ENTENDER
Enabling students with Neurodiversity

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# Project "ENTENDER - ENabling sTudEnts with NeuroDivERsity"

# DRAFT

# WP 1 Needs Analysis Report

# Version 1

**Project number 610302-EPP-1-2019-1-UK-EPPKA2-CBHE-JP (2019 / 001 - 001)"**

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# Introduction

The overall aim of the ENTENDER project is to improve access, retention, attainment and employment prospects of people with neurodiverse conditions in Argentina and Mexico, allowing them to achieve their full potential by capacity building of neurodiversity support across higher education and employment sectors, fostering inclusion, and building knowledge.

The project objectives are to:

1. Create sensitive processes and tools to screen for neurodiversity and assess learning needs which do not necessitate disclosure of a 'disability' Thereby increasing understanding of the needs of neurodiverse students.

2. Train the trainers - enhance human capital of teachers in understanding and identifying neurodiversity, being aware of the social and academic implications for students, and capable of implementing inclusive education practices that promote integration and accommodate difference.

3. Share, develop, and embed existing good practice between institutions, nationally and internationally, in supporting neurodiverse students, learning from each other and building on achievements.

4. Facilitate school/university/employment transitions for neurodiverse students through resource and programme development, and workplace learning initiatives. Note that such interventions will benefit all students.

5. Provide employer neurodiversity training, resources and interventions to support positive conceptions of neurodiversity in the workplace and promote benefits of a diverse workforce.

6. Establish regional networking activities promoting the inclusion of people with neurodiversity through dialogue with ministers, and other political-level actors, to get policy change for democratization of education and the workplace.

7. Empower neurodiverse students to participate in activities that achieve attitude change in Latin America towards a positive conception of neurodiversity, fostering their own and others' social integration and mitigating isolation and stigmatization.

The 7 objectives have been set on the basis that they are feasible in that the HEIs, as catalysts for schools and employers, have identified needs that they are committed, at leadership and all other levels to addressing. The project activities follow a typical inquiry, development, implementation, dissemination and evaluation plan. Each activity results in an output that informs subsequent activities and dissemination is a continuous process from an early stage. The methodology is collaborative and participatory.

## Models of Disability and Neurodiversity

The ENTENDER project aims to democratise education so that people with conditions that mean that they diverge from the neurotypical ways of learning and working are accommodated and supported to optimise their potential. Neurodiversity is an umbrella term, including conditions such as Dyspraxia, Dyslexia, Attention Deficit Hyperactivity Disorder, Dyscalculia, Autistic Spectrum, and Tourette Syndrome. **A group of people is neurodiverse** when one or more of its members differ in terms of their neurocognitive functioning. Such **individuals are 'neurodivergent'** rather than neurodiverse. The conditions that are associated with neurodiversity can occur singularly or in various combinations with other physical and sensory impairments. For example, a person who is Autistic, dyslexic and ataxic is 'multiply divergent.'

The ENTENDER project challenges the social dynamics resulting from these differences of human diversity, that create disadvantage and 'disable' individuals. Aside from actual impairment that neurodivergence can bring such disadvantage exists due to

society's attitudes and actions that neglect to adopt the alternative perspective to promote inclusion and tap into the creative potential that neurodiversity offers. Whilst some neurodivergent people do not consider themselves to be disabled the social model of disability provides a useful lens through which to explore and remedy issues of disadvantage. With EU support, the project will result in actions to democratise higher education and promote change in employment prospects of neurodivergent people in Argentina and Mexico. ENTENDER represents the first concerted collaborative effort to help this disadvantaged group achieve their full potential.

# Work Package 1 (WP1) Methodology – Needs analysis and Transfer of Knowledge

Work package 1 is led by Coventry University. The needs analysis and transfer of knowledge project phase provides the foundation for the rest of the project and underpins the seven objectives set out above. WP 1 aims to ensure the collection of baseline data and knowledge of needs of a variety of stakeholders and existing good practices against which project progress and outcomes can be measured. Of particular importance is the involvement of students in the project who can help to steer it to through all stages to ensure that the inteventiuons that are finally put in place are appropriate to their needs. As such we adopt the mantra of "Nothing About Us Without Us" used by disabled people's organisations as part of the global movement to achieve equal opportunities and inclusivity.

Two methods were used to collect information for this needs analysis. Firstly, project partners participated in a baseline needs analysis survey (see *Appendix A*). Secondly, project partners invited the following groups to participate in semi-structured focus groups:

1. Neurodivergent students currently enrolled on programs
2. Staff who were involved in supporting students with disabilities and or neurodivergence (both teaching and administrative staff)
3. Parents of neurodivergent students where possible.

The intention was that whereas the institutional survey could be completed in a relatively similar way by each partner to give consistency of information the focus group approach could be adapted for each institutional context where necessary. The project team did not foresee the COVID-19 pandemic which did severely disruptive impact on the collection of data for the needs analysis phase of the project. As a result of the closure of most institutions and the move to online learning for students across Latin America and a working from home policy for staff the majority of data was collected via

virtual means.  The student voice is not as apparent in some institutions as in others and this can be explained by the fact that there are institutions where the number of neurodivergent students is not known or neurodivergent students are absent.

Whereas some institutions provide access to focus group transcripts, others have summarised their findings. Focus groups were conducted in Spanish and data translated into English by Latin American partners taking care to ensure that meaning was not been lost in translation. The Coventry University team was responsible for gaining overall ethical approval for the data collection and for coordinating the synthesis and analysis of findings.

## Partner: University of Colima

## Number of students: 28,000+

## Number of campuses: 5

The University of Colima (UCOL) was founded in 1940, as a public and autonomous institution. It has an academic population of 28,386 students (14,859 high school, 12,890 bachelor and 637 postgraduate) and 2,186 professors (745 for senior high school students and 1,441 for higher education: bachelor and graduate levels). The University of Colima offers 66 undergraduate programs, and 37 graduate programs. The Secretariat of Education of the Government of Mexico, known as SEP, certifies the high quality of the programs annually.

The internationalisation policy is aimed at being committed to the preparation of its researchers, teachers and students to understand, work, contribute, and coexist successfully in the society of knowledge, as well as in multicultural settings. The commitment to prepare better people and excellent professionals is an added value outlined among the objectives of the University of Colima. In this respect, the institution promotes the values of respect for institutional and individual's autonomy, diversity, solidarity, equity, and social justice.

The information presented about UCOL is taken from the following sources:

- The baseline survey delivered to all participating institutions (see Appendix A)

- Focus group with 14 students

- Focus group with 5 University teachers

- Focus group with 4 parents

- Interviews with 4 University managers

It is worth noting that in general, students come from a middle-low socioeconomic level, have a positive perception of the educational institution, and consider it as an opportunity for personal and professional growth.

## Legislation

National policies that are in place to promote equal access to educational opportunities are as follows.

- Political Constitution of the United Mexican States

- Political Constitution of the Free and Sovereign State of Colima

- General Law for the Inclusion of People with Disabilities

- Federal Law for Prevention and Eradication of Discrimination

- General Law for Children and Teenagers

- Regulation of the General Law of Rights for Children and Teenagers' Rights

- Rights Law for Children and Teenagers in the State of Colima

- Law for the Integration and Social Development of People with Disabilities in the State of Colima

- Regulation of the Rights Law for Children and Teenagers in the State of Colima.

## Declaring neurodiverse conditions

UCOL has collected data in previous years on support required for disabilities, however this tool has in the past not specifically covered neurodiverse conditions. In 2019-20, 54 students identified themselves as students with disabilities, with 1 identifying as Autistic and 1 with "behaviour problems".

In 2020-21, UCOL have implemented new processes to start to raise awareness of neurodiverse conditions in the hope that student declaration will increase. This includes:

- A series of awareness-raising activities for parents, teachers, executives, high school students, and students from first semesters of higher education, in order to disclose challenges and highlight the importance of self-declaring, and implementing supporting strategies available once cases have been identified.

