muse

Training Handbook

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1. What is the MUSE Project?

The “Modernity and Disability: Ensuring Quality Education for Disabled Students” (MUSE) is co-financed by the European Commission through the ERASMUS + programme. The proposal is a Key Action (KA2) of Cooperation for Innovation and the Exchange of Good Practice – Capacity Building in the field of Higher Education (HE).

The overall objective of the MUSE Project is to improve access, ensure learning conditions and develop employment opportunities for HEs’ Disabled Students in Latin American (LA) countries via modern inclusion practices and networking. The three Latin American countries involved in are Chile, Mexico and Argentina, with the support of institutions in Europe (EU). The motivation behind this Project comes from awareness that, despite an anti-discriminatory legislation framework, there are enormous gaps between the international law, the local policies and the practices of inclusion. In fact, HEIs in Chile, Mexico, Argentina and in LA countries are somewhat isolated in the task of granting students with disability access to high quality education adapted to their needs.

The democratisation of HE has helped to ensure a growing trend of increasing enrolment of students with disabilities, although it is still not significant enough in terms of potential numbers. According to the World Health Organisation, 15% of the world’s population are estimated to live with some form of disability (World Report on Disability, 2011) and evidence suggests that persons with disabilities are disproportionately represented among the world’s poor. The adaptation of HE to cater for disability is of major importance from an economic, political and social point of view. Only through this can the employability of persons with disabilities be enhanced, and public policies focusing on the promotion of work, income security, poverty prevention and social exclusion can be supported. Consequently, the international community is increasingly taking into consideration the rights of students with disabilities regarding their access to HE. The Convention on the Rights of Persons with Disabilities was ratified by Chile, Argentina and Mexico in 2007.

To date there is no network for cooperation in LA, however according to a recommendation resulting from a UNESCO workshop on inclusive HE for people with disability in LA in 2009, HEIs should look to forge the creation of a regional initiative to exchange knowledge, good practices and experiences, conduct consultancy and foster the development of a proposal stemming from the HE community. Without a regional network to coordinate the activities between countries and HEIs, measures will continue to be *ad hoc* and isolated. This will result in students with disability remaining underrepresented and invisible.

The European cooperation is of fundamental importance to facilitate access and retention of students with disability. As a result of the European partner’s cooperation, and guidance, the Latin American partners have developed their own Inclusion Centre Support Plan and Strategies. The three EU partner universities have had a support centre for more than 10 years and have the capacity to transfer the knowhow gained. Not only that, but the experience gained has helped reach a successful record of 90% retention rate of students with disability within their institutions. EU cooperation is necessary to help LA university top managing staff, who are strongly committed towards HE social inclusion, to have a university framework that is both efficient and sustainable for students with disability.

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Participant Institutions

Universidad Viña del Mar
UVM
Coordinator
Partner's country:
CHILE

ASTIKI MH KERDOSKOPIKH ETAIREIA FOUR ELEMENTS – NGO
FOUR ELEMENTS
Partner
Partner's country:
GREECE

Coventry University
COVUNI
Partner
Partner's country:
UK

Universidad de Magallanes
UMAG
Partner
Partner's country:
CHILE

Instituto Tecnológico y de Estudios Superiores de Monterrey, EGADE Business School
ITESM
Partner
Partner's country:
MEXICO

Fundación Universia
Associated
Partner's country:
SPAIN

Universidad de Colima
UCOL
Partner
Partner's country:
MEXICO

Universidad Nacional del Litoral
UNL
Partner
Partner's country:
ARGENTINA

Alma Mater Studiorum University of Bologna
UNIBO
Partner
Partner's country:
ITALY

Universidad Nacional de Rosario
UNR
Partner
Partner's country:
ARGENTINA

Universidad de Alicante
UA
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The specific objectives

- To create a modern inclusive framework through the creation of Support Centres for Students with Disabilities and long-term strategies for the access and retention of Students with disabilities in the HEI system.
- To establish a Regional Network to increase inter-institutional relations and sharing of best practices while responding to society's equity demand.

The outputs

- Increase inter-institutional cooperation and sharing of good practices via the needs analysis and transfer of know-how.
- Enhancement of managerial and administrative staff capacities in dealing with and implementing inclusive education practices.
- Creation of institutional support structures and assistive technology to enable access to HE and foster the consolidation of a social integration culture within universities.
- Development of a LA network for the Inclusion of Students with disabilities in Higher Education. Increase external relations cooperation to improve access and employment of students with disabilities.
- Increase public awareness and understanding on inclusive education within higher education institutions.

The Project activities

The Project activities are all interlinked and have been arranged in a logical sequence, so that each activity produces an output that forms the basis for the next steps and activities. The Project strongly supports and believes in the motto "Nothing About Us Without Us" used by Disabled Peoples' Organizations (DPOs) throughout the years as part of the global movement to achieve equal opportunities and full inclusion. The action will invite students with disabilities to have a full participation in the Project at all its stages.

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The activities are divided into eight Work Packages (WP):

WP1. Need Analysis & Transfer of Know-How.

WP2. Modernization and Strengthening of Human Capital.

WP3. New Institutional Support Structures.

WP4. Regional networking for the inclusion of disabled students in Higher Education.

WP 5. New External Relations Framework.

WP 6. Dissemination and Exploitation.

WP 7. Quality Control and Monitoring.

WP 8. Project Management and its methodology.

This Training Handbook falls within the Work Package 2, the Modernization and Strengthening of Human Capital that is described in the next paragraph.

2. What does "Modernization and Strengthening of Human Capital" mean?

The overall object of the "Modernization and Strengthening of Human Capital" work package, led by UNIBO, is to increase knowledge in the area of Inclusive Education with specific focus on students with disability. This action is addressed to the whole spectrum of administrative and academic staff dealing with situations of students with disability.

The main stages are the following:

- Development of an innovative training plan.
- Training modules for administrative and academic staff.
- Training modules for future trainees through the "train the trainers" approach.
- Collection of teaching and learning materials implemented within this Handbook.
- Pilot trainings by trained trainees in LA.
- Assessment of pilot trainings' quality.

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3. What is this Training Handbook for?

The Training Handbook is a guide for university administrative and academic staff in order to implement the appropriate training to support the MUSE Project objectives, both in the short term and in the future, of increasing higher education's equal access and retention to learning environments for students with disability.

This Training Handbook is meant to support the use of the online materials (http://www.museproject.eu/training-materials) prepared by European Institutions for future trainers who want to develop inclusive education cultures, practices and policies at the university.

While reading this guide and consulting the online materials, keep in mind that you will not find any "ready-made recipe", but open materials which aim to give a wide overview on inclusive education. Every context is different – different cultures, different environments, different laws, different human and material resources, different needs, different opportunities – so there is not only one way to reach educational and inclusive objectives. That is why the strength of these collected materials is to be flexible and multi-media (e.g. videos, slides, international documents, interviews, policy guides etc.) which could better encourage original thinking, stimulate discussions and drive to a common reflection based on your specific context's needs.

As a good example of how the online materials might be used as a starting point to arrange new learning pathways and trainings, at the end of the Handbook you can find three pilot trainings organised by the LA trained trainees who took part in the MUSE Project.

Since good practices are context-independent, we chose three pilot trainings that are more different from each other as an evidence of both the adaptability of the online materials and the capability of each Institution to respond to their context's needs. Therefore, it is highly recommended that everyone who uses this Training Handbook considers these learning and teaching materials in relation to their specific environment.

At the end of this Handbook you will also find an Annex (A) that presents some activities carried out within the WP2 of the MUSE Project in order to lay the foundation for the creation of *Support Centres for Students with Disabilities* in Chile, Mexico and Argentina.

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4. What will you find in the online materials?

The University of Bologna (Italy), The University of Coventry (UK), The University of Alicante (Spain) and Four Elements (Greece) contributed to the overall implementation of the adaptable materials focusing on different topics that represent the key concepts of the Project.

Module 1 - Understanding Inclusive Education: principles, requirements, challenges

by Università di Bologna

The module provides an overview of inclusive education that aims to define the key principles, concepts and definitions of Special Education approach and perspective. Special Pedagogy intents to raise awareness of real meanings of inclusive education's words, such as disability, inclusion, integration, participation, socialisation, context, etc. This is achieved through different levels: laws, international documents, personal experiences on disability issue, papers on Special Pedagogy's principles, requirements and challenges. It includes key features and trends regarding educability and possibility, difference and diversity regarding disability. This module offers basic concepts on disability rather than specific inclusion processes for students with disabilities at the university.

