# Innovative Academic Course on Integrative Interventions for Children with Autism Spectrum Disorders

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#### Abstract

This article will present an ongoing Erasmus + Innovative Academic Course on Integrative Interventions for Children with Autism Spectrum Disorders, IACIIC-ASD, implemented betweeen 2017/2019 by the West University of Timisoara (WUT) Department of Educational Sciences, in partnership with Universita degli studi di Firenze (UNIFI), Universitatea Lucian Blaga din Sibiu (ULBS) and Sveuciliste u Zagrebu Edukacijsko-Rehabilitacijski Fakultet (ERF). The need for an internationaly developed course in autism spectrum disorders (ASD) is high because all of us must stay in tune with curent theoretical and methodological approaches to provide best quality training for the future specialists. The ASD is one of the most researched domain in special education and related fields and the parents and specialists feel a constant need to find new solutions and modern therapeutic methods for best addressing the children needs. By proposing a course that will present the most recent theories and findings in the field and will discuss the best options in educating the children with ASD we aim to train better professionals and increase the future specialists' competence. Also, this course will be accessible via an on-line platform so becoming an open/course for all interested parties. The virtual clinic for ASD will be a virtual scientific environment where students, academics, specialist and parents can exchange knowledge, expertise, experiences and good practices.

Keywords: autism spectrum disorders, Erasmus – Program, academic course

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Autism spectrum disorder (ASD) refers to a group of complex neurodevelopmental disorders characterized by repetitive and characteristic patterns of behavior and difficulties with social communication and interaction. (American Psychiatric Association, 2013). Even we do not have yet a final statistic for UE (<u>http://asdeu.eu/</u>) the prevalence rate of ASD it is assumed at about 1% (http://www.autismeurope.org/activities/news/the-european-parliament-hosts-aconference-on-the-call-for-a-european-strategy-for-autism-5.html) and increasing (<u>https://www.eu-aims.eu/autism-spectrum-disorder-asd/</u>). The socio-economic impact of the disorders is high, not only due to costs related to treatment, but because individuals with ASD need permanent care and also fail to pursue an occupational career as adults and because the most severely affected individuals are ofteninstitutionalized (http://eurlex.europa.eu/legal-content/en/ALL/?uri=CELEX:52010DC0636), the social inclusion and educational integration of ASD children are still a challenge for all EU countries. There are still big differences "in the state of affairs" in the field of ASD in different countries.

West University of Timisoara (WUT) conducted two focus groups: the parents and the professionals focus group. Correlated with a revision of the literature and of the ongoing European projects results on ASD, some common needs of our target groups can be identified:

• In some UE countries, the number of ASD exclusively dedicated courses in universities is reduced or missing completely. Where the formation is offered by private training/education providers, the fees for certified continuing education programs are sometimes prohibitive.

• In schools: there is a gap between mainstream schools teachers' knowledge and how to realize this in practice (which leads to anxiety or even rejecting working with autistic pupils; the lack of professionals properly trained to work with children with ASD; the lack of support staff in schools.

• For the parents, often they must seek support for their child by themselves, and find the best methods of intervention. Parents encourages a more child focused approach of intervention instead a medical approach of ASD. They expressed their needs to be more involved in therapeutical intervention as active participants. Also they stressed that they should be involved in all the phases of interventions, including assessment. Finally, they emphasized the fact that most advocacy actions are made by parents with little support from professionals.

• An increasing need for high qualified practitioners in outpatient centers/clinics. In some UE countries (Romania among them) the number of ASD masterprograms is reduced or missing completely (<u>https://bacb.com/</u>).The fees for some certified continuing education programs can be sometimeexcessive.( https://bacb.com/)

•The scientific research suggest that students with autism progress much better when autism-specific educational support is provided (Parsons, Charman, and Faulkner, 2013). This has been argued to put unfair pressure on teachers and for the child with ASD to experience "integration without social inclusion"

(<u>http://www.birmingham.ac.uk/generic/transform-autism-</u> education/progress/index.aspx).

•The deployment of school staff or the gap between mainstream schools teacher knowledge and how to realize this in practice lead to anxiety or even rejecting working with autistic pupils (Mesibov and Howley, 2003).