- Attempt to identify specific cases at enrolment in order to guide the diagnosis through educational orientation and personalized tutoring services.

Currently, there are no formal screening tools in place for neurodiverse conditions at the University. UCOL are currently working with the Schools of Educational Sciences, Psychology, and Social Work, in cooperation with the University Family Development Centre to define a strategy in order to execute a basic diagnosis. It is yet to be determined whether this will be a free test or low cost.

Data from the focus groups suggest that teachers are never certain of having worked with neurodiverse students, indicating that they assume students declare at enrolment stage.

*"I wouldn't be able to tell that I have indeed worked with such students. That is because I'm not aware we have a diagnose telling us that the student has some sort of neurodiversity. Nonetheless, we do find some students with some problems or students we suspect…"*

Teachers believe that it is complicated for neurodivergent students to enrol generally in higher education, expressing the importance of making neurodiversity more visible both in self-declaring and in training teachers to identify and plan for various conditions. Teachers expressed a need for appropriate screening methods, and subsequently sharing information at enrolment stage in order to plan effectively.

The following departments have responsibility for supporting students with disabilities:

- University Family Development Centre

- Directorate General of Vocational and Educational Orientation

- Mental Health Programme: This programme includes the participation of the Schools of Psychology, Social Work, Medicine and Nutrition.

There are currently no identified posts with specific responsibility for supporting neurodivergent students, or society/clubs.

Within the parents focus group, they expressed a need for economic / financial support as well as professional.

Student focus groups highlighted the perceptions of support given throughout their studies by the school counsellor and informal advisors were mixed:

*"I liked the way [she] gives you confidence and it's because of her. I mean, she has helped me a lot…"*

*"I didn't feel so confident with my advisor and I actually doubted he could help me, so I asked the school for another advisor, and so it happened…"*

*"As for me, my advisor is really kind to me. Her name is V… we get along, she understands me. I have talked to her a couple of times, I'm sure she's professional and won't disclose any information and… we get along*

*really well, in and out of classes. The thing is that I don't currently want to talk to her in spite of her being my advisor, as my classmates started to say I was her favourite student…"*

## Assistive Technology

Based upon survey and focus group responses, assistive technology provided by UCOL included a variety of applications and the learning management system.

All schools have a computing centre and library spaces, and assistive software includes apps which are available for anyone enrolled at the University, which all staff also have access to.

The Coordination General of Information Technologies and its General Directorate for Educational Resources provides technical support and maintenance for the assistive technology.

UCOL uses EDUC as its learning management system (LMS). This is a platform designed and operated by UCOL rather than a commercially available system. As such, the LMS is not currently adjustable to support the needs of students with neurodiverse conditions.

Universal design for learning materials is a principle that has only come into place in 2020-21, to improve and optimize teaching and learning in acknowledgement of neuro-differences, in response mainly to the COVID-19 pandemic. It is currently at the early stages of implementation.

Interview responses indicated that access to the internet and technologies whilst away from the University was a fundamental problem. Students do not necessarily have access to complete academic activities at home.

*"I admit that I have no idea on how to use a computer. They ask for a lot of activities using computers, but I*

*don't know how to use it. I've also seen many other*

*people with this problem."*

Respondents also acknowledged that internet was often a challenge on campus.

*"Teachers ask us to do some research, to use our cell*

*phones, to download an app, to visit a specific*

*website… but we just can't do it because the internet is*

*too slow or it won't work."*

### Staff support for Students with Disabilities

The level of staff awareness of the needs of neurodivergent students is low to medium amongst management, teaching, learning support and administration. There is a will to change this, though this is recent, and the impact of COVID-19 has slowed progress in this area.

The University has a Bachelor's degree in special education and a master's degree in educational intervention that are open to staff, though there is a lack of training programmes as part of teacher's continual professional development. The knowledge and skills required to design and implement inclusive educational practices are currently limited, but again the University aspires to change this. Reasonable adjustments made to teaching practices are dealt with at the beginning of each semester, specifically for any students that have identified a neurodiverse condition or a disability, though it is acknowledged that many students do not self-declare.

Teachers do not have the appropriate training to provide support for a neurodiverse student group, expressing a need to both identify and put mechanisms in place to help students succeed.

*"We're not trained in, say, special education so as to*

*identify the characteristics of a specific student. You*

*know, higher education has a variety of professions and it's really hard to say that a person has certain aspects. I think we don't have the tools to evaluate and determine it, to say there is something different that comes from a given nature. Let alone the strategies we should use. We may actually be able to make some adaptations, but I think both aspects go together. If you knew what the problem is, you would know what strategies to use…"*

Respondents also referred to the need to restructure the educational model, curricular flexibility, and pedagogical and didactic strategies. Findings indicated that establishing guidelines for institutional policies was imperative for University transition to be viable, both in the sphere of inclusion as well as in other relevant university aspects of students.

Students report that in general, they have had very positive educational experiences, though there were some difference in how teachers had supported them in the teaching and learning context. They refer specifically to the work of some teachers, who have helped them feel confident and secure and treat them equally, something that favours students' learning process.

*"When I was in 1st semester, I had a teacher that noticed that I wasn't understanding some concepts. I went to her after the class was over, because I didn't like to ask in front of the whole class as I felt everyone would make fun of me, so I talked to her alone and she explained it to me. As the semester went on, she would*

*relate to things in our environment, gave more*

*examples or even wrote more things on the board, so*

*that helped me understand better..."*

However, several students perceived negative attitudes toward themselves or their work, believing there to be a lack of compromise on behalf of the teacher.

*"You ask a question and she will make you look as*

*inferior, as if you were dumb, as someone who can't*

*understand."*

The data collected demonstrated that there were both positive and negative experiences of staff support, indicating a clear need for training both in terms of diagnosis, and the resulting supporting strategies that would need to be tailored for individual students.

## Peer Support

Peer support at UCOL happens organically within the classrooms. However, the focus groups with students highlighted that there was a strong sense of social rejection, highlighted as a major disadvantage to neurodivergent students.

The data collected suggests that the students who face the most rejection from peers are women. This implies some sort of discrimination or rejection based on gender only, which is something that should not exist at all in this context, let alone for students with neurodivergent conditions.

*"So, um, I'm very shy. What terrifies me is when the*

*teacher asks if a topic was clear, as I have to study it*

*several times to be able to understand it. So, when the*

*teacher asks 'so far so good?' I want to ask her to*

*explain it again. The problem is that when I was in high school I raised my hand or asked the teacher and all of my peers would say… 'Stop bothering! You're making the teacher waste his breath…"*

*"I've noticed that, in general, my peers are not tolerant or they point at you, and that surprises me a lot… the fact of them talking about you, asking others about you. Perhaps you're there listening to them, but them talking negative things about you, it affects you a lot, as you feel set aside, you feel marginalised, and there is a point when you no longer know if you can trust them…"*

Parents from the focus groups reported that peer support is affected by groupwork in the classrooms and in assessments, highlighting a lack of equity in responsibility. Parents suggested that individuals in their care 'accept' that it is necessary to work in groups and they do so because of the need for belonging in a group, though it sometimes affects their progress because of their condition.

*"… lately, it's just that they don't submit everything they need to submit… so I have to finish it, and I do so in a hurry because otherwise she will start to despair. If she does what she has to do and others don't, she starts to stress out in a way only those with children with Asperger will understand…"*

Parents also expressed a need for understanding neurodiverse conditions so that peers are more understanding.

*"As for me, I would like to suggest the creation of an exclusive class including all of these students. You can't just separate them from others, because at the end they have to join a team, right? So maybe giving lectures, a lecture for the whole class, without tagging people, but explaining there are different living conditions. I think that would be cool, to have a lecture about neurodiversity, right?"*

## Employability

Currently, all students at UCOL receive the same level of employment support. There is no indication of specialist resources being made available to neurodiverse students.