Module 2 – Practical implementation of legal obligations

by University of Coventry

This module looks at the law, at the obligations of higher education institutions to support students with disabilities and to encourage learners to examine the law in their own countries. This module covers "Challenges for the University" which include: lack of disclosure of disabilities to the University/employers, fear of offending students, reasonable adjustments, and discrimination. The "Challenges for the students" covers: lack of awareness of disability rights, worries about applying for work, disclosing a disability, and low confidence. Training materials are provided in order to support teaching staff in the communication with students with disabilities, plus brief case studies are designed to encourage discussion during training sessions. The aim of this module is to ensure that students and staff are aware not only of the institutional obligations but of their own obligations as individuals.

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Module 3 – Students support service and measures for students with disability

by Universidad de Alicante

The mission of the Student Support Centre's (CAE), linked to the Vice-rectorate of Students and Employment at the University of Alicante, is to offer specific attention to students of the University of Alicante who, due to personal, family or socio-economic circumstances, may be disadvantaged or affected in their academic performance, in order to guarantee their full participation in the university community and the development of personal competences, following the principles of equal opportunities and universal accessibility and through the implementation of programs of educational inclusion, counselling and awareness aimed at the university community. Our team is an integrated and interdisciplinary group of psychologists, social workers, sociologists and also an expert on assistive technology, who are supported by two administrative officers. The interdisciplinarity of the team allows to deal with students with disabilities with a holistic approach, offering them with best solution adapted to every specific case. Within the team the ultimate goals are: detect students' needs, advise them, develop a customized plan of action to each case, secure data confidentiality, guide the teacher on disability adaptations, and support teachers and students during the whole process of learning. The Students Support Centre of University of Alicante is currently implementing the following interventions:

- Equal opportunities program: the ultimate goal is levelling the playing field between students with disabilities and the ones without them.
- Volunteering: the ultimate goal is to provide personal support to our students with disabilities but also promoting solidarity, cooperation and empathy.
- Social action: offers a comprehensive attention to the student, whether they require specific or continuous support to resolve personal, family, economic or social issues. In this program we coordinate activities of social mediation, emergency financial assistance and accommodation.
- Psychological and psycho-pedagogical counselling: addressing problems related to academic studies and psychological advice to the whole university community.
- Observatory for equal opportunities: the team networks with civil society organizations in the province of Alicante, local public entities and professionals to mainstream the needs of people with disabilities among the social community.

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Module 4 – Accessible technology: a resource for Universal Learning

by Universidad de Alicante

The module provides information about:

i) Why accessible technology is important as a resource for universal learning;
ii) What are the basic concepts of accessible documents;
iii) How to create accessible digital documents and;
iv) A list of assistive products by type or need.

Module 5 – Post education: labour market integration and opportunities

by Four Elements

The module provides an overview of the current situation of people with disabilities in the European Union, at various levels. It includes key features and trends regarding employment policies and opportunities for people with disability, as well as labour market experiences of employees with disabilities. It also presents a Universal model design for Universities that wish to promote equal access for all, and recommends ways in which Science, Technology, Engineering, and Mathematic (STEM) activities can become fully accessible. In addition, Module 5 examines four main factors related to social inclusion of people with disability, namely employment, educational participation, living conditions, and discrimination on grounds of disability, and proposes actions for bringing people with disability within the scope of the “opportunity society”.

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5. Glossary[1]

Accessibility

Accessibility describes the degree to which an environment, service, or product allows access by as many people as possible, in particular people with disabilities.

Assistive Technology

In the context of Information and Communication Technologies (ICT), Assistive Technology (AT) provides access to and provides services beyond those offered by the ICT in use to meet the requirements of users with disabilities.

Biopsychosocial model

The biopsychosocial model concept comes from the International Classification of Functioning (ICF). It is based on an integration of two opposing models (medical and social) and it attempts to achieve a synthesis, in order to provide a coherent view of different perspectives of health based on the interaction of biological factors, psychological factors and social factors (ICF, 2001).

Deficit

Deficit (or *impairment*) is a given and permanent condition. It is a loss or abnormality of psychological, physiological or anatomical structure or function.

Disability

Disability is an evolving concept and it results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others (UN, 2006).

Handicap

Handicap is relative to contexts. Handicap as permanent datum does not exist: it is the negative result of the interaction between a person – with or without disability – and a context that presents physical, cultural and political barriers. It is an interaction between

[1] The lemmas *Inclusion*, *Index for Inclusion*, *Integration*, *Moral imperative*, *Non-discrimination vs exclusion* are drawn from Roberta Caldin, Educability and possibility, difference and diversity: the contribution on Special Pedagogy, «EDUCATION SCIENCES & SOCIETY», 2013, 2, pp. 65 - 77. With special credit to Roberta Caldin (Full Professor of Special Education – University of Bologna).
The lemmas *Accessibility*, *Assistive Technologies*, *Deficit*, *Handicap*, *Health*, *Inclusion Society*, *Universal Design* are drawn from the Swing Project materials.

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features of the person and features of the context in which the person lives that limits or prevents the fulfilment of that person's role in his/her context of life.

Health

Health is not a limited concept, centred on being or not being healthy, but implies a wider view of the quality of life and the possibility of preserving it even when faced with diseases that require a reorganization of day-to-day life.

Inclusion

Since the Salamanca World Conference on Special Needs Education (UNESCO, 1994), the word inclusion appears in the majority of international documents (OECD, 1997, 1999; UNESCO, 2003) to indicate how all children and adults with disabilities have the right to be educated in ordinary contexts (United Nations, 1993): the Convention on the Rights of Persons with Disabilities (2006) reconfirmed how inclusion is a question of human rights and is the privileged route for fighting all forms of discrimination; however, the different interpretations of the concept of inclusive education determine the choice and implementation of very different political decisions and educational practices from country to country.

Speaking of inclusion, we must refer not only to the International Convention on the Rights of Persons with Disabilities (UN, 2006), but also to the Madrid Declaration (2002), one of the most interesting documents in terms of the proposals for inclusion because it contains the foundation of the rights for all (rather than in individual needs). The Madrid Declaration underlines the role of schools which, for many minors, is the only educational opportunity they are offered in their lives, and is the unquestionable context in which significant adults and/or educational figures can take care of the young generations, offering protective factors for development that help to generate resilience.

In this perspective, it is even more appropriate to talk of inclusion as an overall approach which: focuses on educational, social and political spheres as a whole; considers all students; intervenes firstly in the contexts and then on the individual; transforms a specialist response into an ordinary one, referring to the social model of disability and the sense of empowerment which places the person with disability and their families at the centre of all decision-making processes (D'Alessio, 2005).

Inclusive education

Education which is based on the right of all learners to a quality education that meets basic learning needs and enriches lives. Focusing particularly on vulnerable and marginalized groups, it seeks to develop the full potential of every individual. Inclusive Education ensures that "persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability" (UN, 2006).

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Inclusive society

Society which is based on the right of everyone to learn and participate thanks to a facilitating environment without restrictions or limitations (social, cultural, political barriers etc.).

Index for Inclusion

The Index (Booth and Ainscow, 2002) offers a path that supports the self-analysis and improvement of schools, based on the representation of the academic staff, the school council, the management staff, students and their families, as well as the local community. The path implies a detailed review of how to overcome obstacles to learning and participation for all students. In this perspective, the proposed Index for inclusion is radical and aims to overcome the concept of Special Needs Education (SEN), as these are part of a framework of reference that continues to consider disability as the problem of the individual, proposing to replace the term SEN with that of obstacles to learning and participation, attributing the responsibility for facilitating (making accessible) or hindering the social participation of everyone to each context (Booth and Ainscow, 2002). The authors of the Index indicate that inclusion refers to the education of all children, with Special Needs Education and those with normal learning.

Integration

As stated in other contributions (Caldin, 2007a, pp. 167-186, 2007b; 2012; d'Alonzo, Caldin 2012), the concept of integration: increasingly refers to the educational environment in its strict sense and to individual students with disability; intervenes firstly on the individual and then on the context; increments a specialist response, referring to a psychological model of disability and a compensatory vision. In the pedagogical field, these assumptions make us reflect on the idea that school integration partially achieves the objective of social participation and the recognition of equal opportunities for the students with disability. Considering that the path covered by this field has offered sufficiently positive and constructive results, we must identify the strategies and processes that were functional to their purpose and transfer them to other contexts and life situations. People with disabilities wish to participate in school life, but also in all other social activities: work, places of aggregation, leisure activities, sport, culture, transport, travel etc.

