

digital educational environments

inclusive and accessible



Guide to
support
the
oral
of **communication**
students
with **deafness**

Title

INCLUSIVE AND ACCESSIBLE DIGITAL EDUCATIONAL ENVIRONMENTS
Guide to support the oral communication of students with deafness

Published by

Confederación Española de Familias de Personas Sordas - FIAPAS

© FIAPAS 2021

1st edition

All rights reserved. Reproduction prohibited.

Legal Deposit: M-37221-2021

Printed in Spain

Available at FIAPAS Virtual Library <https://bit.ly/digital-educational-environments>

For your Bibliographic Reference

FIAPAS (Jáudenes, C. Coord.) (2021): Inclusive and accessible digital education environments.
Guide to support the oral communication of students with deafness. Madrid: FIAPAS Confederation.

This FIAPAS Guide aims to serve as an agile and practical tool in approaching the various elements that contribute to making education in the digital age an inclusive and accessible environment for students with deafness. In particular to support oral communication and the application of hearing support products for access to information, communication and knowledge.



FAMILIES OF DEAF PEOPLE



EDUCATION. DIGITISATION. LEARNING. KNOWLEDGE	6
LEARNINGS IN THE DIGITAL AGE	8
TEACHING AND LEARNING PROCESS. ORGANISATIONAL MEASURES AND ONLINE METHODOLOGY	10
ACCESSIBILITY AT EDUCATIONAL INSTITUTIONS	12
AUDITORY ACCESSIBILITY IN THE CLASSROOM	14
MAGNETIC INDUCTION SYSTEMS IN THE FIELD OF EDUCATION	16
COMMUNICATION AND ACCESSIBLE TRAINING PLATFORMS	18
INCLUSIVE AND ACCESSIBLE VIRTUAL ENVIRONMENTS	20
INFOGRAPHIC “Rejection. Bullying. Safety Online”	23

Contents





Education. Digitisation. Learning. Knowledge.

By Carmen Jáudenes

Director of FIAPAS

We are these days advised that formal learning accounts for the smallest part of the overall balance of knowledge a person accumulates throughout their life. This is also a time in which we note with concern the expression of educational and cultural shortcomings caused by different personal and/or social and family circumstances, by inherent failings in the educational system itself, and in curricular plans. A “knowledge blackout” by reducing knowledge to the mere accumulation of data, believing that knowing more simply means chaining together information or merely copying, overly trusting in the mere use of technology as a source of knowledge.

Meanwhile, we are also faced with a vision that understands that educational resources must be placed at the service of autonomous and active learning throughout life, supported by the development of higher basic cognitive processes (founded in key competences, such as linguistic communication) and the acquisition of efficient learning strategies, motivation and self-confidence, the promotion of curiosity and a critical and reflective spirit. In short, resources that, beyond the Infor-

mation Society, prepare each individual to enter the Knowledge Society.

And we do not expect anything less for deaf school-children and students. While the time spent learning at school or university is not the whole story of the learning process, it does provide or deny tools and options for growth when these fundamental educational stages are completed. Hence our interest in bringing information and resources closer to these students and their reality, which is today different from that of thirty, twenty or ten years ago. Or even different from just two years ago... because we now need the means to overcome the additional barriers caused by the security measures to prevent the spread of the pandemic.

Within this framework, deaf students need support teachers more than ever; organisational and methodological strategies to facilitate access to information and knowledge; hearing and oral communication support resources (FM emitters, remote microphones, magnetic loop, subtitling, etc.); accessible digital environments; curricula adapted to learning in the digital age; and information and guidance pathways for their families.



- The digital environment is evolving, expanding and offering new educational opportunities to access and generate knowledge. For deaf students it is also an opportunity to put into practice their right of access to information, communication and knowledge.

Schools must be ready to ensure that opportunities do not become barriers, or new causes of inequality or exclusion.

