the teacher or away from distracting students is of paramount importance for the SLD students to concentrate and not abandon. Learning takes place more easily when the lesson is seen as relevant by the students and they feel involved in its development. Embedding the lessons in class with student

⁶ <http://www.ldonline.org/article/6065/>

interests, real-world connections, breaking big tasks into smaller steps, and frequently reminding them about upcoming homework and projects are some organizational strategies that might prevent students from feeling overwhelmed by the homework overload.

A last strategy could be to make adaptations for assuring students' participation. A lot of these procedures and approaches apply to all subjects, but teaching languages is unique because students gain knowledge on how to communicate and exchange ideas and absorb language, but a lot of SLDs make reading and speaking a challenge. Some easy ways-tips to really engage students' participation follow:

Constitute a detailed syllabus with an outline of the course and the ways of assessment	Encourage students to record lessons or take their own notes. A hand-out with the main points of the lesson can be very useful for students with SLD to follow what you are saying	Motivate your students with customized activities and tasks within their comfort zones and development levels
Start by reviewing what was taught last and summarizing what will be taught today	Break up large projects or lessons into manageable tasks to help students with their planning and time management	Be lenient with mistakes made by students with LDs, especially in reading, spelling, tests, etc
Open communication and private discussions. Learners should have access to educators both for educational and for personal matters	Enrich your lesson with more tools that require students use their senses, e.g. audio-books for students with reading challenges	Be straight and specific in terms of what is expected by them




*"Once again, as with all things associated with learning disabilities, the answers are often complex and long-term, and every student's problem and solution are likely to be different. What is most important is that the problem of foreign language learning for the learning disabled be recognized for what it is and that the student be fairly and reasonably accommodated. Hopefully, as learning disabilities personnel, foreign language professionals and others become more aware of the research and literature, the path for the LD student facing foreign language requirements will become smoother."*⁷

Another growing sector in teaching generally and teaching foreign languages specifically is the use of Information and Communications Technology (ICT) *"which has the potential to transform the educational opportunities and life chances of people whose special educational needs may otherwise marginalise them."*⁸ The term ICT includes all the equipment and technological tools (hardware and software devices, programmes) that allow people to access, store, organise, manage information by electronic means. It also includes the communication devices through which people communicate and which are now used to collaborate and set up partnerships. Teaching is another form of collaboration that can be facilitated by assistive/adaptive technologies (AT) included in the term ICT aiming at students with special educational needs.

For the implementation of ICT in teaching and learning and for developing the ICT Framework, which is for all students, including those with special educational needs, a set of guiding principles was necessary. ICT is most effective with students when it supports active involvement in learning, higher order thinking skills, learning in authentic environments, interest and engagement in learning, differentiated learning, collaborative learning, and assessment of and for learning, principles that are fundamental for every learning procedure, as concluded so far.

⁷ <http://www.ldonline.org/article/6065/>

⁸ https://ncca.ie/media/2509/sen_introduction.pdf



ICT may benefit
students with
general learning
disabilities by:

Providing a non-threatening and pleasant environment in which the level and pace of instruction can be customized according to their needs.

Using software programs with graphics, sound effects and immediate rewards which provide exciting and stimulating repetition, a necessary element for students with LDs.

Providing the necessary and useful support to students in order to accomplish tasks which may otherwise find difficult and stressful.

Promoting independence and communication since technology might be the only way for some people to communicate with others and offer enough assistance to work on their own.

Providing a multi-sensory approach to the teaching of essential skills and concepts in a variety of contexts and settings.

Providing interesting and intriguing learning experiences and giving feedback immediately.

Being a non-judgemental tool that allows students to work at their own pace.

Many students with any kind of learning disabilities have the ability and knowledge to use simple computer systems for learning, provided that suitable peripherals and software are available, but some of them might need to use specialised peripherals to facilitate their use of the computer. Furthermore, in recent years and with the increasing use of the internet, more and more digital resources are becoming available online, either for free or at a cost, with very rich content. Hopefully, the majority of these free tools and resources provide free access to everyone, both educator and learners, and are suitable for students with general learning disabilities. Social networking websites are also becoming more and more popular among young people because students can create and maintain blogs and personal websites on their own, use chatrooms and email for communication, webcams for content creation etc. These can enable students to express themselves and communicate with their peers.⁹

⁹ https://ncca.ie/media/2509/sen_introduction.pdf

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