Medical model

The medical model views disability as a problem of the person, directly caused by disease, trauma or other health condition, which requires medical care provided in the form of individual treatment by professionals. Management of the disability is aimed at cure or the individual's adjustment and behaviour change. Medical care is viewed as the main issue, and at the political level, the principal response is that of modifying or reforming health care policy (ICF, 2001).

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Moral imperative

As Stainback and Stainback stated: “Inclusion is an existential method, an ethical imperative, a basic right that nobody has to earn; consequently, we do not have to demonstrate the pedagogical value of community life and learning in an ordinary school. Rather, governments and communities have the duty to remove the barriers and obstacles that hinder social inclusion, providing appropriate resources and support to allow children with disabilities to grow in inclusive environments” (Stainback and Stainback, 1990, pp. 71-87). The two researchers consider the notion of inclusion to be a moral imperative that does not depend on the results and empirical tests of scientific research: “[…] inclusion is a way of living honestly, ethically and fairly”, and they propose an ethical paradigm in which “all individuals have the moral right to be educated in ordinary schools, and inclusion is the ideal context for achieving this objective” (Stainback and Stainback, 1990, pp. 71-87). For many aspects, this approach is similar to Barton’s, who states that inclusive education should not be an individual or fragile aspiration but rather a “collective hope” (Barton, 2001 a, p. 4).

Non-discrimination vs exclusion

In the Madrid Declaration, the priority of inclusion remains within the sphere of human rights – *Non-discrimination plus positive action results in social inclusion* was the document’s slogan – which are always untethered by logics of emergency and/or contingent needs. Non-discrimination in fact means equal rights, not equal treatment or equal response, as diversity can be treated with different approaches guaranteeing the same rights, in the most suitable and targeted manner for each person, and in the context in which they live.

Within the inclusion perspective, the focus on disability is relevant for two reasons: students with disability continue to be discriminated against at school and exclusion practices are even more visible along the line of class, race, ethnic group and language, disability, gender and sexuality and geographical location” (Slee, 2001, p. 116); we must also remember how, in history, people with disabilities have often been marginalised in society, and how they have had to fight hard for their rights. However, inclusion is only partially to do with persons with disabilities in mainstream schools: rather it concerns the implementation of an inclusive education system as a whole: how changes must take place and which types of changes are required are two of the main questions faced by those fighting for social inclusion (D’Alessio, 2009; Barton & Amstrong, 2007).

Participation

Participation is defined as a person’s involvement in a life situation and represents the societal perspective of functioning. The social environment remains significant as a factor throughout everyone’s whole life (ICF, 2001).

Reasonable accommodation

It means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons

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with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms (UN, 2006).

Social model of disability

The social model of disability, on the other hand, sees the issue mainly as a socially created problem, and basically as a matter of the full integration of individuals into society. Disability is not an attribute of an individual, but rather a complex collection of conditions, many of which are created by the social environment. Hence the management of the problem requires social action, and it is the collective responsibility of society at large to make the environmental modifications necessary for the full participation of people with disabilities in all areas of social life. The issue is therefore an attitudinal or ideological one requiring social change, which at the political level becomes a question of human rights. For this model disability is a political issue (ICF, 2001).

Universal Design

It means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. “Universal design” shall not exclude assistive devices for particular groups of persons with disabilities where this is needed (UN, 2006).

Universal Design for Learning (UDL)

UDL is a set of principles for curriculum development that give all individuals equal opportunities to learn. It provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone: not a single, one-size-fits-all solution but rather flexible approaches that can be adjusted for individual needs.

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6. Examples of good practices in Latin American Institutions

In this section we will give you examples of how the online materials might be used as a starting point to arrange new trainings. You will find three pilot trainings[2], which were set up in each partner country (Chile, Mexico, Argentina).

As you can notice in the following pages the trainings are all different, since – as we have said before – we did not give any "ready-made recipe" but context-independent and challenging materials.

[2] All the pilot trainings received are valid, significant and well-structured examples. However, only three of them were chosen considering the diversity of topics, teaching-learning strategies and people involved.

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Instituto Tecnológico y de Estudios Superiores de Monterrey

Raise awareness for including: People with disability in the learning process

Persons responsible for the activities.	**Dr. América Martínez Sánchez, Department of Knowledge Management; Jorge Ayala, Coordinator of Campus Accesible and Dolores Coronado.**
TOTAL NUMBER OF PARTICIPANTS (ESTIMATION)	30
OVERALL DESCRIPTION OF THE CONTENT: main topics to be addressed	1st session: introduction and contextualization of Inclusion of people with disability 2nd session: the educational and institutional context of inclusion for people with disability 3rd session: the Assistive Technology in Inclusive Education 4th session: learning and teaching strategies for disability: psychosocial disorder and motor disabilities 5th session: learning and teaching strategies for people with disability: visual and auditory disabilities 6th session of the evidence of skills
MAIN LEARNING OBJECTIVES	To identify the level of the universal design for inclusion, of the activities and the learning materials which are planned at least in one of the courses, considering the principles of the course's approach.
INTENDED OUTCOMES	To plan at least one activity or to design a learning material, considering the principles of the course's approach.
General Format for the Workshop	
1st session: **Introduction and contextualization of inclusion of people with disability**	**1.1 Introduction and aware-raising: The importance of inclusion of people with disability** Goal: to recognize the importance and the present condition of inclusion of people with disability. Subtopics: • Data • Overview of the World • Reflection and testimony/story/video Lecturer: Jorge Ayala Duration: 1 hour **1.2 The ABC of inclusion of people with disability** Goal: to recognize the main aspects related to the inclusion of people with disabilities.

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	Subtopics: • What are Inclusion and Diversity? • Vulnerable groups • Integration vs Inclusion • Inclusive language • Inclusive interaction • Legal Framework of Inclusion • Kind of disabilities: Motor, Sensory, Intellectual, Psychosocial, Multiple Lecturer: Jorge Ayala Duration: 1 hour **1.3 Universal design of Education and Learning** Goal: • To identify the characteristics of the Universal Design approach in Education and Learning • To identify the application fields of the Universal Design for Learning criteria within the role of lecturers Subtopics: • Background of the Universal Design: Universal Design in Architecture • Principles of Universal Design in Architecture • The importance of principles of Universal Design in Architecture • The contextualization of Universal Design in Education and Learning • Guidelines for Universal Design in Education and Learning • Examples of Universal Design in Education and Learning Lecturer: América Martinez Duration: 2 hours
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Professors of Tecnológico de Monterrey
LOCATION	Tecnológico de Monterrey, Monterrey Campus
DESIGN AND LEARNING METHODOLOGY	Experiential workshops, experts' presentations and activities on platform (Blackboard)
EQUIPMENT AND MATERIALS REQUIRED	Computers, Internet connection, Blackboard

FORMATIVE AND EVALUATION INSTRUMENTS	- Presentations; - Attendance at the training sessions; - Outputs of activities related to the learning session; - Outputs: analysis of the level of universal design and inclusion of the activities and learning materials which are designed and planned at least in one of the courses, considering the principles of the course's approach; - Outputs: to plan an activity or a learning material at least, considering the principles of the course's approach.
LENGTH OF ACTIVITY (time schedule)	In the morning from 9:00 AM to 1:00 PM or in the afternoon – if possible – from 2:30 PM to 6:30 PM
2nd time session: **The Inclusive context in Education and the institutional context of inclusion of people with disability**	**2.1 Inclusive Education introduction** Goal: to recognize the importance and the current status of inclusion of people with disability in high schools. Subtopics: • Inclusive Education • Barriers to be overcome for Inclusive Education • Main stakeholders in Inclusive Education • Role of Lecturers • The importance of inclusion of people with disability in the high school education (Data/general overview) • Culture, practice and policy • Case studies Lecturer: Jorge Ayala Duration: 2 hours **2.2 Included Tec** Goal: to identify the progresses and services that the Instituto Tecnológico y de Estudios Superiores de Monterrey offers to the Tec Community. Subtopics: • Campus accessibility • Services offered to students with disabilities • Actions that are carried out to promote Inclusion • Accessibility • Generation of knowledge and innovation Lecturer: Jorge Ayala Duration: 2 hours