- Within this context, teacher training to address diversity and for the development of digital skills applicable in teaching/learning processes, including evaluation, as well as for methodological developments and the design of accessible content and materials must be given priority.

- It is also necessary to set digital skills development targets for students, to coordinate and regularly evaluate the results achieved, and to establish the necessary safeguards and monitoring procedures to prevent situations of risk, rejection, etc. in digital environments.

To promote the inclusion and participation of deaf students on equal terms and opportunities to other students, resources and support products to use technology and access to information and learning contents need to be mobilised and implemented.

- Digital environments and technologies must not, however, undermine face-to-face education. Their decisive role in the formative development of students cannot replace personal interactions with teachers, peers or families. For students with deafness, interaction and face-to-face communication are of essential value as a priority in their personal and communicative development, knowledge acquisition and inclusion.

- Any innovation incorporated within the educational environment (face-to-face or online), whether organisational, methodological and/or the application of resources, must take into account the diversity of students with deafness and be preceded by an individual assessment of their needs, ensuring that platforms, materials and supports enable auditory accessibility and access to information and communication, both in formal and non-formal teaching/learning environments, and in complementary and extracurricular activities.

- Families need support to develop the basic technological skills to help their children learn in digital environments. They also need guidance to maintain appropriate attitudes and expectations as to the role of the digital environment, technologies and support products applied in each case.





Professor at Camilo José Cela University, Madrid
and Director of the Higher Institute for Educational Promotion, Madrid

The curriculum of the future must, in order to deliver this new learning for the digital age, review of all its elements, with the need to maintain the utmost consistency among them, methodology and evaluation being essential.

Digital skills are not linked to any particular area. They must therefore be managed as a universal working tool. A fundamental platform from which to access new methodologies and knowledge in any field of learning. Using and properly applying these skills makes a curriculum accessible to the

- Methodological changes are required in line with what we aim to teach, and hence the selection of suitable strategies, activities or resources to learn.
-

- The need is to apply the basic principles of Universal Design for Learning in all classrooms, since they will facilitate curricular accessibility for all students, by devising approaches from the outset through multiple forms of presentation, with diverse forms of expression and stimulating student motivation and commitment in different ways.

Example strategies would include: project work, problem-based learning, challenge-based learning, task-based learning, teaching units, concept maps, mind maps, cooperative work, simultaneous dialogues, workshops, assemblies, dramatisations..., which can be applied with or without digital technology.

- Strategies that require digitalisation to be implemented (V-Learning, forums, blogs, virtual communities, etc.) must be taken into account for implementation, especially because of the advantages they offer for the personalisation of learning processes and the support for the methodological innovation needed to learn these new lessons.
-

- The right choice of evaluation model will condition the teaching and learning processes in order to move on from mere rote learning to critical thinking, autonomy, creativity, respect for difference, a level of cooperation, emotional balance and oral competence.
-

- Various data collection and analysis techniques, different types of records or tools to express the information obtained, are all needed in order to evaluate.

The resources available to collect information would include: observation, interview, sociometry, surveys, etc. Information that is for analysis purposes recorded (computerised) in checklists, assessment scales (rubrics), anecdotal accounts, sociograms, photographs, audio and video recordings... Many of the results obtained can be filed in a portfolio as evidence of the work of each student.

- It is important to provide families and students with access to a descriptive report, reflecting existing talents and lessons learned, together with emerging difficulties and skills to be achieved. This helps families to work together and allows the student to appreciate their efforts and achievements.





Teaching and Learning Process.

Organisational measures and online methodology

By Adoración Juárez

Doctor of Psychology and Speech Therapist
Director of Tres Olivos School in Madrid

In the context of the pandemic, schools had to adapt unexpectedly to remote learning and overcome a series of difficulties that have subsequently turned into learning and improvement opportunities for teachers and students as a whole, but which undoubtedly serve as necessary waypoints when planning and delivering online teaching for students with a hearing disability.