## Current Good Practice

UCOL identified several students for monitoring throughout their studies to provide support for students and their parents in their integration at the University. On a case by case basis, curricular adjustments have been made.

One particular bachelors' student with Asperger's (who has already graduated) received monitoring and support throughout his studies. He received a vocational orientation process in order to identify the most suitable profession for him. Appropriate adjustments were made to enable him to succeed in his studies.

## Needs Analysis

Needs identified for Colima include:

- The identification and timely diagnosis of students with neurodiverse conditions (declaration, screening and recording), either at enrolment stage or at any point throughout the learning process.

- A simple and statistically correct database that can record such information and be used to identify support needs, as well as communicating this appropriately to relevant staff.

- Awareness raising, openness and encouragement to declare or seek help with diagnosing in University schools.

- Training for staff on neurodiverse conditions, and how to support – specifically on sensitivity, empathy, communication techniques and psychoeducational support, and teaching-learning strategies with a humanistic approach. Teachers need to be aware of how significant it is to be empathetic, to spend extra time, to create alternative learning strategies, and to reduce levels of demand, which is essential to strengthen students' learning and self-esteem.

- Curricula modifications need to take place on study programs, so as to allow the use of inclusive learning strategies within group classes.

- Adjusting strategies for group activities is imperative for achieving inclusive processes where students do not feel rejected. This will also produce social and educational inclusion and should be supported by awareness raising strategies for students when working with their neurodivergent peers.

- Access to effective internet access and multiple assistive technologies is crucial.

## Partner: University of Guadalajara

## Number of students: 287,00

## Number of campuses: 15

The University of Guadalajara (UDG) is an institution inheriting an educational tradition of more than 200 years of history, and it is renowned as one of the most important Higher Education Institutions in Mexico. It is fundamental for the formation of high-quality human resources and the production of scientific and technological knowledge that support the development of Jalisco, with an academic population of 287,000 students.

UDG is the University in Mexico with the highest number of postgraduate programs at circa 176 and recognized by the National Science Council. Furthermore, it is the 3rd University in Mexico with the highest number of researchers recognized by the National Science Council with 1,182. UDG is currently a member of 30 Associations and actively participates with 87 different Collaboration Networks.

UDG is structured as a network with 15 College Campuses (or University Centres) and one Online Educational System. From these University Centres, six specialise in different areas of study and are located in the Guadalajara Metropolitan Area, and eight, called regionals, are located in different regions of the State of Jalisco.

The information presented about UDG is taken from the following sources:

- The baseline survey delivered to all participating institutions (see Appendix A)

- Surveys with 26 teachers from the Baccalaureate, Higher Education, Specialty or Masters programmes.

## Legislation

National policies that are in place to promote equal access to educational opportunities are as follows.

- Article 3 of the General Law and other relating to the Political Constitution of the United Mexican States

- General Education Act

- Law of the National Institute for the Evaluation of Education

- Article 5 of the General Education Act

- General Law for the Inclusion of Persons with Disabilities (Federal Government)

- Institutional Inclusion Policy of the University of Guadalajara.

## Declaring neurodiverse conditions

UDG, as at the end of 2020 had 3,818 students that had declared a disability, which included a number of physical disabilities.

The School Control Coordination and the Inclusion Unit filter information of applicants at entry point, and students are asked if they have a disability, what type and whether it requires special support to make adjustments, for example:

- Extension in assessment time

- Support staff

- Reader (visual impairment or paralysis)

- Sign language interpreter

- Sandbox so that students are alone to study without any intrusion.

However, there is no reference made to neurodiverse conditions specifically on the form, what they are or how support can be offered.

In 2020, 33 had selected intellectual categories, and 23 autistic spectrum disorder (ASD). Overall, the figure of 3,818 applicants represents 1.33% declared disabilities, which is lower than the reported 5% at a national level. UDG believes that students may not declare neurodiverse conditions because of the stigma associated with them.

Additionally, on admission to UDG, there is a standardised academic examination. This is described as exclusionary as there are only 10 questions assessing linguistic reasoning, logical mathematical and English. It is recognised that the assessment may not be suitable for students with neurodiverse conditions. Additionally, adaptations to assessments are described as expensive.

## Student Support Services

The following support services are in place:

- Academic Services: This is a tutoring unit which may detect challenges in learning, though staff are not trained specifically in neurodiverse conditions.

- Inclusion Unit, represented by the Head of the Unit. Its role is to follow up on the learning, guidance and support needs of scholarships of people with disabilities (visual, hearing, motor). Only 3 of the 15 centres have inclusion units:

    o University Centre for Health Sciences

    o University Centre for Art, Architecture and Design

    o Southern University Centre (Regional Centre)

- General Coordination of Libraries (Reading Centre for All) that has a braille reader and documents in accessible format, and is only available in the General University Library – "Juan José Arreola".

- In cases of neurodiversity such as Autism, reasonable adjustments include providing an isolated space and more time to answer the entrance exam to the University.

Therefore, student support services exist, however are more tailored around physical disabilities. Where support exists for students with neurodiverse conditions, this is not standardised.

<center>Networks</center>

UDG has access to the following networks:

- Directorate of Inclusion of Persons with Disabilities of the Government of Jalisco, who support with sign language interpreters.

- The UDG collaborates in the Evaluation Committee of projects submitted to calls to support Civil Associations (AA) working for inclusion. Of 37 Civil Organizations, 16 received support from the State Government (annual).

- COPIJAL (Collective that brings together more than 50 AC Organizations working for Inclusion. Monthly meetings are held in which the Inclusion Unit represents the Rector General of the University of Guadalajara.

- Ministry of Labour and Social Security.

- The UDG works as part of this Collective through the Inclusion Units, getting some reforms to the electoral processes in Jalisco, so that people with disabilities can now exercise the vote.

- Xochimilco Metropolitan Autonomous University (UAMX). Orientation and experience sharing meetings are held, for example a deaf student of the UAMX spoke of her experience as a deaf student in high school 7 of the University of Guadalajara. There are 2 objectives: Collaborative work between UAMX and UdG) and raising awareness among students about disabilities and how to adapt the academic environment to diverse needs.

## Assistive Technology

For visual or hearing impairment there are tablets, iPads, braille writing machines, braille writing strips, poles, and high contrast keyboards for low vision.

Some University Centres, such as the University Centre for Exact Sciences and Engineering University Centre (regional) have magnifiers to facilitate the reading process, for students with a particular visual disorder, such as color blindness. For those students, UDG are not working with the Universal Design Model, but with the Adjustment Model, that is, it responds specifically to the particular needs of the student.

For neurodivergent students there are no specific support materials available. Support software is not available as standard to students, only those who specifically request it.

Additionally, there are no learning technologists or technical staff maintaining assistive technologies.

Some areas of UDG use Moodle as their learning management system, and the online environment is the same for all students, with no special adaptations made.

## Staff Training

University staff in general, both academic, student, administrative, service, and even parents and carers, are not sensitized to challenges and opportunities around neurodiverse conditions. There is no staff training to design and implement inclusive educational practices.

## Employability

Directorate of inclusion of persons with disabilities of the Government of Jalisco.

- Secretariat of Labour and Social Security of the Government of Jalisco.

- National Employment Service

- WallMart Human Resources

- Jabil Human Resources (manufacturing plant, computer assembler);

Students with neurodiverse conditions do not have access to any additional employability support.

<div align="center">Current Good Practice</div>

UDG has no experience with neurodivergent graduates, and therefore the following example is based on a student experience with cerebral palsy.

The student is a 48-year-old male with spastic cerebral palsy. He was born into a close-knit family. Until the age of seven he could not walk alone, only by the hand of someone, however, and by the tenacity of his father, of the family, and his own, he managed to stand up. His brothers still today remain a great support in every way, from a young age they helped him by dressing him, teaching him school activities and others.