	2.3 MUSE Project Goal: to identify the impact of MUSE Project considering the development of the Instituto Tecnológico y de Estudios Superiores de Monterrey in order for it to become an Inclusive University within an international framework. Subtopics: • Goal • Phases and actions • Aims Lecturer: Jorge Ayala Duration: 2 hours
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Instituto Tecnológico y de Estudios Superiores de Monterrey Professors
LOCATION	Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey Campus
DESIGN AND LEARNING METHODOLOGY	Experiential workshops, experts' presentations and activities on platform (Blackboard)
EQUIPMENT AND MATERIALS REQUIRED	Computers, Internet connection, Blackboard
FORMATIVE AND EVALUATION INSTRUMENTS	- Presentations; - Attendance at the training sessions; - Outputs of activities related to the learning session; - Outputs: analysis of the level of universal design and inclusion of the activities and learning materials which are designed and planned at least in one of the courses, considering the principles of the course's approach; - Outputs: to plan an activity or a learning material at least, considering the principles of the course's approach.
LENGTH OF ACTIVITY (time schedule)	In the morning from 9:00 AM to 1:00 PM or in the afternoon – if possible – from 2:30 PM to 6:30 PM
3ª session: **the assistive technologies in Inclusive Education**	**3.1 The Assistive Technologies in Inclusive Education** Goals: • To recognize the characteristics of technologies which can facilitate the inclusion in education • To recognize the assistive technology

	Subtopics: • Definition of assistive technology • Characteristics of the assistive technology • Types of assistive technology • Learning processes within the assistive technology Lecturer: Jorge Ayala y José María Fernández Duration: 2 hours **3.2 Support tools** Goal: to identify the possible use of technology as an inclusive tool for learning. Subtopics: • Examples of assistive technologies for people with disability • Inclusive Web material: Text, Images, Videos, Tables, Graphics, Color Use, Forms, PDF Documents Lecturer: Jorge Ayala y Jose María Fernández Duration: 2 hours
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Professors of Tecnológico de Monterrey
LOCATION	Tecnológico de Monterrey, Monterrey Campus
DESIGN AND LEARNING METHODOLOGY	Experiential workshops, experts' presentations and activities on platform (Blackboard)
EQUIPMENT AND MATERIALS REQUIRED	Computers, Internet connection, Blackboard
FORMATIVE AND EVALUATION INSTRUMENTS	- Presentations; - Attendance at the training sessions; - Outputs of activities related to the learning session; - Outputs: analysis of the level of universal design and inclusion of the activities and learning materials which are designed and planned at least in one of the courses, considering the principles of the course's approach; - Outputs: to plan an activity or a learning material at least, considering the principles of the course's approach.
LENGTH OF ACTIVITY (time schedule)	In the morning from 9:00 AM to 1:00 PM or in the afternoon – if possible – from 2:30 PM to 6:30 PM

4th time session: **Learning and teaching strategies for disability: psychosocial and motor disabilities**	**4.1 Learning and teaching strategies for disability: PSYCHOSOCIAL DISORDER** Goal: to identify the main characteristics of psychosocial disorders in order to create a consistent strategy that supports the learning process. Subtopics: • Definition of mental disorder • Most common types of mental disorder: - **Depression** • Definition • Supports required by people with depression • Recommendations towards Inclusive Education - **Anxiety** • Definition • Supports required by people with anxiety • Recommendations towards Inclusive Education - **Autism Spectrum** • Definition • Supports required by people with autism • Recommendations towards Inclusive Education Lecturer: Maritza Leal Duration: 1.5 hours Lecturer: Rosa Nelly Nava Duration: 1 hour **4.2 Learning and teaching strategies for disability: MOTOR DISABILITIES** Goal: to identify the main characteristics of motor disabilities in order to create a consistent strategy that supports the learning process. Subtopics: • Definition of motor disability • Most common types of motor disability • Support tools • Recommendations towards Inclusive Education Lecturer: Felipe Robledo Duration: 1.5 hours
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Instituto Tecnológico y de Estudios Superiores de Monterrey Professor

LOCATION	Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey Campus
DESIGN AND LEARNING METHODOLOGY	Experiential workshops, experts' presentations and activities on platform (Blackboard)
EQUIPMENT AND MATERIALS REQUIRED	Computers, internet connection, Blackboard
FORMATIVE AND EVALUATION INSTRUMENTS	- Presentations; - Attendance at the training sessions; - Outputs of activities related to the learning session; - Outputs: analysis of the level of universal design and inclusion of the activities and learning materials which are designed and planned at least in one of the courses, considering the principles of the course's approach; - Outputs: to plan an activity or a learning material at least, considering the principles of the course's approach.
LENGTH OF ACTIVITY (time schedule)	In the morning from 9:00 AM to 1:00 PM or in the afternoon – if possible – from 2:30 PM to 6:30 PM
5th session: **learning and teaching strategies for people with disability: visual and auditory abilities**	**5.1 Learning and teaching strategies for people with disability: visual disability** Goal: to identify the main characteristics of visual disability in order to create a consistent strategy that supports the learning process. Subtopics: • Definition of visual disability • Different types of visual impairment and support tools • Recommendations towards Inclusive Education Lecturer: María del Carmen Muñoz Duration: 1.5 hours Witness: Guest: Vanesa Lazo Duration: 1 hour **5.2 Learning and teaching strategies for people with disability: Auditory disability** Goal: to identify the main characteristics of auditory disability in order to create a consistent strategy that supports the learning process.

	Subtopics: • Definition of auditory disability • Different types of auditory impairment and support tools • Recommendations towards Inclusive Education Lecturer: Edith de la Rosa Duration: 1.5 hours
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Professors of Tecnológico de Monterrey
LOCATION	Tecnológico de Monterrey, Monterrey Campus
DESIGN AND LEARNING METHODOLOGY	Experiential workshops, experts' presentations and activities on platform (Blackboard)
EQUIPMENT AND MATERIALS REQUIRED	Computers, Internet connection, Blackboard
FORMATIVE AND EVALUATION INSTRUMENTS	- Presentations; - Attendance at the training sessions; - Outputs of activities related to the learning session; - Outputs: analysis of the level of universal design and inclusion of the activities and learning materials which are designed and planned at least in one of the courses, considering the principles of the course's approach; - Outputs: to plan an activity or a learning material at least, considering the principles of the course's approach.
LENGTH OF ACTIVITY (time schedule)	In the morning from 9:00 AM to 1:00 PM or in the afternoon – if possible – from 2:30 PM to 6:30 PM
6th session: Evidence of skills	**6.1 Evidence of skills** Identification of the level of the universal design for inclusion, of the activities and the learning materials which are planned at least in one of the courses, considering the principles of the course's approach. Lecturer: América Martínez Duration: 2 hours **6.2 Evidence of skills** To plan at least one activity or to design a learning material, considering the principles of the course's approach.

	Lecturer: América Martínez Duration: 2 hours
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Instituto Tecnológico y de Estudios Superiores de Monterrey Professor
LOCATION	Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey Campus
DESIGN AND LEARNING METHODOLOGY	Experiential workshops, experts' presentations and activities on platform (Blackboard)
EQUIPMENT AND MATERIALS REQUIRED	Computers, internet connection, Blackboard
FORMATIVE AND EVALUATION INSTRUMENTS	- Presentations; - Attendance at the training sessions; - Outputs of activities related to the learning session; - Outputs: analysis of the level of universal design and inclusion of the activities and learning materials which are designed and planned at least in one of the courses, considering the principles of the course's approach; - Outputs: to plan an activity or a learning material at least, considering the principles of the course's approach.
LENGTH OF ACTIVITY (time schedule)	In the morning from 9:00 AM to 1:00 PM or in the afternoon – if possible – from 2:30 PM to 6:30 PM