In this process of adaptation to the online context, the first step must be to identify how to effectively deliver information and learning content to students with deafness, and how to enable their interaction with teachers and other classmates, as well as their participation under conditions of equality and full accessibility.

We must therefore assess the accessibility conditions of the environment in which the class is taught, the platform itself and the channel used, as well as the methodology and materials employed. It will in this regard be necessary to evaluate the difficulties that may result from such accessibility conditions, such as acoustic quality, access to lip reading, connection

with the FM system, use of augmentative systems, clarity of explanations and their reinforcement with texts and/or audiovisual supports, dealing with difficulties of understanding...

Attention must also be paid to the inherent difficulties arising in online teaching as opposed to face-to-face teaching: loss of habits that favour subsequent study, reduction of interactivity, both between teacher and students and among the latter, thereby reducing the exchange of ideas, queries... Collaborative, manipulative and experimentation activities are also reduced. In general, it is more difficult for teachers to apply parameters to adapt the linguistic complexity of information and certain aspects of communication, such as, for example, the speed of delivery, which is almost systematically faster in online mode. This situation probably results from the scant feedback received by teachers in online mode, where visual monitoring of faces and attitudes is largely lost, along with the considerable flow of information about how much students are focusing on and following the class.



- Before the activity begins, and while it continues, there must be monitoring of fulfilment of the basic guidelines to make the virtual learning environment inclusive and accessible.

- It must be ascertained that deaf students are receiving the information at all times, remain properly connected and are using any habitual hearing support device.

The student and their family must be encouraged to check that hearing prostheses and support products are working, batteries are fully charged, etc. before logging on each time, likewise checking the technical quality of the transmission: internet connection, cameras and microphones, use of chat...

- It is advisable to: anticipate layouts and notes for subsequent classes; encourage note-taking and/or the printing of written information anticipated by teachers. Use of printed material can compensate for the dispersion sometimes generated by poor access to the material available on the digital platform, given the diversity of personal, social and family situations of students.

- Content and activities must be programmed by taking into account that in online mode, more repetition may be required in the presentation of themes, and emphasis may be placed on presenting new subject matter, linking and contextualising it with a previous topic.

- It is important to apply the “rules of good use” in oral communication: speed of delivery, clarity of pronunciation, order in the presentation of topics, frequent checking of comprehension, and avoidance of overlaps in group interventions.

- Work group organisation, collaborative work and small group exchanges should be encouraged. This helps to avoid the isolation of the most vulnerable students, promotes mutual knowledge and encourages empathy with personal circumstances.

- Daily coordination between teachers and support professionals (Hearing & Language and Therapeutic Pedagogy teachers) must be reinforced for students with deafness: adaptation of texts, preparation of vocabulary and individual checking of understanding of the information received in the classes.

- It is essential to inform and involve families in monitoring the benefit that students derive from the classes, informing them of procedural issues and rules of operation and participation.

Families must be offered an accessible online communication channel to resolve questions and queries with teachers and schools.



ACCESSIBILITY IN SCHOOLS

Table of Support Resources for Hearing-Impaired Students

Updated from FIAPAS (Jáudenes, C. & colleagues) (2007). Support for Oral Communication in the Educational Context. Practical guidance for the application of resources. (5th Ed.). Madrid, Confederación Española de Familias de Personas Sordas – FIAPAS (2017).