*"I went into school a little older, but I performed very well. This is despite the fact that in 3 of the schools my brothers were in, they didn't want me to because I was going to traumatize them, or referring to me as intellectually disabled. At school I did accept it I had a great time, and I had friends who always helped me.*

*High school was a difficult thing; the change of school and the atmosphere didn't help me, and I just took it out, with low grades and little support from classmates*

*and teachers. I went, like many students, through so-called bullying, even by some teachers.*

*I got my first job, not well paid, but a lot of learning. Later I went to work at the University of Guadalajara, and there I have developed my trade for 23 years, as Server Manager and email."*

Despite some teachers supporting this student, there is a clear need for awareness around neurodiverse conditions, and the right support to be put in place for students that declare.

## Needs Analysis

Needs identified for UDG include:

- Teacher training to raise awareness of the topics of neurodiversity and inclusion.

- Make curriculum adjustments and establish this as a regulation at the University of Guadalajara.

- Conceptualise what disability and neurodiversity is in the university context.

- Make neurodivergent people visible at the University (higher education) through awareness campaigns aimed at the staff in charge of training students, including students.

- Generate a Website on Neurodiversity at the University Centre for Health Sciences that serves as an example and refers to other Centres of the University of Guadalajara.

- The evaluation of students with disabilities or possible neurodivergence is carried out by institutions outside the University. In order to integrate timely and differential diagnoses, from the Coordination of Neuropsychology of the

University of Guadalajara and the Civil Hospital "Fray Antonio Alcalde" a collaboration agreement should be established with the Inclusion Unit of the University of Guadalajara.

- Inclusion Units should be enabled in each of the University Dependencies (Higher Education).

- Enable Inclusion Unit for the High School

- Enable Virtual University Inclusion Unit.

## Partner: Universidad Nacional de Rosario (UNR)

Number of students: 85,443 undergraduate students and 14,390 postgraduate students.

Number of campuses: The institution has 12 Faculties, organized into four areas according to their geographical distribution:

- Health Area University Center (CUAS)
- Rosario University City (CUR) – this is a campus
- Central Area University Center (CUAC)
- Productive Area University Center (CUAP).

Universidad Nacional de Rosario was created in 1968 through National Law 17,987. Its founding structure was a detachment of Universidad Nacional del Litoral from which it took its first academic and administrative bodies, which at that time consisted of: the faculties of Medical Sciences; Sciences, Engineering and Architecture; Economic Sciences; Philosophy; Law and Political Sciences; Dentistry; Agrarian Sciences and the Hospital-schools and the secondary schools that depended on it, in addition to the Higher Institute of Music of Rosario.

Since its inception, Universidad Nacional de Rosario began an active relationship with Rosario society from which it generated each of the projects that it launched and that was expressed in a sustained growth according to the demands of the region.
Its current structure consists of 12 faculties, 3 secondary schools and 1 centre for interdisciplinary studies. It has a building area of 68,000 square meters where an academic offer is made up of 183 postgraduate degrees, 74 undergraduate degrees, 15 technical courses, 53 intermediate degrees, 26 degrees by articulation with the non-university higher education system, and 55 degree-level specializations.

In recent years, a virtual campus was added to this academic offer, from which courses are offered in the distance mode and using the web support as a teaching environment.

The information presented about UNR is taken from the following sources:

- The baseline survey delivered to all participating institutions (see Appendix A)

- Focus group with 5 students all of whom had disclosed their neurodivergence in their University enrolment and currently enrolled on different undergraduate programs. Neurodivergence included Tourette's Syndrome, Pervasive Developmental Disorders -PDD-, Dyslexia) and other associated conditions (bipolarity, photophobia, short-term memory issues).

- Focus group with 4 teachers from four different Faculties (Law; Exact Sciences, Engineering and Surveying; Political Science and International Relations and Psychology)

## Legislation

National policies that are in place to promote equal access to educational opportunities are as follows:

- Convention on the Rights of Persons with Disabilities (2006): Argentina approved the Convention in 2008 by law 26,378. The Convention has a constitutional hierarchy by law 27,044.

- Law No. 22,431 of the Comprehensive Protection System for Persons with Disabilities: This law, enacted in March 1981, establishes a comprehensive protection system for disabled people, aimed at ensuring they receive their medical care, education and social security, among other things.

- Law No. 24,521 of Higher Education (L.E.S.): The main and non-delegable responsibility of the national State, the provinces and the Autonomous City of Buenos Aires, regarding higher education, implies, among other things, "establishing the necessary measures to equalize the opportunities and

possibilities of people with permanent or temporary disabilities" (Law 24.521, 1995).

- Article 13, subsection f) (incorporated in 2002) states that "people with disabilities, during evaluations, must have the necessary and sufficient interpretation services and technical support" (Law 24.521, 2002).

- Also incorporated by Law 25,573, article 28, subsection a) of the L.E.S. indicates that one of the basic functions of public universities consists of 'to train scientists, professionals, teachers and technicians, capable of acting with professional solidity, responsibility, critical and reflective spirit, creative mentality, ethical sense and social sensitivity, attending to individual demands, particularly of people with disabilities, disadvantages or marginalization, and national and regional requirements (Law 24.521, 2002).

- Furthermore, the L.E.S. maintains in its article 29, subsection e, that universities will have academic and institutional autonomy, among other things, to "formulate and develop study plans, scientific research and extension and community services including the teaching of professional ethics. and education and training on the problem of disability" (Law 24,521, 1995).

- Law N ° 26,206 of National Education: In paragraph n) of Article 11 of this Law sanctioned in 2006 it is stated that one of the aims and objectives of the national educational policy should be "to provide people with temporary or permanent disabilities, a pedagogical proposal that allows them the maximum development of their possibilities, the integration and the full exercise of their rights" (Law 26.206, 2006).

- Article 48 states that the curricular and institutional organization of the Permanent Education of Young People and Adults will seek, among various objectives and criteria, "to promote the inclusion of older adults and people with disabilities, temporary or permanent "(Law 26.206, 2006).

- Law on Accessibility of Information on Web Pages: Approved in November 2010, National Law 26.653 on Accessibility of Information on Web Pages is one of the

first laws on web accessibility to be enacted in South America. 3 explains that accessibility is the possibility that the information on the Web page can be understood and consulted by people with disabilities and by users who have different configurations in their equipment or their programs.

- Audiovisual Communication Services Law: Also known as the Media Law, National Law 26,522 sanctioned in 2009, regulates audiovisual communication services throughout the country, understanding communication as a basic right of people and promoting diversity and the plurality of the contents.

- Article 66 - Accessibility Open television broadcasts, the local signal of own production in the subscription systems and the informative, educational, cultural and general interest programs of national production, must incorporate additional visual communication media in the hidden subtitling (closed caption), sign language and audio description be used for reception by people with sensory disabilities, older adults and other people who may have difficulties accessing the content.

## Declaring neurodiverse conditions

UNR does not require students to hold the Unique Certificate of Disability (a national document that certifies the disability of the person with a formal diagnosis). However, an attempt is made to keep a record of all students with disabilities. The data obtained from the registration system is filtered through personalized contact and subsequent individual interviews for all students who manifest a disability in the admission process, but the issue of neurodiversity is generally not recognized. Hence there is currently no screening process in place to identify neurodiversity issues. If these become evident students are contacted by the Inclusion and Accessibility Directorate and support for assessment may be sought from University Health Center.

In the computer system used to enroll students, they are asked if they have a disability, but they do not need to declare a disability. If they do so they are asked to

specify the type of disability by choosing from a series of options (established at the national level). Neurodiversity is not an identified category but the categories "Psychological", "Language disorders" and "Other" can be linked to neurodiversity.

According to recent admissions records (2018-2020), providing information on the type of disabilities disclosed, those that may be related to the three categories are shown in the following table:

|  | 2018 | 2019 | 2020 |
| --- | --- | --- | --- |
| Psychological | 0 | 1 | 1 |
| Language disorders | 0 | 2 | 1 |
| Other | 6 | 9 | 11 |
| Total | 6 | 12 | 13 |

UNR does not currently collect any statistics on retention, and or attainment of neurodiverse students.