Our answer to these matters is that the parents and the professionals must act together as a team where each member must understand the role he has, the relationship between therapy, education and family life. So it is very important that all future professionals working with children with ASD to speak a common language either they act as educators, a therapist for the child or as counselor for the parents. In order to achieve this language, they must be trained equally in assessment (A), therapy (T), education (E), family counseling (F) and advocacy (A) (either they are preparing to become educators for the mainstream or special education, psycho-pedagogues working in specialized centers/clinics, psychologists in private practice- therapists or counselors). We strongly believe that this quadridimensional (A-T-E-F-A) integrative approach is the best approach and that it is necessary to be taught to students in universities. Further, these professionals mustteach the parents how to deal with all the aspects that ASD involves but also how to adapt their parenting syles in order to become a "therapeutic parenting". This is what we aim to do proposing an improved curriculum with new course modules which will enhance the skills, knowledge, and understanding of these future professionals in the field of ASD.

Different countries in Europe have different approaches of the ASD child. Because there are variations in policy and practice among EU countries-there are similarities but also points of divergence, different perspectives on the relationship between therapy and education, and the professionals are trained differently from country to country-we think the best manner to address the common issue of autism is transnational, 1) in order to unify the practice and 2) because Romanian universities do not have any ASD master programs or postgraduate studies although in Romania there are NGOs functioning as Continuing Education Providers or independent psychologists offering courses on ASD based on their own practice but not always "the established practices are the best practices".

In time, participating universities involved in the project will strengthen their contact with educators and therapists (trough the online platform but not only) integrating research with practice, to diminish the "persistent disconnect between research and practice"

The primary beneficiary of the project will be the students from Special Education, Educational Sciences, Psychology, Sociology and Social work specializations from partners Universities. For them, we will develop a course that will have an integrative view on ASD intervention and that will present the most current trends in the field. By this course we aim to increase the quality of the educational offer and to improve their competences in the field, according to the ECTS.

The indirect beneficiaries will be the parents and the teachers of children with ASD. They will have access to a MOOC course that will be available on the European Virtual University Clinic for ASD (EVUCASD) platform and can seek counseling through it. The ultimate beneficiaries will be the children with ASD that will be addressed by more competent specialists, in an interdisciplinary team, with up to date techniques.

The project objectives are:

-To develop an innovative academic course on ASD, based on the integrative view of case management

-To create a European Virtual University Clinic for ASD (EVUCASD) which will host the Open Educational Resources developed in the project (including a MOOC on ASD)

-To share the curriculum model developed in the project, tools and materials with other universities, private education/training providers, stakeholders, practitioners, to improve the educational offer at National and European levels.

The number of students participants in testing activities will be 160. The students will participate in the course materials development, in course testing (including the MOOC), in EVUCASD development and in the multiplier events

In the course materials development the student participants will be involved in the first phase of designing. Before the student's manual will be developed one focus group with 15 students will be conducted.

In the activities of course testing they will be participating in the summer and winter schools in which the course will be tested in an intensive manner. At the four schools will participate a number of 40 students each, a total of 160 participants from all partner universities.

Also, the student participants will be involved in the development of the EVUCASD, in the first phase of designing. Before the EVUCASD will be developed one focus group with 15 students will be conducted. The students will express their needs in the platform structure, mode of operation, content, communication and on/line-assessment. We aim that the EVUCASD will have at least 1000 unique visitors at the end of the project. At least 220 will enroll on the platform to visualize MOOC. The platform will incorporate all the elements required by us, including disclaimers, logos, and link to ERASMUS.

The students will participate in the multiplier events: one conference, seminars on the EVUCASD, and workshops in integrative approach to ASD.

Our approach has three starting points. The ASD is a complex issue that needs multidisciplinary approach, the national practices are diverse, the potential users of our courses (future professionals, actual professionals, interested parents et al) have all a strong involvement with the subjects, are mature learners and they have distinct voices. Our main objective is to develop an innovative course on ASD that will be delivered in our universities.

From scientific point of view we propose a diamond approach ATEFA (a- assessment, ttherapy, e- education, f- family counseling, a-advocacy) that focuses on children with ASD in an ecological context. We will provide specific ways to bridge the gap between different kinds of interventions (family centered, educational and therapeutically) in order to achieve a joint effort in educating and promoting the autonomy of ASD children.

From didactic point of view we will use blended learning as the way to deliver the course. Also the course (and all the materials) will be available through a MOOC course on the EVUCASD. As general pedagogical approach we will incorporate specific practices and elements of constructive learning, learning through expansion and transformative learning because we strongly believe in the social constructed understanding of ASD. Our courses will be both interactive and transformative in the sense that students will have the possibility to voice their experiences and to transform their views.

In a similar fashion we are intending to develop the course, based on the different expertise of each partner and on specific target to be reached. The course will have five major topics, each one coordinated by a partner. Each module, although focused on one topic, will provide clear ways to incorporate other perspectives in intervention. All the courses should be interactive and based on case studies or hard data.