Availability of resources in the different spaces		Classroom	Laboratory Computer Room (and similar)	Library School Hall	Secretarial Office Head of Studies Management	Gym Canteen	Lift	Playgrounds Toilets Changing Rooms Stairs	Complementary Activities Extracurricular	Spaces Tutorials
FM systems Remote Microphones		●	●	✕	✕	✕	✕	✕	●	●
Magnetic loop (room / counter / individual use)		●	●	●	●	●	●	✕	●	●
Acoustic Conditioning		●	●	●	✕	●	✕	✕	●	●
Subtitling	Audiovisuals	●	●	●	✕	✕	✕	✕	●	✕
	Direct									
Signalling and Information Panels		●	●	●	●	●	●	●	●	✕
Noticeboard		●	●	●	●	●	✕	●	●	✕
Quality public address		●	●	●	●	●	✕	●	●	●
Light and acoustic alarms		●	●	●	●	●	●	●	●	●
Visual access (indoor-outdoor)		●	●	●	✕	●	●	●	✕	✕
Accessible institutional website		✕	✕	✕	●	✕	✕	✕	✕	✕
Telephone with option for text, messaging, video call, chat...		✕	✕	✕	●	✕	✕	✕	✕	✕
Accessible interactive content		●	●	●	✕	●	✕	✕	●	✕
Accessible Platforms for Communication and Education		●	●	●	✕	✕	✕	✕	●	● (Online tutorials)



Auditory accessibility in the classroom

By Mariana Maggio De Maggi

Speech and hearing therapist

Juan Carlos Calvo

Prosthetic Audiologist

Phonak Children's Programme

Classrooms are essentially auditory-verbal environments. Talking and listening are the main modes of communication in teaching and learning environments. Children participate in listening activities for approximately 85% of their school day. Access to this acoustic signal is therefore essential for learning and social participation.

The perception of speech depends on the acoustic properties of the environment and the quality of the signal. Classrooms are spaces with low acoustic quality due to various factors, mainly their type of design and structure which cause the background noise level to interfere with the main spoken message. In addition, signal intensity decreases with distance.

Children need better audibility conditions than adults to achieve the same level of verbal comprehension. Students with hearing loss are even more heavily affected.

The signal-to-noise ratio (SNR) is the difference between the intensity of the sound to be heard and the background noise. For speech to be intelligible, in children with normal hearing, an SNR of at least +6 dB is required. Children with hearing loss need an SNR

of at least +20 dB to obtain the same performance as their hearing peers.

In the educational context, one third of learning opportunities arise from interactive discussions between students based on a question or comment from the teacher or another student. This participation contributes to the development and strengthening of verbal skills.

Within one single utterance, the intensity of the different speech sounds varies: vocal phonemes are deeper and more intense contributing audibility, while consonant phonemes, sharper and with lower energy, contribute intelligibility. The teacher's voice may extend throughout the room and be audible, but the message could still be unintelligible. This inconsistent signal may adversely affect learning and interaction.

The use of face masks adds further difficulties for speech intelligibility, degrading signal quality and limiting the display of facial clues. This combines with physical distancing to avoid infection and increased noise from permanent external ventilation. All of these conditions impair listening for all students, who must strain to maintain attention, leading to fatigue and lost learning opportunities.



- A clear, full speech signal is required to develop auditory processing skills. The signal-to-noise ratio must therefore be appropriate in all learning situations.

Acoustic detail detection precedes high-level auditory processing skills. The better the differences between sounds and words are detected and identified, the greater the opportunities to develop and expand language and literacy skills.

- Acoustic conditioning of classrooms can be performed by reducing smooth surfaces and using absorbent materials on walls such as cork panels, corrugated cardboard handicrafts, bookshelves, etc.

The noise level generated by activity in the classroom can be reduced by applying simple measures such as protecting the legs of chairs and tables with felt or tennis balls, and keeping any apparatus used or installed in the classroom (heating, air conditioning, etc.) in optimal working order.

Applications that emulate a sound meter can be used to roughly measure the noise level in the classroom. Ideally, this should not exceed 40 dB SPL.

- The hearing situation of students who use hearing aids/implants improves with the use of hearing support products in the classroom, such as frequency modulated systems or remote microphone technology, with a specific transmission protocol that provides efficiency, increases range and eliminates interference.

- The use of an additional microphone, which can be used by all students in the class and which works together with that of the teacher, allows greater access to language and pedagogical content, encouraging interaction and participation of students with hearing loss.