Universidad Nacional del Rosario

Social and academic approach to Disability

Persons responsible for the activities.	**Natalia Pieroni and Virginia Ferreyra** **Lecturer in charge: Norberto Boggino**
TOTAL NUMBER OF PARTICIPANTS (ESTIMATION)	124
OVERALL DESCRIPTION OF THE CONTENT: main topics to be addressed	Educational paths of Inclusive Education University accessibility Researches on Disability and Higher Education Pedagogical dialogues
MAIN LEARNING OBJECTIVES	To increase knowledge on the possible approaches towards Inclusive Education of people with disabilities in the University, through learning about the different paradigms, the regulatory framework and the public policies of higher education.
INTENDED OUTCOMES	- The increased awareness of administrative and academic staff on this topic; - The increase knowledge of administrative and academic staff on this topic; - To increase knowledge on the educational methodologies and strategies for the inclusion of people with disability in the University.
General Format for the Workshop	
ACTIVITY NAME (main topics to be addressed)	**1. Educational paths in Inclusive Education**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Administrative and academic staff of the UNR, professionals and participants in general
LOCATION	Seat of Government UNR
DESIGN AND LEARNING METHODOLOGY	Power Point presentation and experts' presentation
EQUIPMENT AND MATERIALS REQUIRED	Computers, sound, internet connection, projector
FORMATIVE AND EVALUATION INSTRUMENTS	Power Point presentation, information flyers, attendance list, attendance certificates

LENGTH OF ACTIVITY (time schedule)	From 9:00 AM to 10:30 AM
ACTIVITY NAME (main topics to be addressed)	**2. University and academic accessibility**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Administrative and academic staff of the UNR, professionals and participant in general
LOCATION	Seat of Government UNR
DESIGN AND LEARNING METHODOLOGY	Power Point presentation and experts' presentation
EQUIPMENT AND MATERIALS REQUIRED	Computers, sound, internet connection, projector
FORMATIVE AND EVALUATION INSTRUMENTS	Power Point presentation, information flyers, attendance list, attendance certificates
LENGTH OF ACTIVITY (time schedule)	From 11:00 AM to 12:00 PM
ACTIVITY NAME (main topics to be addressed)	**3. Researches on Disability and Higher Education**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Administrative and academic staff of the UNR, professionals and participants in general
LOCATION	Seat of Government UNR
DESIGN AND LEARNING METHODOLOGY	Power Point presentation and experts' presentation
EQUIPMENT AND MATERIALS REQUIRED	Computers, sound, internet connection, projector

FORMATIVE AND EVALUATION INSTRUMENTS	Power Point presentation, information flyers, attendance list, attendance certificates
LENGTH OF ACTIVITY (time schedule)	From 01:00 AM to 3:00 PM
ACTIVITY NAME (main topics to be addressed)	**4. Pedagogical dialogues**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Administrative and academic staff of the UNR, professionals and participants in general
LOCATION	Seat of Government UNR
DESIGN AND LEARNING METHODOLOGY	Power Point presentation and experts' presentation
EQUIPMENT AND MATERIALS REQUIRED	Computers, sound, internet connection, projector
FORMATIVE AND EVALUATION INSTRUMENTS	Power Point presentation, information flyers, attendance list, attendance certificates
LENGTH OF ACTIVITY (time schedule)	From 3,30 PM to 5:00 PM

Universidad Viña del Mar

Construcción de material accesible y productos de apoyo para estudiantes con discapacidad

Persons responsible for the activities.	**Marcela Godoy Valenzuela -Head of Inclusion Unity**
TOTAL NUMBER OF PARTICIPANTS (ESTIMATION)	50 people, including teachers and students
OVERALL DESCRIPTION OF THE CONTENT: main topics to be addressed	The workshop will be focused on the following contents: • Construction of accessible Power Point and Word documents, with regards to the special needs education • Use of support tools for disability The workshop will be held in the computer lab, with accessible equipment.
MAIN LEARNING OBJECTIVES	- To provide concrete tools aimed to adapt learning materials; - To know which support tools are available for students and their use.
INTENDED OUTCOMES	- To apply the knowledge in order to adapt Power Point and Word's material, according to the type of disability; - To identify the support tools that improve the learning process of students with disabilities.
General Format for the Workshop	
ACTIVITY NAME (main topics to be addressed)	**1. Introduction to accessible ICT and disability**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Teachers and students, managers, PIU team, Chiefs of Department, headmasters, RESI
LOCATION	Computer lab (Miraflores Campus)
DESIGN AND LEARNING METHODOLOGY	The methodology is based on theoretical-practical foundations
EQUIPMENT AND MATERIALS REQUIRED	Data, notebook, support tools
FORMATIVE AND EVALUATION INSTRUMENTS	-

LENGTH OF ACTIVITY (time schedule)	20 minutes
ACTIVITY NAME (main topics to be addressed)	**2. Production of Word document for people with low vision or blindness**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Teachers and students, managers, PIU team, Chiefs of Department, headmasters, RESI
LOCATION	Computer lab (Miraflores Campus)
DESIGN AND LEARNING METHODOLOGY	The methodology is based on theoretical-practical foundations
EQUIPMENT AND MATERIALS REQUIRED	Data, notebook, support tools
FORMATIVE AND EVALUATION INSTRUMENTS	Work guide to product accessible Word material for people with visual disabilities
LENGTH OF ACTIVITY (time schedule)	30 minutes
ACTIVITY NAME (main topics to be addressed)	**3. Construction of an accessible Power Point for people with low vision or blind**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Teachers and students, managers, PIU team, Chiefs of Department, headmasters, RESI
LOCATION	Computer lab (Miraflores Campus)
DESIGN AND LEARNING METHODOLOGY	The methodology will be theoretical and practical (method of case analysis)
EQUIPMENT AND MATERIALS REQUIRED	Data, notebook, support tools
FORMATIVE AND EVALUATION INSTRUMENTS	- Work guide to develop accessible material for people with visual disabilities; - Summary document of the available support tools for visual impairment and their use.

LENGTH OF ACTIVITY (time schedule)	30 minutes
ACTIVITY NAME (main topics to be addressed)	**4. Use of Jaws software for blind people. Case study: reading the accessible document and other which is no accessible**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Teachers and students, managers, PIU team, Chiefs of Department, headmasters, RESI
LOCATION	Computer lab (Miraflores Campus)
DESIGN AND LEARNING METHODOLOGY	The methodology will be theoretical and practical (method of case analysis)
EQUIPMENT AND MATERIALS REQUIRED	Data, notebook, support tools
FORMATIVE AND EVALUATION INSTRUMENTS	Study case that presents real difficulties. It has to be read with the JAWS software, when the document is not accessible
LENGTH OF ACTIVITY (time schedule)	20 minutes
ACTIVITY NAME (main topics to be addressed)	**5. Use of Dragon Natural software, for students with cerebral palsy.**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Teachers and students, managers, PIU team, Chiefs of Department, headmasters, RESI
LOCATION	Computer lab (Miraflores Campus)
DESIGN AND LEARNING METHODOLOGY	The methodology will be theoretical and practical (method of case analysis)
EQUIPMENT AND MATERIALS REQUIRED	Data, notebook, support tools
FORMATIVE AND EVALUATION INSTRUMENTS	Instructional guide to operate with Dragon Natural software and its practical application

LENGTH OF ACTIVITY (time schedule)	40 minutes
ACTIVITY NAME (main topics to be addressed)	**6. Closing and satisfaction questionnaire**
TARGET LEARNERS AND PARTICIPANTS' REQUIREMENTS	Teachers and students, managers, PIU team, Chiefs of Department, headmasters, RESI
LOCATION	Computer lab (Miraflores Campus)
DESIGN AND LEARNING METHODOLOGY	The methodology is based on theoretical-practical foundations
EQUIPMENT AND MATERIALS REQUIRED	Data, notebook, support tools
FORMATIVE AND EVALUATION INSTRUMENTS	Satisfaction questionnaire
LENGTH OF ACTIVITY (time schedule)	10 minutes

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7. How to successfully replicate the training?

After having read this Training Handbook and consulted the online materials, the syllabus and the examples of good practices in Latin American Institutions, here are some tips to successfully replicate the training.

There are no "off-the-shelf" solutions!

Every path needs to be efficient, effective and appropriate for your context's needs.

What should you keep in mind while designing a training?

- Use a *person-centred approach*. You should take into high consideration that people who participate in your training would be adults with their own educational, social, cultural and political backgrounds.
- Find a balance between theoretical framework and practical session (e.g. experiential learning).
- Use *different teaching strategies* in order to involve, interest and motivate: brainstorming, cooperative learning, role-playing, simulations, peer-to-peer, think pair share, think aloud strategy etc.
- Use *different learning tools* in order to respond to everyone's specific learning needs: interactive whiteboards, video, case studies, games, graphics, diagrams, pictures, interactive presentation, testimonies etc.
- Find *accessible rooms* that are suited to the tasks and the participants involved.
- Have *flexibility concerning the timing*.
- Consider that *learning has a social dimension*: it is important to make the participants be active part of the teaching-learning process.
- Define in advance the *general and specific aims* of your training path and share them with the participants.
- Create a good relationship between you and the participants: promote dialogue, discussion, debate and peer interaction.