We consider the implementation a scientific and academic journey, and we will make effort to document this journey into dissemination products, including scientific articles and presentation in conferences.

During the project several materials will be developed: teacher and student manual, an academic book, he on-line platform for the European Virtual University Clinic for ASD EVUCASD and a MOOC course on ASD.

The teacher's manual will be developed by capitalizing the need of the end-users. For each of the material there will be a focus-group with students, conducted by the coordinating partner in order to capture their voice, needs and preferences in designing the products. All the partner will contribute to the development of the teacher's manual and for quality assurance reasons, the teacher's manual will be sent for reviewing to at least six specialists in the field. The beneficiars will be the academics that will lecture the course. The teacher's manual will cover the content of 125 teaching hours, and is addressed to the undergradute and postgraduate students.

The teacher's manual will be structured in five modules: assessment, therapy, education for children with ASD, family counseling and autism advocacy. For each module

two partners will be responsible in writing it: one coordinator and principal writer and an assistant.

All the partner will contribute to the development of the student's manual and for quality assurance reasons, the student's manual will be sent for reviewing to at least six specialists in the field. The student's manual will cover the content of 125 learning hours, and is addressed to the undergraduate and postgraduate students. The student's manual will reflect the structure and content of the teacher's manual. The structure will also be developed in five modules: assessment, therapy, education for children with ASD, family counseling and autism advocacy, reflecting the teacher's manual. The content of the student's manual will be similar with the teacher's manual, but presented in an interactive manner, adapted for learning for adult learners. The student's manual will have in addition an introductory part in which will be presented the course objectives, covered skills and expected results. Each module will include in addition to the content, learning tasks, key concepts, quizzes, practical examples, resources and a brief summary.

The academic book will reflect the theoretical approach into integrative interdisciplinary case management for children with ASD and the newest scientific evidence in the field. The book will consist from approximately 150 pages with a theoretical-centered approach. All partners will contribute equally to the writing process, each of them will develop approximately 40 pages. The book will be structured in three main chapters: introduction, interdisciplinary approach to case management in ASD and research, and testing results. In the introduction, information about the importance of the integrative, interdisciplinary approach and the family/centered ecological model in addressing the child with ASD will be presented. Also, a comprehensive review on the current scientific literature in the field, with an analytical dimension will be presented. In the second chapter a review on interdisciplinary approach to case management in ASD will be advanced. The procedures, activities, management and communication will be addressed. The third chapter will present the results obtained in our project and in similar European projects. Also, the current significant data from international research will be analytically presented. The novelty of the academic book will be the integrative approach that will be analyzed and the benefits obtained from this model of intervention.

The UVCASD will be design as a virtual space for learning, practice exchange, and communication for students, academics and in future for teachers and parents. The platform will be different from the project site. The EVUCASD platform will be divided in two sections: the learning and mentoring one, accessible only by ID during the project, and the section for open/acces course (MOOC) and debate forum. The learning section of the platform will be designed exclusively for students and experts and will host the on-line section of the course, practical video examples, practical assignments realized by students and the feedback from the mentors, the course materials, the mentoring section for students. The open/access section of the platform will host the MOOC course and the online forum, which will offer everyone the possibility to interact, exchange ideas and practice. It will give students, academics and in the future parents and teachers of children with ASD the possibility to seek support from European specialists and the students to practice their acquired skills in a supervised virtual environment. The platform will also develop the transversal skills of the students': to enroll at the platform and take advantage of all the opportunities it offers they must practice the TIC and English skills. The beneficiary will be students that take the "Integrative interventions for children with ASD" course from all partner universities as direct beneficiary, academics interested in the ASD problematic, and in future teachers and parents of children with ASD.

The new course, entitled "Integrative interventions for children with ASD is designed as a blended learning experience. The on-line part of the course will take place on the MOOC course. The MOCC will be hosted by the EVUCASD. The MOOC course is an on/line course that will respect de structure of the proposed course. For each module and chapter the adapted on-line version of the student's manual will be uploaded. The students will find for each module video demonstrations and tasks that must be completed by a dead line. They will benefit from the teachers feed-back and supervision.

The developed course in ASD will be tested in four sesions, each hold by one of the partners. he course will be tested by implement it in an intensive manner (ISP). The course implementation will allow the validation of the concept, materials and delivering them in a relevant form. Also, the implementation will allow the development of new skills and knowledge (including transversal ones, IT and English).

In all implementation of the learning activities we will have teachers from each partner and students will work in mixed nationality groups. In this way we will add a transnational dimension of training allowing students to experiment a multinational learning experience. The whole course will be tested in an intensive manner in four winter and summer schools hosted by each partner. The school is a 5 course days which will reflect the 5 course modules: assessment, therapy, training, family counseling and autism advocacy.