The teacher focus group findings confirm a lack of documented information about neurodivergent students in each Faculty although one teacher was aware of the existence of data in her Academic Unit. They acknowledged that:

> *"Known cases are very few. Many students decide not to disclose that they have some neurodiverse condition yet they should not feel excluded by their difference."*

Interviewees agreed on the usefulness of the University enrolment form which questions special educational needs that once identified, opens-up possibilities for planning appropriate programs and tools that help students during their university life, as well as their teachers. Teachers noted that:

*"In most cases it is the teacher who detects difficulties in students who have not disclosed learning challenges due to neurodiversity, either out of knowledge or shame."*

They proposed universal design as the paradigm that supports the transition to university education by providing tools to address needs.

## Student Support Services

The following departments have responsibility for supporting students with disabilities:

- Directorate of Inclusion and Accessibility
- Directorate of Student Orientation (Scholarships, Peer tutors, Psychopedagogical Cabinet)
- All the faculties have disability areas or Secretariat.

UNR employs professional staff who work in the field of disability.

The teacher focus group participants were positive about the central support mechanisms:

*"the current existence of a Directorate of Inclusion and Accessibility at the University is important, as well as the need for the presence of an analogous space to be replicated in the Faculties."*

However, students highlighted:

*"lack of awareness and lack of dissemination of student support areas and the absence of guides and supports*

*during early university experience, are factors that*

*cause loneliness and frustration potentially leading to*

*university drop-out."*

The students all agreed that once they bonded with a referring person in their Faculty, who offered them academic accompaniment, their experience at the university improved.

They also highlighted the importance of the role of the tutor in the educational trajectories, who offer a listening space where, together, strategies and proposals are developed for students with learning difficulties. They emphasized both having a tutor and tutoring as two experiences that improved their academic journey. The students recognised that proposals are usually individual initiatives that then get the support of the university and many of them have then been implemented as institutional policies. The main idea shared by students in this regard is that these individual proposals that served to open new opportunities must go from mere actions to becoming inclusive policies and programs for all students. Two interventions that have been made include Modem scholarships and the 2020 pilot study of Accompaniment in ICT for students with disabilities.

## Assistive Technology

The UNR uses the Moodle platform, which is a learning management tool, or more specifically Learning Content Management, freely distributed, written in PHP. Its design is not specifically adjusted to meet the needs of neurodivergent students.

Universal Design (UD) principles, as a means of improving and optimizing teaching and learning in acknowledgement of neurodiversity, are not used by the UNR although development is in process to improve slide shows in an attempt to carry forward the principles of UD. Otherwise, interventions seem to occur on an ad hoc basis. For example, students mentioned that the Faculty of Humanities and Arts enabled access to

a computer room so that those students of the Academic Unit who had connection or technological problems to take virtual exams could do so on their premises. In the Faculty of Political Science and International Relations students have been provided with computers with the programs required during the degree and texts in an audio format that were recorded in the Sound Laboratory (Labso) of the Academic Unit. Exposure to some software necessary in certain programs was available although instruction in its use was lacking. Audiobooks on some texts were available on certain programs. Finally, one of the students interviewed could acquire a recorder provided by the university for recording classes in case he could not take notes at the time because he has Tourette's Syndrome.

Teachers discussed issues with the move to online learning during the pandemic identifying a gap between what teachers proposed and the requirements of students. They felt that spontaneity has been lost during class dictation. They also noticed that students adapted faster than teachers, but that connectivity issues were a challenge that overwhelmed some students impairing their learning. They suggested that they would benefit if the online experience could be blended with face to face. They also identified the volume of educational materials that occurred from the beginning of the pandemic onwards, to complement the absence in the classroom as a positive aspect of the move to virtuality.

## Staff Training

The institutional survey rated the level of staff awareness amongst teaching, learning support, administration, management staff of the needs of neurodivergent students at UNR as low. There is currently no specific training available to any category of staff working with neurodivergent students. Inevitably this means that there is limited knowledge and skills available to design and implement inclusive educational practices. That said it seems that whenever students with disabilities are detected, reasonable accommodation is worked on.

Teacher focus group feedback also highlights insufficient training to enable teachers to recognize and support neurodiversity amongst the student group, pointing out that they find it essential to have training and tools in this regard. They highlighted peer support (students) as positive, but not enough without the accompaniment of teaching staff. They also stressed the relevance of having accompanying protocols for these students, which allow them to be individualized first and then offered a proposal appropriate to their needs. Here they mentioned the different dimensions that each of the 12 Faculties of UNR has as an aspect to consider in the planning of work with students, since the different levels of student entry generate greater or lesser difficulties when thinking, for example, of more personalized attention, especially in the career's initial years. As a starting point, they stated that the students should know who to turn to for help and that the teachers could learn about each type of neurodiversity and how to detect them.

It appears that many teachers are having to be proactive in researching how they can support neurodivergent students for themselves. Mention was made of exchanging ideas amongst all teachers in the subject area to find solutions together and the possibility of peer-to-peer work among teachers.

*"They are turning to consult about issues inside their chair, to talk to the student or to look for information [on neurodivergence], for example, on the internet.*

A common challenge for teachers was knowing how to adapt assessment.

*"The biggest barrier is at exam time, both for the student and for the teacher who does not know how to approach the evaluation of a neurodivergent student."*

Student focus group comments highlighted the need for staff to gain an improved insight into neurodiversity in order to be able to foster inclusivity. Following on from staff

comments about issues with exams students offered several ideas about approaches to assessment.

*"Knowledge can be progressively accredited rather than with an inclusive final examination, for example, by units or by topic.*

*"The possibility to think of evaluations in different formats, combining different formats. Having to fit into a single type of education makes difficult learning and transiting through university."*

Aside from rethinking assessment students also suggested that teachers needed training in ways to rethink their approaches to teaching, being more flexible, and enhancing student learning.

## Employability

Currently, all students at UNR access the same level of employment support. There are no specialist arrangements or resources available to accommodate neurodiversity.

## Current Good Practice

UNR is particularly keen to develop and improve its methodologies and good practices for both identifying and working with neurodivergent students in future.

## Needs Analysis

Needs identified by staff and students at UNR include:

- Raising of awareness about inclusivity and neurodiversity in higher education amongst all staff.

- Inclusion of neurodiversity as a matter for development in the interaction with UNR students.

- Development of training to increase staff knowledge and tools for identifying and supporting neurodivergent students.

- Promoting empathy, respect, and better social treatment of people with some difficulty so that students do not desert reject their education due to stigma

- Greater interaction between the 12 Faculties of UNR to exchange experiences of this kind, so that inclusion is a collective construction

- Each Faculty to have a well-constituted and referenced area of inclusion and accessibility

- Diversification of the formats of academic content and assessment.

## Partner: National University of Jujuy (NUJ)

### Number of students: 30,000

### Number of campuses: NUJ carries out activities in 15 locations (in the capital city and inland in the province.

The National University of Jujuy is a public institution of higher education that depends on the Ministry of Education of the Nation, autonomous and free (it does not charge for tuition). It was founded in 1973 and has a central campus in the capital city of San Salvador de Jujuy and 12 sub-sites in the interior of the province. It has four Faculties, which offer fifty-five undergraduate degrees, five doctorates, three Master's Degrees, three Specializations and one Postgraduate Program.

NUJ has a teaching staff of approximately 1,500 professionals, 30,000 students and around 400 administrative and academic support staff. It is understood as a consolidated institution of the Argentine Higher Education System, at the forefront at international level, which contributes in an outstanding way to the sustainable development of the region and to the positioning of Jujuy at national and international level.

Its mission is to train people committed to their community, participating in its social, economic and political development, protecting its natural and cultural heritage. With competences in their area of knowledge of international scope and actively contributing to the sustainable development of the Province, the Region and the Country.