- If the same microphone is used so that the signal also reaches a speaker or free field system at the same time as the receiver of the personal system of an auditory hearing prosthesis user, this benefits listening by all students in a class, while reducing the teacher's vocal stress and fatigue. These microphones can also be connected to the multimedia devices used in class.

- Knowledge of the individual needs of students with deafness, as well as the possibilities of each system, together with a correct adjustment based on the auditory hearing prostheses of each of them (both hearing aids and implantable devices), will serve to obtain the maximum benefit for the intelligibility of speech, learning, interaction and participation.





Magnetic induction systems in the field of education

Adapted from

FIAPAS (2017): Do you have hearing loss and use a hearing aid? CONOCE-T. Madrid, Confederación Española de Familias de Personas Sordas – FIAPAS.

Auditory perception in the environment is influenced by the type of building and its materials, the dimensions of the space occupied and the acoustic conditions, as well as ambient noise. It is also conditioned by the characteristics of the speaker's voice and/or the quality of the sound source, as well as the location and distance of the recipient from the speaker and/or source.

To overcome these limitations, different hearing support products are used in connection with hearing aids. When a fixed installation is required or in the case of use in a heavily frequented space, magnetic induction systems provide the functionality required to overcome these limitations, given the advantages of their performance in terms of scope and coverage, possibilities of connecting a number of users with hearing aids present in the same space, elimination of interference, etc.

The magnetic loop is a sound system that transforms the sound signal, generating a magnetic field captured by the auditory prosthesis (hearing aids and implants) that has a telecoil or telephone coil. This is identified by the letter "T". When the telecoil of the auditory pros-

thesis is activated, and connects with the magnetic loop, the aforementioned adverse effects are eliminated.

If the auditory prosthesis is not fitted with the telecoil, it can be connected to an external device with different transmission programmes, including the telecoil mode. The telecoil should nonetheless ideally be incorporated within the prosthesis itself.

There are various types of magnetic loops that can be used, depending on the situation and/or dimension of the space in which listening occurs and/or the type of interaction that is to take place: for rooms, counters and individual use. In the first two cases they can be installed permanently or occasionally. In the third, they are portable loops that may be available to a user who needs them (teachers, students or parents with deafness) depending on each situation.

The magnetic loop installation must be performed in accordance with the parameters established by the current technical standard (UNE-EN IEC 60118-4:2016/A1:2018).



- Before starting any activity or communicative interaction in an adapted space with a magnetic loop, it is vital to ensure that the auditory prostheses are in optimal condition for use: the telecoil is activated, the batteries are in good condition and charged, etc. With regard to the prosthesis batteries, it should be noted that the loop does not cause any greater battery drain than standard operation.

- Although the magnetic loop does not improve the auditory profile of the prosthesis user, nor the performance of the prosthesis itself, it streamlines the auditory signal, enhancing the quality of listening, and ultimately makes this possible in spaces where acoustic conditions, noise and distance would limit audibility.

- In cases of bilateral deafness, it is advisable (although not essential) to have a telecoil in both the prostheses used, since this improves signal integration, adds quality to the listening and the benefits of stereophonic hearing.

- The design of the installation (fixed or occasional) and the choice of the type of magnetic loop (room, counter) depends on the space to be adapted and its dimensions (an auditorium, a classroom, an office, a window, a shop counter, etc.), as well as the needs of the situation in which auditory accessibility must be provided, while a loop for individual use could also be chosen in accordance.

- Due to the quality of the signal transmission and its scope, the magnetic loop is an ideal system for large spaces (classrooms, library, laboratories, conference rooms...), since it can be used by an unlimited number of users at the same time, without causing interference among them, and does not add any delay in signal processing, so reception and listening occur simultaneously with utterance of the sound. It also has a high data transmission capacity as it amplifies the entire useful sound bandwidth (from 200Hz to 8000Hz).