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- Involve *students with disability* both as key informants and as participants.
- Create a *network* with local and national stakeholders (e.g. labour market members etc.)

Never forget that the process of gaining knowledge, skills and competences continues throughout life

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Annex (A)[3]

This Annex aims to present some activities carried out within the WP2 of the MUSE Project, whose intention is to lay the foundation for the creation – in Chile, Mexico and Argentina - of *Support Centres for Students with Disabilities*. This can be enabled by raising awareness on long-term strategies for the access and retention of students with disabilities in the Higher Education system.

I. The pedagogical design of active learning environments to support didactic inclusion at University

One of the main expected results from the MUSE project concerns the creation of Support Centres for Students with Disabilities. Each Centre will purchase several Assistive Technologies that will be used to improve the teaching-learning process and delivery for students with disability. This focus on teaching and learning processes – and not only on technical tools or on the single student with disabilities' needs – recalls some strategic issues that should be considered, at the same time and by each University, both in the learning environments' design and in the didactic design of teaching-learning models.

This paragraph presents some brief and non-exhaustive considerations regarding the relationship between the organization of spaces, engagement and impact on student learning. A few questions are behind our reflection: to what extent does the student change his/her way of learning according to the environment in which he/she is located? To what extent is the "container" (the class setting, a "virtual" environment that hosts the interaction between the members etc.) able to change the quality of the student's teaching-learning experience? What role does the teacher play in this educational mediation process?

In the field of pedagogical sciences, the focus on learning space is not a new topic. From Don Milani to Montessori and Dewey, from Freinet to Malaguzzi, anyone who has felt the need to follow the student-centred approach has come to the conclusion that the chair and its location on the predella are the emblem of a hierarchical relationship (Mosa and Tosi, 2016).

However, both in a scholastic and university scenario (albeit with few positive exceptions), this really desired change is not, in most cases, achieved. If we observe a school or university classroom, we instantly grasp that the most common setting of the classroom is still the traditional-transmission one. However, problematizing this argument, the use of a traditional physical setting of the classroom should be considered as an "independent variable" compared to the teaching methods of the teacher. According to Trichero (2014), for example, even the "traditional lesson" can be effective; everything depends on how it is carried out by the teacher: "the frontal lesson is effective when it is interactive, structured with actions aimed at maximizing the effectiveness of the information transfer and the construction of valid mental representations by the students" (Mosa & Tosi, p .11).

In our reflection, the theme of the student's and teacher's agency takes a relevant value. The agency of the students develops when they are involved in the whole learning process, in the choices regarding the way and the reasons why they are learning (Wenmoth, 2014). Evidently, using the words of Wiggins et al (2016), a better understanding of how students perceive their learning environments and on why they do or do not choose to engage in an activity will help to increase the best practices of the active learning's didactic design.

[3] Paragraphs I, II, III are written by Luca Ferrari and paragraphs IV, V, VI, VII by Enrico Emili.

At the same time, we agree with Sloan (2006) when he emphasizes the need to better understand the way in which physical, social and knowledge structures, as well as available resources, norms and curricula, are able to facilitate or hinder the teacher's agency. Career development paths need to be designed to create true opportunities for transforming teacher practices. That is why the main goal of professional development is to transform teacher practices in order to increase learning opportunities for all students.

II. Architectural design Vs educational design?

A recent study by Steelcase Education (2014) reports that the design of learning spaces has a physical, social and psychological effect on students. The findings of this survey underline that policy makers from educational institutions, architects and designers should know that investing in solutions, which are intentionally designed to support active learning, can create more effective classes and greater involvement in students.

However, authors like Temple (2008) emphasize the lack of systematic and empirical studies that examine the classroom as a physical space and its connection to teaching and learning. Brooks (2011), in addition, argues that the connections between classroom design, pedagogy and teaching-learning strategies should be further explored.

It follows from this that, concerning the subject in matter, it is possible to identify two different views in the pedagogical research.

On the one hand, some researches show that the creation of active settings would lead to an "improvement" of students' learning. In this case the focus is – above all – on spaces' design in "architectural" terms. Changing the physical setting guides and shapes the teaching strategies that teachers might implement in a specific "learning space". In this case it is necessary to invest in furnishings, technologies and structures that set up the learning environment.

On the other hand, instead, some researches emphasize that the main variable – which is able to influence the above mentioned "improvement" (in terms of students' learning, engagement and performance) – is the pedagogical-didactic design of active learning (Stoltzfus and Libarkin, 2016). The pedagogical-didactic design is the most important feature of effective education even with respect to where active learning takes place (in or outside of the classroom). In this second case a significant investment is required, in terms of training (initial and ongoing), on teachers' didactic skills and knowledge of both didactic models and teaching-learning strategies and methods which can lead to different learning objectives. From this point of view, the learning space has to be set up taking in high consideration the didactics activities' needs.

An attempt of synthesis, between those above mentioned approaches, is well described by Perks (2016) in the following statement: we would argue that the alignment of design and pedagogy is a central consideration to any classroom modification and both need to be considered in tandem. In other words, changing the physical environment of the classroom appears to be worth doing if the change corresponds with subsequent changes to pedagogical practices.

III. Some pedagogical recommendations for the construction of active learning environments within the University context

In the “Universal Design of the learning spaces”, some interesting recommendations proposed by Walker et al (2011) and by Stoltzfus and Libarkin (2016) are summarized and readapted. These recommendations should guide the process of designing and implementing the Support Office for People with Disabilities foreseen in the MUSE project.

- In higher education (HE) contexts with sufficient financial resources, the “administrators” (e.g. department heads etc.) could consider the possibility of renewing the learning spaces by implementing Active Learning Classroom (ACL) and Flexible Learning Space (FLS) where enable the promotion of active learning activities in order to improve the results of student learning and increase student wellbeing.
- On the contrary, in higher education (HE) contexts with scarce economic resources, the greatest efforts of the HE “administration” should be directed in the ongoing training of teachers; in the creation of physical flexible learning spaces (with flexible furniture) rather than incorporate expensive technologies into the classroom (as in the case of Active Learning Classroom), in the training of didactic tutors able to maintain frequent and high quality interactions with students and teaching staff during lessons.
- Teachers who teach in a FLS and ACL should be aware that the decentralized nature of space can make traditional and expositional teaching techniques difficult. In these classrooms, teachers should know and apply a variety of techniques and approaches to active learning (e.g. peer instruction, questioning, collaborative learning etc.).
- University development programs – that are designed to support the redesign of courses according to ACL and FLS “approach” on physical flexible spaces – should merit ongoing or greater institutional support.

In conclusion, we present further relevant recommendations that came to light through the analysis of the articles considered in this paper:

- Students from different demographic groups perceive the same class activity in different ways. Several students’ populations are disproportionately influenced by active learning activities. The underlying cultural factors – including gender, geographic location, socio-economic condition – strongly influence students’ involvement during their active learning.
- The dynamics of small groups and the enthusiasm of teachers, could influence students' willingness and their inspiration to engage in complex learning activities.
- The inclusion of technology in the classroom, the remodelling of classrooms to facilitate interactions and the flipped classroom, is not a panacea that necessarily produces better results for students.
- Although the evolution of media and digital devices have allowed us to broaden horizons of knowledge as a process of progressive outsourcing of it (Ferri and Moriggi 2016), we need to consider the didactic design as a central point of the teaching and learning experience. It is the physical setting that is modified according to the teaching-learning needs, not the contrary. In other words, the notion of “improvement” of the physical characteristics of a learning environment has little meaning without some specific pedagogical objectives or an explicit understanding of the kind of learning environment that a teacher intends to create.

IV. Universal Design for Learning (UDL) and Information and Communications Technology (ICT) for inclusion at University

The opening lines of this paragraph refer to the Article 30 “Participation in cultural life, recreation, leisure and sport” – Convention on the Rights of Persons with Disabilities (UN, 2008). The first point states that “1. States Parties recognize the right of persons with disabilities to take part on an equal basis with others in cultural life, and shall take all appropriate measures to ensure that persons with disabilities: (a) Enjoy access to cultural materials in accessible formats; […]” (UN, 2008, p. 22).

Italy has ratified the Convention on March 3rd 2009, with the Law No. 18/2009 (Gazzetta Ufficiale della Repubblica Italiana, No. 61, March 14th 2009).