International relations are managed by the Office of Internationalization and Regional Integration Programs (OPRI), which reports directly to the Rector, the highest executive authority of the University. OPRI is in charge of coordination and operates with the advice of a Council with representation from all the Faculties and Research Institutes. Through the OPRI, agreements with institutions outside the country are processed, so that currently there are about 80 agreements in force with universities in America, Asia and Europe. Also relevant are the inter-institutional links through networks, through

which we interact with neighbouring countries such as Chile, Bolivia, Paraguay, Brazil and Peru. These are CRISCOS (Consejo de Rectora por la Integración Subregional Centro Oeste Sudamericana), ZICOSUR UNIVERSITARIO (Zona de Integración Centro Oeste Suramericana) and UNIRILA (Red Universitaria del Corredor Bioceánico Brasil-norte de Chile por la integración). These networks include mobility of students, faculty and administrative staff. OPRI is also responsible for the academic and administrative administration of ERASMUS Projects - such as ENTENDER - specific training programs in Engineering such as ARFITEC and Agricultural Sciences such as ARGAFRI. It also acts from binational agreements that favor interculturality and make the National University of Jujuy an inclusive university.

The information presented about NUJ is taken from the following sources:

- The baseline survey delivered to all participating institutions (see Appendix A)

## Legislation

**National Disability legislation**

- Law No. 22431/1981. "Integral protection system for disabled people (guarantees medical care and social security)

- Updated by:
  Law No. 23021/1983. "Modifies the conditions under which tax exemptions will be given to employers who grant employment to disabled persons".

- Law No. 24308/1994. "Regulates the granting of small businesses to the blind and/or visually impaired".

- Law No. 24314/1994. "Establishes the priority of removing physical barriers in the fields of architecture and transport, for people with reduced mobility"

- Law No. 24901/1997. "Institutes a system of basic benefits of integral attention in favor of people with disabilities, actions of prevention, assistance, and to offer integral coverage to their needs, through the social works (health insurers).

- Modified by Law N° 26480/2009.
  Law N° 25504/2001. " Establishes that the National Ministry of Health will issue the single certificate of disability.

- Law N° 25634/2002. "Determines accessibility to public transport for people with disabilities"

- Law No. 25635/2002. "Guarantees free public land transfer for disabled people.

- Law No. 26378/2008. "Adheres to the Convention on the Rights of Persons with Disabilities"

**Legislation on Neurodiversity**

- Law No. 27043/2014. "Declares of National Interest the Integral and Interdisciplinary Approach of People with Autism Spectrum Disorders
- Regulated by Decree 777/2019.

- Law No. 27306/2016. "Regulates the integral and interdisciplinary approach to subjects with specific learning difficulties".

- Law No. 27053/2015. "Establishes April 2nd as National Autism Awareness Day to coincide with the World Autism Awareness Day established by United Nations Resolution No. 63-139".

Thursday 10 October is International Dyslexia Day. The Ministry of Education, Culture, Science and Technology (MECCyT) is carrying out various actions to generate the necessary conditions within the Argentine education system and the community, in

order to achieve an increasingly inclusive society.

https://www.argentina.gob.ar/noticias/día-internacional-de-la-dislexia

**Legislation Jujuy Province**

- Law 5874/2015. Inscribe April 2nd of each year as "Provincial Autism Awareness Day".

- Law N° 5951/2016. " Adheres to the National Law N° 27043 "Comprehensive and interdisciplinary approach to people with Autism Spectrum Disorders".

## Declaring neurodiverse conditions

NUJ does not collect any statistics on prevalence of neurodiverse students on admission, or on retention and attainment of these students therefore there is no record of the number of neurodivergent students currently studying in the institution. There is no screening process in place to identify neurodiversity issues. However, there is a general psychological support service (called Espacio saludable), which works with derivations of the different faculties. It works in psycho-affective containment but does not diagnose or treat neurodiversity.

## Student Support Services

NUJ does have an interaction agreement with an institution dependent on the Ministry of Education of the Province (dependent on the Provincial Government), for the training of Special Education Teachers (Disabled). The institution has a rented Tutorial Service, run by young professionals and advanced students of the careers, which act as support for academic and institutional management.

The University has an intervention dependent on the Rector's Office (the highest executive body of the Institution) through the University Extension Secretary, called UNJuProDis (University and Disability Programme), which aims at the social and educational integration of all its students, working on educational inclusion with the coordination of a University Volunteer Service. They organize workshops with the

participation of the families of these special educational needs students and train the staff - administrative and teaching - of the University to deal with these cases. (https://sites.google.com/site/seuunjujuy/unjuprodis/somos-unjuprodis)

## Assistive Technology

The computer service - both in the central management of the University and in the different Faculties – is available to students, especially those with a visual impairment, so that they can access the bibliographic material for their programmes digitized by UNJuProDis.

Assistive software is available in computer labs.  Technical support and maintenance is provided by the ICT Coordination through UNJu Virtual. (https://virtual.unju.edu.ar/).

NUJ uses the MOODLE platform for the delivery of the different subjects of all the academic units belonging to the institution. It has a plug-in that works as a text reader for visually impaired students.  The institution does not use universal design principles to improve and optimize teaching and learning for any specific student groups.

## Staff Training

The level of staff awareness of the needs of neurodiverse students in NJU is considered to be low for all levels of staff. There is currently no specific training available for staff working with neurodiverse students resulting in an assessment of the level of knowledge and skills to design and implement inclusive educational practices as being limited. There is currently no knowledge of the extent to which teaching practices and/or assessment practices are adapted by staff for students with specific learning difficulties.

## Employability

There is no access to any additional careers' guidance resources for neurodivergent students and no follow-up of graduates. Only some experiences of aggregation of graduates, outside the University.

## Needs Analysis

Needs identified by staff at NJU include:

- Work with all teachers to develop their skills on the subject of neurodiversity, enabling them to identify behaviours, to anticipate possible drop-outs for this reason and to facilitate alternative strategies in the various faculties for the care of "neurodiverse" students.

- To train human resources for the identification of neurodivergent students

- Establish an Office that specifically supporting neurodiverse students in their studies and their university life.

## Partner: Universidad Nacional De San Juan (UNSJ)

## Number of students: 22,000

## Number of campuses: 1

The National University of San Juan (UNSJ) is an autonomous, public, free and secular university, located in the province of San Juan, Argentina. It was created in 1973 when the Faculty of Engineering and the Faculty of Exact, Physical and Natural Sciences separated from the National University of Cuyo, a year later the Domingo Faustino Sarmiento Provincial University was incorporated.

UNSJ is composed of 5 faculties, a university-level school and three Pre-University Schools. Its academic offer consists of 68 undergraduate courses and 39 postgraduate courses. It has 21,973 students, 3,295 teachers and 1,184 non-teachers. The Ministry of Education of the Nation endorses the degrees issued and accredits the careers. UNSJ has delegations in cities far from the city of San Juan, where different races are dictated as aural extension. It also has an FM Radio Station, Radio Universidad and its television channel called XAMA, which transmits by open digital television.

UNSJ participates in international and national mobility programs for students, teachers and researchers, to strengthen intercultural relations, as well as research programs and agreements.

The institution is an innovative institution that fosters pluralism, tolerance and respect for ideas; that seeks academic excellence and imparts critical and ethical training to its students to strengthen their awareness of their social and civic responsibilities, as well as their commitment to the environment.

The information presented about UNSJ is taken from the following sources:

- The baseline survey delivered to all participating institutions (see Appendix A)

## Legislation

- **National Law 27306:** Comprehensive Approach Specific Learning Difficulties (Dyslexia, Dysgraphia and Dyscalculia) Article 1-This law establishes as a priority objective to guarantee the right to education of children, adolescents and adults who present Specific Learning Difficulties

- **National Law 27.043**: declares of national interest the integral and interdisciplinary approach of people who present autist spectrum disorders.