- A loop adapted to the applicable technical regulations may eliminate or reduce the noise threshold in the environment. However, any noise produced by magnetic fields of electrical or electronic origin may interfere with listening, hence the importance of acoustic conditioning of the space where the magnetic loop is to be used, and inspection and maintenance of the optimal condition of devices and apparatus located in the same space.

- To identify that a space has a magnetic loop, it must be marked with the symbol:





Platforms for accessible communication and education

By Irene González

Member of the FIAPAS Technical Management Team

The use of information and communication technologies (ICT) in education has seen a significant increase in recent years, especially during the pandemic. Audiovisual resources and communication and education platforms have become key tools for teachers and students, and will remain in place over time.

However, although these technologies offer significant opportunities for application in this area, deaf students may be excluded if their access to them is not guaranteed under equal and accessible conditions.

In the context of inclusive education, support resources such as subtitling are essential in the use of such technologies, both to be applied in audiovisual materials (teaching, making videos or other audiovisual broadcasts, etc.) and in activities carried out online (classes, conferences, cooperative work, etc.).

Subtitling must comply with the quality parameters established in the current technical standard (UNE153010:2012), which specifies, among others factors, the criteria regarding visual aspects (number and size of characters, colour contrast...) and timing (speed of exposure, synchronism...) of the presentation of subtitling.

The option of automatic subtitling by means of speech recognition, which is rapidly expanding in communication platforms and for education, will make it difficult, if not impossible, to understand the content unless it offers the necessary quality, overcoming its current limitations regarding the literalness and presentational format of the subtitles.

Hence the importance in the decision-making process of choosing the most suitable platforms for application in educational environments according to criteria of accessibility and quality. It is important to take into account the optimal conditions of the platform software and the quality of the features with respect to the elements that basically enable access to information and learning content on equal terms through subtitling: literalness with regard to the content, broadcast lag, and the configuration and location on screen.

To maximise the functionalities of educational platforms, it is advisable to use computers and tablets, which have a screen size that makes it easier to adjust the position and size of digital content, including subtitling. Mobile phone use for this purpose would not be suitable.



- The broadcasting of subtitles is considered acceptable if they achieve 98% content accuracy, which means that they provide a sufficiently verbatim reflection of the information communicated, presented without spelling or grammatical errors that hinder comprehension.

- Another essential element for subtitling to be effective and high-quality, and in any event facilitating user comprehension, is that image, audio and subtitles should be presented with the utmost synchronisation, which means that the lag in the broadcasting of subtitles must be less than 5 seconds.

- Subtitling should be presented in a single dialogue box, with two lines of text, and a maximum of 37 characters.

- Several options must be available to locate the subtitle position on screen, although the recommendation is that subtitles should always be displayed at the bottom. Standards dictate this placement, and deaf people are familiar with such a position.

- The chosen platform must offer configuration options for the colour, size, font style, background, contrast, etc. of the subtitles.

- It is important to have the capacity to change the layout of the elements of the screen (images, presentations, graphics, chat...). This option is particularly useful in the case of the speaker's image to facilitate lip-reading, avoiding overlapping elements that obscure the view.

- The platform should make it possible to identify participants on screen, so that students with deafness can not only access the content of what is being said, but can also identify who is saying it. There are platforms that include the name of the participant and assign a colour to each one, accompanied by their image to facilitate this identification.

- The quality of the audio output and input of the device used (computer, tablet) must be checked, since access to information and content through subtitling is supplemented by the auditory information provided by the audio, which is accessed by students with deafness through their prostheses and the support products used in connection with them and their device.

- It is very useful for subsequent individual study by students with deafness to have a recording of online classes, including subtitling and the option to download a file of the transcript.



Accessibility in virtual environments is a right of the persons with a hearing disability.

Accessible Technology, combined with support products, improves digital culture, broadening the horizon of learning and personal development in all types of environment (education, work, socio-cultural, etc.), encouraging and motivating participation and providing equal opportunities.