At the moment, all the Member States involved in the MUSE Project ratified the Convention and endorse principles and values of inclusion and Education for All (UNESCO, 2000). In particular, among the main goals, we draw the attention to the No. 3 that states “3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes” (UNESCO, 2000, p. 16).

In order to ensure the right of participation to all students, all the Institutions involved in the MUSE Project identified the following learning needs:

- training about the technology that is available and how it works (if possible, focusing on open source and free software);
- staff training about how to teach people with Disabilities and Learning Disabilities and how to adapt the learning materials according to their needs.

Considering these learning needs, the three workshops have been organised, within the MUSE project, on the following topics:

- Universal Design for Learning (Cast, 2011);
- open-source software (to ensure access to digitised learning materials and to support independent learning);
- general criteria for documents’ high readability (in particular, to facilitate the use of analogue and digital learning materials).

V. Universal Design for Learning

In the first workshop, through the analysis of some evidence based researches’ results (Hattie, 2013; Marzano & Brown, 2015; Mitchell, 2013), the workgroup examined the most efficient inclusive learning strategies. In particular, the attention was focused on the UDL’s principles: in fact, the UDL can be considered as a compass that can help enable obstacles and barriers to learning and ensure appropriate opportunities for participation. In other words, the UDL’s principles can make an essential contribution to plan efficient teaching-learning paths, as well as individualisation and personalisation strategies. These could lay the foundations for the process of empowerment to begin, with specific regards to capabilities development.

The UDL guidelines are based on three main principles:

1. provide multiple means of Engagement: specifically provide options for recruiting interest, for sustaining effort and persistence and for self regulation;
2. provide multiple means of Representation: specifically provide options for perception, for language and symbols and comprehension;

3. provide multiple means of Action and Expression: specifically provide options for physical action, for expression and communication and for executive functions (CAST, 2011).

The main goal of the UDL guidelines is to provide useful strategy to create a learning environment that is accessible to all. This leads to the possibility to both enable obstacles and barriers to learning and identify facilitation teaching practices.

These principles valorise the learners' creativity within the *Be-Know-Do* framework:

- dimension of Being: expert learners who are purposeful and motivated;
- dimension of Knowing: expert learners who are resourceful and knowledgeable;
- dimension of Doing: expert Learners who are strategic and goal-directed (CAST, 2011).

Therefore, during the first workshop the participants analysed examples of teaching-learning strategies and materials based on UDL principles in a perspective of knowledge co-construction and sharing.

VI. Open source software

In the second workshop, as a consequent deepening of the first one, the Bologna University researchers presented a suite of open source software to sustain both the students with Specific Learning Disorder (SLD) and students with disabilities. In particular, the suite includes the Italian software called "TuttiXuni" by G. Serena.

The interest shown by the workshop participants encouraged a bottom-up process that leaded to a further development of the software.

Thanks to the availability of the programmer and the collaboration with Alicante University, "TuttiXuni" was entirely translated in Spanish – the name was changed from "TuttiXuni" to "LeeConMigoUni" – and equipped with speech synthesis for every language of the MUSE Member Countries.

To this day, the "LeeConMigoUni " software has these main inclusive characteristics:

- "text to speech" function;
- "speech to text" function;
- speech synthesis in English, Italian, Spanish, Mexican Spanish, Chilean Spanish;
- conversion of the text in mp3 format;
- reading of PDF files and noting on PDF files;
- creating a digital concept map starting with the text.

VII. General criteria for documents' high readability

During the third workshop, the MUSE members discussed the readability criteria that should be taken into consideration before exposing the students to learning contents.

At European and International level, many documents give practical suggestions to make texts more comprehensible and usable for all. Among all, we highlight the "Guidelines for Accessible Information. ICT for information accessibility in learning (ICT4IAL)", edited by the European Agency for Special Needs and Inclusive Education in 2015.

Despite the linguistic peculiarities and differences of the contests, it was possible to analyse, summarise and bring to the MUSE Partners attention the main indications that are recognised and accepted by the scientific community.

In particular, the considerations were aimed at sharing useful criteria in order to create

- high readability learning materials;
- high readability video-presentations (e.g. using PowerPoint, Keynote, Impress etc.)

In line with the principles of UDL, it is essential to provide multiple means of representation and present the information using a format that is flexible and adaptable to different perceptual features.

In particular, a high readability digital document should have at least the following characteristics:

- large fonts;
- font style: sans serif font such as Arial, Trebuchet, or Verdana;
- text and graphics also understandable when viewed without colour;
- background colour and text combinations that provide a good contrast;
- alternative text to describe the image;
- line spacing of 1.5;
- imagine in high definition.

Documents prepared to be accessible in alternative formats for people with visual impairments or reading difficulties are defined multimodal. These documents allow not only to adapt the parameters of the display, but also to facilitate their use through different (assistive) technologies – for example personal device, screen readers, text reading software or display braille. Word processors and open PDF files are the easiest to modify according to individual viewing preferences and to listen using screen and text reading software.

Despite the difficulties to provide universally readable documents, the MUSE group agreed on the importance of providing teaching-learning documents in multimodal format. This first step fosters the removal of barriers that hamper the text accessibility: so that the content maintains the same quality as the original one and everyone – with their own specific peculiarities – is able to access the information thanks to assistive technologies or compensatory instruments.

References

- ADAMS F. (1990). *Special Education in the 1990s*. Harlow: Longman.
- AINSCOW M. (2000). The next step for special education. Supporting the development of inclusive practices. *British Journal of Special Education*, 27, 76-80.
- AINSCOW M. AND BOOTH T. (eds.) (1998). *From Them to Us: An International Study of Inclusion in Education*. London: Routledge.
- AINSCOW M., BOOTH T. AND DYSON A. (2006). *Improving Schools, Developing Inclusion*. London, New York: Routledge.
- ARMSTRONG D. (2003). *Experiences of Special Education. Re-evaluating policy and practice through life stories*. London: Routledge.
- BANFIELD E. C. (1958). *Le basi morali di una società arretrata*. Bologna: Il Mulino. 1976 (tit. or. Moral Basis of a Backward Society).
- BARTON L. (ed.) (2001). *Disability, Politics and the Struggle for Change*. London: David Fulton.
- BARTON L. (2001). Disability, Struggle and the Politics of Hope. In L. Barton (ed.). *Disability, Politics and the Struggle for Change*. London: David Fulton.
- BARTON L. AND ARMSTRONG F. (eds.) (2007). *Policy, Experience and Change: Cross-Cultural Reflections on Inclusive Education*. Dordrecht: Springer.
- BOOTH T. AND AINSCOW M. (2002). *Index for inclusion: developing learning and participation in schools*, CSIE, Bristol; Italian translation Dovigo F. and Ianes D. (eds.) (2008). *L'index per l'inclusione. Promuovere l'apprendimento e la partecipazione nella scuola*. Trento: Erickson.
- CALDIN R. (2004). Abitare la complessità: insegnanti e processi inclusivi. *L'integrazione scolastica e sociale*. 3, pp. 114-123.
- CALDIN R. AND SUCCU F. (eds.) (2004). *L'integrazione possibile. Riflessioni sulla disabilità nell'infanzia, nell'adolescenza e nella vita adulta*. Lecce: PensaMultimedia.
- CALDIN R. (2007). *Introduzione alla pedagogia speciale*, Padua: Cleup.
- CALDIN R. (2007). Il Master in "Disabilità e interventi inclusivi nelle istituzioni e nel territorio". *Generazioni*. n. 8, pp. 167-186.
- CALDIN R. (ed.) (2012), *Alunni con disabilità, figli di migranti*. Naples: Liguori.
- CALDIN R., CINOTTI A. (2011). Etre frères, vivre le handicap, in Catarsi E., Pourtois J.P (eds.) *Education familiale et services pour l'enfance*. Florence: University Press. pp. 165 – 169.
- CAMPBELL C. (ed.) (2002). *Developing Inclusive Schooling: Perspectives, Policies and Practices*. London: Institute of Education.