## Declaring neurodiverse conditions

Currently UNSJ does not collect any statistics on the prevalence of student neurodiversity on admission therefore there is no record of the number of neurodivergent students enrolled or statistics on their retention, and or attainment. There are no processes in place to allow students to disclose neurodiversity issues and no screening process in place to identify neurodiversity issues.

## Student Support Services

UNSJ has a Disability Office that would have responsibility for supporting neurodiverse students. It currently does not employ staff with specific responsibility for supporting neurodivergent students. There are no support clubs for neurodiverse students.

## Assistive Technology

Currently UNSJ does not provide any assistive technology or tools for neurodivergent students and there is no assistive software available in any computer labs.
Technical support and maintenance of technology is provided by the Computing Center of the UNSJ and IDECOM (Communications Institute of the UNSJ).

The Learning Management System in use is the Moodle platform. It is not adapted in any way for neurodiverse students. There are learning technologists deployed to facilitate use of Moodle but Universal design principles are not employed

## Staff Training

The level of awareness about neurodivergent students is low in all UNSJ workers, but it is envisaged that as a consequence of the ENTENDER project this will change and awareness will be raised.

Currently there is no specific training program on neurodiversity in place and the knowledge and skills of teaching staff to design and implement inclusive educational practices is rated as limited.

In careers that must accredit a degree through the National Commission for University Evaluation and Accreditation (CONEAU), adjustments of teaching and evaluation practices are carried out every three or six years. Although there is academic freedom at the UNSJ, all adaptations and changes must align with the University Statute and Academic Regulations.

## Employability

Employability support for students occurs in very few cases, for example, when a company requires professionals or students in the last year of a program. Scholarship systems are in place and students in receipt of these may stay working at the university. There is currently no access to any additional careers' guidance resources for neurodivergent students.

## Current Good Practice

There is a psychological cabinet and the disability office that could be developed to cater for the support needs of neurodivergent students.

The only documented case at UNSJ is a student with Asperger's Syndrome, who is studying Electronic Engineering at the Faculty of Engineering. He was admitted to the program with a diagnosis, and his parents requested support from the institution. An advanced student was assigned to give him academic and administrative support. He attended two years of the degree and when the pandemic began, the follow-up was complicated. He is expected to resume his studies next year.

## Needs Analysis

Needs identified by staff at UNSJ include:

- Establish a process for identifying neurodivergent students at admission
- Improvement of the psychology cabinet
- Creation of a neurodiversity office to raise awareness, train teachers and administrative staff to identify neurodiversity and provide the assistance necessary to be able to pursue a university career and achieve your title.
- With the participation in the ENTENDER Project, a change is foreseen in the entire UNSJ community, that they became aware that neurodivesity exists, and that they are students who with the appropriate help can achieve their university degree and a suitable job placement.

## Conclusion - Summary of Collective Needs

The main objective of this report is to share and synthesize the results of the needs analysis designed to gauge existing awareness and provision of support for neurodivergent students in Latin American universities in order to put in place interventions to improve the educational experience. In gathering information via the institutional surveys and focus groups, already the project has begun to raise awareness of neurodiversity and its implications for how existing practices and processes might need review and change. The following findings inform future workpackages:

1. The aim of encouraging more neurodivergent students to want to continue into higher education in the knowledge that they will have support to fulfil their aspirations hinges on the significant need to **raise basic awareness of neurodiversity and to change attitudes in schools and universities** to view it less in terms of deficit and more as a strength. This might involve making neurodivergent people being more visible to both staff and students.

2. There is a need to put in place a system for **identifying students with neurodiverse conditions and in need of learning support (using accessible tools) to encourage declaration, support screening and recording,** either at enrolment stage or at any point throughout the learning process. The system should generate a statistically correct database that can record such information and be used to identify support needs, as well as communicating this appropriately to relevant staff and following up students' achievements as they progress through their programs. In some situations where assessment is carried our outside of the institution the integration of timely and differential diagnoses might involve reviewing processes.

3. **Instigating a training program for all staff (academic, professional, administrative) and students (with or without disabilities) on diversity is essential.** Both staff and students should be prepared for how to work with neurodiversity in terms of collaboration, assessments, examinations, and other aspects of life at the university. Specifically, there is a need to develop sensitivity, empathy, communication techniques and psychoeducational support, and teaching-learning strategies with an inclusive humanistic approach. Such training needs to be embedded in induction programs for new staff and in continuing professional development.

4. Encourage the **adoption of an inclusive and flexible approach to teaching, learning and assessment using the principles of universal design.** For example, adjusting strategies for group activities is imperative for achieving inclusive processes where students do not feel rejected.

5. **Establish an office or an inclusion unit as a function of student support services for neurodivergent students for access to any support needs concerning their studies or their university life.** The unit could be virtual and supported with a website providing all relevant information and links to other services.

6. **Revisit employability support** which appears to limited specifically for neurodivergent students for whom the transition to employment may be a challenge. Institutions should work with students, local employers and national charities and organizations to develop internships and other schemes to enhance employability prospects for neurodivergent students.

7. **Exploit technology** where appropriate. Access to use of the internet and the increasingly wide range of technology available will increase in importance. All institutions have learning management systems, such as Moodle where materials can be accessed. However, the use of assistive technology, such as personal organisers appears to be limited and support is necessary to make sure that students get the most from the technologies that are available.

In this conclusion, we summarise the needs identified across all institutions acknowledging that they are all at various stages of development in these areas and that transfer of knowledge between partners is crucial to ensure that interventions are successful. The different contexts mean that no one intervention will work in the same way in different institutions but the importance of the adoption of the principles of inclusion are fundamental to the success of the ENTENDER project.

# Appendix: Institutional Survey

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

## Survey Tool III

## A survey of university current needs and provision.

**Preamble**

As part of an Erasmus + funded project, we are looking at how the institution supports students with neurodiversity issues and what can be improved to ensure that they can have equal access to programmes, fully participate in University life, succeed in achieving their goals, and move on into employment. We would value your views on how well you think staff understand and respond to students' neurodiversity issues, and what support and training you need in adapting your approach to teaching and learning and assessment.

We invite you to provide some information on neurodiversity in your school. We will:
- Use your feedback to design training and resources to address any identified needs.
- Work with you and your students to design and develop a 'Welcome to University' resource to help students make the transition to university.

For clarity, Neurodiverse relates to the term neurodiversity; a positive way of referring to individuals with specific learning differences (examples of associated medical labels would be; autistic spectrum disorder, dyslexia, dyspraxia, ADHD and dyscalculia, with their associated inferred disabilities). Neurodiversity refers a group of people who process incoming information differently compared to the most prominent group of people (neurotypical) within a community; for example, students attending higher education.

**Your Country**
1. Please identify any national legislation that is in place to foster equity of opportunity for people with disabilities.

**Your institution**
2. What is the name of your institution?

3. What is your job title?

4. Do you have direct responsibility to support neurodiverse students and/or the transition to university?

5. How many students attend your institution?

6. How many campuses does your institution have?

7. Does your institution have any connection with projects or organizations, which support staff or students with disabilities?

8. Does your institution collect any statistics on prevalence of neurodiverse students on admission?

9. If so, what are the numbers of neurodiverse students that have formal diagnosis or are self-identified

10. Does your institution collect any statistics on retention, and or attainment of neurodiverse students?

11. If so what are the statistics in regards to neurodiverse students, and how do they compare with neurotypical students/

12. Are there any processes in place to allow students to disclose neurodiversity issues?

13. If so, what are the processes which are recognized by the University for Support to be provided?

14. Does your institution have a screening process in place to identify neurodiversity issues?

15. If so, who is referred, who pays for screening, when does it happen etc.?

**Neurodiverse Students in your institution**

16. How many students disclose additional needs due to neurodiverse issues? Per academic year? How many amongst the current student population?