The application and use of technologies should not therefore create new barriers, but new opportunities for learning, employment and access to the socio-cultural environment.



Present the audience beforehand,

allowing time for the deaf person to ensure that his/her listening situation is correct and, if not, that he/she can make the necessary adjustments to his/her hearing aids and/or the support products he/she is using in connection with the device. At this point, notice will be given of the presence of the sign language interpreter, in the event of any participant with deafness communicating in said language.



Always connect with video,

as seeing the speaker's face supports communication. A good internet connection provides a better quality image, which promotes the visibility of the speaker and the support of lip-reading.



Check the lighting,

as it is always better for the light to be facing the speaker's face and never from behind. The backlit location prevents the person speaking from being seen.



Always keep your mouth visible

to support lip reading, without covering it with your hands or other objects.



Project your voice when speaking

so that it is correctly picked up by the microphone of the device used.



Respect the turn for speaking and mute the microphone of the other participants

when one of the attendees is speaking, allowing for the person involved on each occasion to be clearly identified and for improved listening.



Avoid noise in the environment

from which each participant connects to the session.



Share the screen

whenever documents, images, videos, etc. are shown.



Project audiovisual subtitles,

and in the case of photographs, images or presentations, accompany them with descriptive text. If they are projected with audio or are videos, always subtitled.



Use chat for clarifications, comments... of which there must be a record,

above all for matters regarding which explicit agreement must be expressed or it must be placed on record that the matter in question is known to all those attending the session.



Record the class, video conference or video meeting

whenever possible, so that it can be viewed later. Attendees must indicate their agreement to the recording, in compliance with Law 3/2018 on the Protection of Personal Data and guarantee of digital rights.



Use platforms that allow subtitling in real time, with the possibility of recording and filing, it being advisable to use systems that minimise errors in transcription and/or the absence of punctuation marks, which ultimately render the texts incomprehensible.

WE DON'T WANT TO...

- 1 Feel different or rejected because of our disability
- 2 Not have privacy
- 3 Be exposed to anyone knowing data or images we don't want to share
- 4 See bullying or violence towards other children
- 5 No be able to access information due to not having the necessary support resources



WE HAVE THE RIGHT TO ...

- 6 Be respected and not excluded
- 7 Have privacy in virtual environments
- 8 Express ourselves freely and be heard
- 9 Learn, play and have fun just like everyone else
- 10 Have the support products we need (subtitling, magnetic loop, FM systems, interpreter for sign language users...)



When faced with rejection or harassment, tell someone about it. Be careful about the content you share online.