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- CANEVARO A. (2006). *Le logiche del confine e del sentiero. Una pedagogia dell'inclusione (per tutti, disabili inclusi)*. Trento: Erickson.
- CANEVARO A. (ed.) (2007). *L'integrazione scolastica degli alunni con disabilità*. Trento: Erickson.
- CANEVARO A. (2008). *Pietre che affiorano. I mediatori efficaci in educazione con la "logica del domino"*. Trento: Erickson.
- CANEVARO A. (ed.) (2009). Ineducabile educabile: dall'esclusione dell'ineducabilità all'inclusione dell'educabilità. *L'integrazione scolastica e sociale*. n. 8/2, pp. 120-126.
- CANEVARO A., D'ALONZO L. AND IANES D. (2009). *L'integrazione scolastica di alunni con disabilità dal 1977 al 2007. Risultati di una ricerca attraverso lo sguardo delle persone con disabilità e delle loro famiglie*. Trento: Erickson.
- CANEVARO A., D'ALONZO L., IANES D., CALDIN R. (2011). *L'integrazione scolastica nella percezione degli insegnanti*. Trento: Erickson.
- CANEVARO A., MANDATO M. (2004*). L'integrazione e la prospettiva 'inclusiva'*. Rome: Monolite Editrice.
- CIGMAN R. (ed.) (2007). *Included or Excluded? The challenge of the mainstream for some SEN children*. London and New York: Routledge.
- CLARK C., DYSON A. AND MILLWARD A. (1998). *Theorising special education*. London: Routledge.
- D'ALESSIO S., WATKINS A. (2009). International Comparisons of Inclusive Policy and Practice: are we talking about the same thing?. *Research in Comparative and International Education Journal*. 4 (3), pp. 233-249.
- D'ALESSIO S. (2011). *Inclusive Education in Italy. A Critical Analysis of the Policy of Integrazione scolastica*. Rotterdam: Sense Publishers.
- D'ALONZO L., CALDIN R. (eds.) (2012). *Questioni, sfide e prospettive della Pedagogia Speciale*. Naples: Liguori.
- EURYDICE (2003). *Special needs education in Europe*, European agency for development in special needs education.
- FIORIN I. (2007). La scuola luogo di relazioni e apprendimenti significativi. In Canevaro (ed.). *L'integrazione scolastica degli alunni con disabilità*. pp. 129-157. Trento: Erickson.
- GIROUX H. A. (2001). *Theory and resistance in education: towards a pedagogy for the opposition*. Westport, Connecticut, London: Bergin & Garvey.
- HOLLENWEGER J. AND HASKELL S. (2002). *Quality indicators in special needs education. An international perspective*. Lucerna: SZH/SPC Edition.
- IANES D. (2005). *Bisogni Educativi Speciali e inclusione. Valutare le reali necessità e attivare le risorse*. Trento: Erickson.

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

- IANES D. AND TORTELLO M. (eds.) (1999). *Handicap e risorse per l'integrazione. Nuovi elementi di Qualità per una scuola inclusiva*. Trento: Erickson.
- KOURKOUTAS E., LANGHER V., CALDIN R., FOUNTOULAKI E. (2012). Parent's Experiences of Children and Adolescents With Autism. Regarding Issues Related to Family, School and Social Acceptance, in Karen J. Ripoll-Nunez, Anna Laura Comunian, & Carrie Brow M. Brown Editors, *Expanding Horizons. Current Research on Interpersonal Acceptance*. Boca Raton: BrownWalker Press. pp. 103-124.
- MEDEGHINI R. (2006). *Dalla qualità dell'integrazione all'inclusione. Analisi degli indicatori di qualità per l'inclusione*. Brescia: Vannini Editrice.
- MEDEGHINI R. (2008). Dall'integrazione all'inclusione. In G. Onger (ed.), *Trent'anni di integrazione. Ieri, oggi, domani*. Brescia: Vannini Editrice.
- MEIJER C. J. W., ABBRING I. (1994). 'Italy'. In C. J. W. Meijer, J. S. Pijil and S. Hegarty (eds.). *New Perspectives in Special Education. A six-country study of integration*. London, New York: Routledge.
- MITTLER P. (2000). *Working towards Inclusive Education*. London: David Fulton.
- MONTUSCHI F. (2004). Dalla pedagogia speciale al "pensare speciale". In Montuschi F. and Caldin R. (eds.). *Disabilità, integrazione e pedagogia speciale, monographic issue of "Studium Educationis"*. n. 3, pp. 511-516.
- OECD (1997). *Implementing inclusive education*. Paris: OECD.
- OCDE (1999). *L'insertion scolaire des handicapés. Des établissements pour tous.* Paris: OECD.
- OECD/CERI (2000). *Special Needs Education: statistics and Indicators*. Paris: OECD.
- OECD (2001). *Education at a Glance*. Paris: OECD.
- OECD (2002). *Society at a Glance.* Paris: OECD.
- OECD (2003). *Education Policy Analysis*. Paris: OECD.
- OECD/CERI (2004). *Equity in Education: Student with Disabilities, Learning Difficulties and Disadvantages*. Paris: OECD.
- OLIVER M. (1990). *The politics of disablement.* London: Macmillan.
- OLIVER M. (1992). Changing the social relations of research production. *Disability, Handicap & Society*. 7, pp. 101-114.
- UN (2006). *International Convention of the Rights of Persons with Disabilities*. New York: UN.
- PIJL Y. AND PIJL S. (1998). Are pupils in special education too "special" for regular education?. *International review of education*. vol. 4, n.1, pp. 5-20.
- SAPUCCI G. (2007). Dall'insegnante di sostegno al sostegno diffuso. *L'integrazione scolastica e sociale*. vol. 6, n. 5, pp. 434-437.

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

- SLEE R. (2001). Inclusion in Practice: does practice make perfect?. *Educational Review*. 53, pp. 113-123.
- SLEE R. (2007). It's a Fit-up! Inclusive Education, Higher Education, Policy and the Discordant Voice. In L. Barton and F. Armstrong (eds.). *Policy, Experience and Change: Cross Cultural Reflections on Inclusive Education*. Dordrecht: Springer.
- STAINBACK W., STAINBACK S. (1990). Support networks for inclusive schooling: interdependent integrated education. *Baltimore*. MD: Paul H. Brookes. pp. 71-87.
- SIMON B. (1999). Why No Pedagogy in England? In J. Leach and B. Moon (eds.). *Learners and Pedagogy*. London: Paul Chapman Publishing Ltd. pp. 34-45.
- TERZI L. (2005). Beyond the dilemma of Difference: the Capability approach to disability and Special Educational Needs, *The Journal of the Philosophy of Education Society of Great Britain*. vol. 39, n. 3, pp. 444-459.
- UNESCO (1994). *The Salamanca statement and frame work for action on special needs education*, Salamanca Declaration. World Conference on Special Needs Education: access and quality. Salamanca, 7-10 June 1994. Paris: UNESCO.
- UNESCO (1999). *Salamanque – Cinq ans après – rapport sur les activités de l'Unesco à la lumière de la declaration de Salamanque et du cadre d'action*. Paris: Unesco.
- UNESCO (2000). *Inclusive Education and Education for All. A challenge and a vision*. Paris: UNESCO.
- UNESCO (2003). *Overcoming Exclusion through Inclusive Approaches in Education. A challenge and a vision*. Conceptual paper. Paris: UNESCO.
- UNESCO (2005). *Guidelines for Inclusion: Ensuring Access to Education for All*. Paris: UNESCO.
- UNESCO (2006). *Positive discipline in the inclusive, learning-friendly classroom: a guide for teachers and teacher educators*. Bangkok: UNESCO.
- UNITED NATIONS (1993). *Standard Rules on the Equalization of Opportunities for Persons with Disabilities*. New York: UN.
- UNITED NATIONS (2006). *Convention on the Rights of Persons with Disabilities*. New York: UN.
- VISLIE L. (2003). From integration to inclusion: focusing global trends and changes in the western European societies, *European journal of special education needs education*. vol. 18, n. 1, pp. 17-35.
- WARNOCK COMMITTEE (1978). *Special Educational Needs. Report of the Committee of Enquiry into the Education of Handicapped Children and Young People*. London: D.S.E.
- WARNOCK, M. (2007). Foreword. In R. Cigman (ed.). *Included or Excluded? The challenge of the mainstream for some SEN children*. London, New York: Routledge.

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

- WHO (World Health Organization, 2001). *ICF: International Classification of Functioning, disability and health*. Geneva.
- WHO (World Health Organization, 2011). *World Report on Disability of the World Health Organization and the World Bank*, presented in New York in June 2011.
- WINZER M., MAZUREK K. (2000). *Special education in the 21st century. Issues of inclusion and reform*. Washington: Gallaudet University Press.

Co-funded by the
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