17. Please list the types of neurodiversity most common in your institution (include numbers if possible). Include autistic spectrum disorder, dyslexia, dyspraxia, attention deficit hyperactivity disorder, Tourette syndrome and dyscalculia. Other labels please list.

**Support for Neurodiverse Students**

18. Please list any departments or offices with the responsibility for supporting neurodiverse students (for example, Student Services).

19. Does the University employ staff with specific responsibility for supporting neurodiverse students?

20. If so, what are the job tiles and what are their responsibilities.

21. Does your institution have any support clubs for neurodiverse students? Please list them.

## Assistive Technology

22. Do you provide any assistive technology or tools for neurodiverse students? (For example, tablet computers or iPads, or mobile phones)

23. Is assistive software available in any computer labs?

24. Who provides technical support and maintenance for the assistive technology at your institution?

25.  Which LMS (Learning Management System also known as VLE Virtual Learning Environment) does your institution use?

26. Is your LMS accessible for neurodiverse students? (for example, is the design suitable for students with dyslexia?)

27. Is the LMS/VLE being used in this way?

28. Are learning technologists deployed to facilitate using these features of the LMS/VLE system

29. Universal Design refers to sets of standards deployed by the university to ensure consistency of teaching across all departments. For example templates for slide presentations. Are Universal Design principles deployed at your university to improve and optimize teaching and learning in acknowledgement of neuro-differences?

## Employability and Careers

30. What kind of employability support do you provide to your students? Please give details below.

31. Do neurodiverse students have access to any additional careers' guidance resources?

## Staff Training

32. Please rate the level of staff awareness of the needs of neurodiverse students in your institution. Is it Low/Medium/High? Distinguish between for example teaching, learning support, administration, management staff.

33. Is there any specific training available to all categories of staff working with neurodiverse students? Please describe.

34. Please rate the extent to which teaching staff have the knowledge and skills to design and implement inclusive educational practices. Limited/Satisfactory/Good?

35. How frequently are reasonable adjustments made to teaching practices and/or assessment practices?

## Current Good Practice

36. Please identify at least one **specific service or element,** which you provide for neurodiverse students, as an example of good practice that you can share with project partners.

37. Please describe a specific case of a neurodiverse individual[s] (anonymized) that you feel that your institution handled well.

## Future Aims

38. Please identify an area of practice in your institution, which you wish to improve.

39. Please tell us what specific change you anticipate seeing, as a result of your institution's involvement in ENTENDER.

# Appendix: Focus Group Schedule

## Format 1a:
## A focus group of university staff to identify current practice

**Preamble**

As part of an Erasmus+ funded project, we want to know how the institution provides help to students with neurodiversity challenges and what can be improved to ensure that they have equitable access to programmes, participate integrally in university life, and succeed in achieving their goals and enter the world of work. We welcome your views on how well you believe staff understand and respond to students' neurodiversity issues, as well as the help and training you require to adapt your approach to teaching, learning, and assessment.

By way of clarification, Neurodiverse refers to the term neurodiversity; a positive way of referring to individuals with specific learning differences (examples of associated medical categories: autism spectrum disorder, dyslexia, dyspraxia, ADHD, and dyscalculia, with their associated disabilities inferred). Neurodiversity refers to a group of people who process new information differently compared to the most prominent (neurotypical) group of people within a community; for example, from students attending higher education.

1. **How involved are you with neurodiverse students at your university?**
   - *Are you usually informed about whether a student has a neurodiverse condition?*
   - *Can you usually identify a student who may have neurodiversity conditions?*
   - *Do you regularly teach or help neurodiverse students? How many? What types of disability?*
   - *What challenges does neurodiversity pose to you?*
   - *Do you believe that students with disabilities bring unique skills or qualities to higher education and employability?*

2. **How much do you know about the support available to neurodiverse students at your institution?**
   - *What other forms of support for neurodiverse students do you know or are involved in their provision?*
   - *Are there support groups or clubs for neurodiverse students at your institution?*
   - *Can you identify some of the supportive strategies or adjustments that might help these students?*
   - *If you suspect that a student is having issues with learning because of a neurodiverse condition that has not been diagnosed, what do you do? Can they be evaluated at the University or elsewhere?*
   - *For example, are there expenses/fees involved and who covers them?*

3. **What types of technology (e.g., tablets, cell phones, recorders) do students use when you teach them?**

- *Do you know what assistive technologies are available at your institution to help neurodiverse students? Are they easily accessible?*
- *Is the technology provided by the institution or are the students providing it?*
- *How does the use of this technology affect your teaching (e.g., learning that is more visible by students or is it noisy and distracting)?*

4. **Do you feel qualified enough to serve neurodiverse students?**
   - *Do you think you know enough about the needs of students with various neurodiverse conditions?*
   - *Are you familiar with strengths-based assessment for neurodiverse students?*
   - *Have you received specific training on how to support neurodiverse students?*
   - *Do you need more information or training in training and counseling of neurodiverse students?*
   - *Do you need more information or training in adapting your approach to teaching, learning, or assessment for students with neurodiverse problems?*

5. **Is there anything particularly good about the way your institution supports neurodiverse students?**

6. **Is there anything you feel needs to be improved with respect to the way your institution supports neurodiverse students?**

7. **Is there anything we haven't mentioned that you'd like to discuss?**

# Format 1b:
# A focus group of university students to identify current practice

**Preamble**

As part of an Erasmus+ funded project, we want to know how the institution provides help to students with neurodiversity challenges and what can be improved to ensure that they have equitable access to programmes, participate integrally in university life, and succeed in achieving their goals and enter the world of work. We welcome your views on how well you believe staff understand and respond to students' neurodiversity issues, as well as the help and training you require to adapt your approach to teaching, learning, and assessment.

By way of clarification, Neurodiverse refers to the term neurodiversity; a positive way of referring to individuals with specific learning differences (examples of associated medical categories: autism spectrum disorder, dyslexia, dyspraxia, ADHD, and dyscalculia, with their associated disabilities inferred). Neurodiversity refers to a group of people who process new information differently compared to the most prominent (neurotypical) group of people within a community; for example, from students attending higher education.

1. **As students with neurodiversity conditions, what did it feel like to enter college?**
   - *Do you feel comfortable in the university environment?*

- o *Were your neurodiverse needs identified before your entry into college?*
- o *If so, how similar is the support you now receive in college?*
- o *Is there any support that you have stopped receiving and wish you had continued?*

2. **What kind of support, if any, do you think you receive as a neurodiverse student?**
   - o *Has anyone at your University completed a needs assessment with you? This means they have seen your particular needs and are working with you to find ways the university can help you.*
   - o *How understanding are your teachers? Is there a difference in the help of different teachers?*
   - o *Have any adjustments been made in teaching or assessment to assist you in your learning?*
   - o *What adjustments do you think would be most useful?*
   - o *Where do you go in case of a problem? Example: personal tutor, student services, etc.*

3. **What types of technology (e.g. tablets, cell phones, recorders, virtual learning environments, online newspapers) do you use when you are studying?**
   - o *How did you find out about the assistive technology you use?*
   - o *Do you have any technical support for the assistive technology you use as a student, if any?*
   - o *Is such technology provided by the institution or should you buy it and carry it?*
   - o *How and when do you use it? For example, at a conference or when you study in the library?*
   - o *Is there any technology provided by the institution that you definitely don't use?*
   - o *Can you make use of any of these resources at home?*

4. **How involved do you feel in college life as a neurodiverse student?**
   - o *Do you live in student residences or at home?*
   - o *Are you a member of any student group – whether or not it is specific to neurodiverse students?*
   - o *Is there a support group for neurodiverse students?*
   - o *Are these groups formal (created and supported by the institution) or informal, organized by students? Would you get involved in such groups if they were available? Why?*

5. **Is there anything particularly good about your experience or that is beneficial to you at your university?**

6. **Is there anything that could be better about your college experience?**

7. **Is there anything we haven't mentioned that you'd like to discuss?**