ANDALUSIA (AUTONOMOUS COMMUNITY OF) FAPAS FEDERATION Tel.: 95 409 52 73 (Seville) ASPASA-ALMERIA Tel.: 950 24 47 90 ASPAS-CORDOBA Tel.: 957 76 48 68 ASPRODES-GRANADA Tel.: 958 22 20 82 ASPRODESORDOS-HUELVA Tel.: 959 26 22 90 AFAIS-JAEN Tel.: 953 08 84 82 ASPANSOR-MALAGA Tel.: 95 265 17 31 ASPAS-SEVILLE Tel.: 95 493 28 24	ARAGON (AUTONOMOUS COMMUNITY OF) FAAPAS FEDERATION Tel.: 974 22 77 83 (Huesca) ASOCIACIÓN "SAN FRANCISCO DE SALES"-HUESCA Tel.: 974 22 77 83 ATPANSOR-TERUEL Tel.: 978 61 03 23 ASPANSOR-ZARAGOZA Tel.: 976 25 50 00 ASTURIAS (PRINCIPALITY OF) APADA-ASTURIAS Tel.: 98 522 88 61 BALEARIC ISLANDS (AUTONOMOUS COMMUNITY OF) ASPAS FOUNDATION-MALLORCA Tel.: 871 57 00 73 CANARY ISLANDS (AUTONOMOUS COMMUNITY OF) FUNCASOR Tel.: 922 54 40 52 (Tenerife) 928 23 32 89 (Gran Canaria) 922 41 68 30 (Las Palmas)	CASTILE-LA MANCHA (AUTONOMOUS COMMUNITY OF) FASPAS FEDERATION Tel.: 925 71 33 56 (Toledo) 691 40 12 43 ASPAS-ALBACETE Tel.: 967 55 89 12 ASPAS-CIUDAD REAL Tel.: 926 22 00 95 ASPAS-CUENCA Tel.: 608 393 099 APANDAGU-GUADALAJARA Tel.: 655 670 327 APANDAPT-TOLEDO Tel.: 925 22 46 93 CASTILE-LEON (AUTONOMOUS COMMUNITY OF) FAPAS FEDERATION Tel.: 947 46 05 40 (Burgos) ARANS-BUR-BURGOS Tel.: 947 46 05 40 ASFAS-LEON Phone: 665 66 55 25 ASPAS-SALAMANCA Tel.: 923 21 55 09 ASPAS-VALLADOLID Tel.: 983 39 53 08	CATALONIA (AUTONOMOUS COMMUNITY OF) ACAPPS FEDERATION Tel.: 93 210 55 30 (Barcelona) ACAPPS-BARCELONA Tel.: 93 210 55 30 ACAPPS-LLEIDA Tel.: 685 801 973 VALENCIAN COMMUNITY HELIX-C.V. FEDERATION Tel.: 96 391 94 63 (Valencia) APANAH-ELDA Tel.: 96 698 07 14 96 698 22 49 APANAS-ASPE Tel.: 96 549 00 77 ASPAS-CASTELLÓN Tel.: 964 05 66 44 CDIAT Tel.: 964 05 66 45 ASPAS-VALENCIA Tel.: 96 392 59 48	EXTREMADURA (AUTONOMOUS COMMUNITY OF) FEDAPAS FEDERATION Tel.: 924 30 14 30 (Badajoz) ADABA-BADAJOS Tel.: 924 24 26 26 ASCAPAS-PLASENCIA Tel.: 927 41 35 04 GALICIA (AUTONOMOUS COMMUNITY OF) ACOPROS-LA CORUÑA Tel.: 881 91 40 78 LA RIOJA (AUTONOMOUS COMMUNITY OF) ADARI-LA RIOJA Tel.: 618 953 218 (Logroño) MADRID (COMMUNITY OF) ENTENDER Y HABLAR ASSOCIATION-MADRID Tel.: 91 735 51 60 ASPAS-MADRID Tel.: 91 725 07 45 628 466 873	MURCIA (REGION OF) FASEN FEDERATION Tel.: 968 52 37 52 (Cartagena) 669 43 30 07 ASPANPAL-MURCIA Tel.: 968 24 83 92 APANDA-CARTAGENA Tel.: 968 52 37 52 NAVARRRE (AUTONOMOUS COMMUNITY OF) EUNATE-NAVARRA Tel.: 948 26 18 77 (Pamplona) 637 721 189 BASQUE COUNTRY (AUTONOMOUS COMMUNITY OF THE) ASPASOR-ALAVA Tel.: 945 28 73 92 CEUTA (AUTONOMOUS CITY OF) ACEPAS-CEUTA Tel.: 956 50 50 55
--	---	---	---	---	--

The list provided presents the Confederated Federations and Associations in FIAPAS as of November 2021. (For the most up-to-date contact details: www.fiapas.es)

Funded by:



GOVERNMENT OF SPAIN.
MINISTRY OF EDUCATION AND VOCATIONAL TRAINING



ONCE FOUNDATION



FOMENTANDO INCLUSIÓN. APOYANDO PERSONAS. AVANZANDO SOLIDARIAMENTE.

SPANISH CONFEDERATION OF FAMILIES OF DEAF PEOPLE
PROMOTING INCLUSION BY SUPPORTING PEOPLE. ADVANCING IN SOLIDARITY