The course will be taught in English and will be delivered in blended learning program. There will be 8 hours of face-to face training in two daily sessions (a total of 40 hours). The course will continue on the virtual platform in MOOC format (including the assessment) for another 80 hours (1 month).

The purpose of the course has several aims. First, it will provide the students new competencies in working with ASD children. These competencies will be recognized by issuing a certificate with descriptive supplement, that will be credited with 5 ECTS. Second, it will develop the ICT competency and will enable them to use MOOC and blended format to develop their knowledge and skills. Thirdly, it will allow to test all our products in real educational context, including the functioning of platform and the usefulness of study guide and teacher's manual. Not least, it will allow the interaction between students and allow them to exchange and share their knowledge and skills.

The course will allow a quality check of our products. The courses will be delivered by participants from each country (1 for each partner except Romanian partner with 2 teachers).

the course will also be audited in order to assess both the quality of materials and the quality of teaching. Necessary revisions will be made after the course.

The project will be disseminated through a series of worshops and a conference. The workshops will be hold by each partner will disseminate the European University Virtual Clinic on ASD (EVUCASD) among interest parties: students, academics, teachers, parents, stakeholders. In this seminar, the EVUCASD will be presented, with all its futures, and a session on the platform will be demonstrated. All information about enrollment, sections and activities will be offered. Also, it will be a presentation of the MOOC course, hosted by the EVUCASD, the modalities to access it, structure, and practical information about navigating inside the course. The conference will have two aims: to disseminate the project

results and to put the basis for an international network of specialists interested in ASD intervention. In addressing the specialists we are referring to all factors involved in ASD intervention: experts, psychologists, psycho/pedagogues, teachers including parents, the supreme specialists in their child.

The conference will be a one day event, structured in 2 parts: in the morning the plenary section, in which will be presented the project results and all partners will make a short review of the project. In the afternoon a seminar about collaboration between all specialists will take place, an opportunity for all parties to meet face to face: specialists, parents, teachers, students. The platform EVUCASD will be presented and all participants invited to enroll, in order to create a "therapeutic community".

By the project objectives we aim to determine sustainable results and create an educational climate that supports a sustainable professional development for students. We advance that the number of students that will take this course in each partner University will be equal each year with the initial number of students participating in the course testing (25).

Also, we propose to disseminate this course to other universities. Each partner will present the course to at least 2 Universities from their country and will provide for them any information and course materials requested. So, in total, the developed course will be disseminated in minimum 8 Universities from 4 European countries.

We intend to make a protocol with local educational authorities that they will guide the teachers that have autistic children in classroom to take the MOOC course, hosted by the EVUCASD platform. So, in three years interval, a number of 100 teachers will take the MOOC course.

We intend to make a protocol with local NGOs on ASD that they will guide the parents of children with ASD to visit the EVUCASD platform and choose the right activities for them: take the MOOC course, relate with specialists in the field or seek support. We aim that in three years time a number of 50 parents will take the MOOC course.

In the matter of the EVUCASD we intend to gradually increase the number of visitors and users, in order to reach a number of 500 users.

Also, we propose to post announcements every three month in the social media pages of the Faculties or Departments to promote the services of the EVUCASD and invite students, academics, alumni to visit and enroll in the MOOC course.

## Conclusions

The proposed project is innovative for:

-The integrative five-dimension (A-T-E-F-A) course concept. The course will be design based on integrative interdisciplinary case management view in approaching the children with ASD. All the partner Universities bring their specific expertise (in assessment, education, therapy, counseling and advocacy) into a joint view on integrative interventions in ASD. The expected impact will be that the innovative course concept will be implemented in an innovative University course that will empower students with up to date and trans-national knowledge in the field of ASD. The course materials will be uploaded on the on-line platform in a form of a MOOC course. For Romania, for the first time, through each module comprised, we aim to develop to our students a specific set of competences: assessment, therapy, educational, family counseling, autism advocacy.

-Another aspect that we consider to be innovative is that professionals will not only teach parents how to deal with all the aspects that ASD involves but to collaborate with the specialists; will not only offer counseling for the family, but they will be able to teach the parents how to adapt their parenting styles in order to become "therapeutic parents". This is a role the parent can ask for or assume and he can be succesful or not. Our aim is not only to transform the parent into a (co-) therapist for his child by teaching him methods and techniques used in therapy. Our aim is to make the parents aware of their parenting styles, on their ways to communicate with the child, on the time they spend with the child, and how to make the most of all the aspects that being a partent involves, according to the age of the child, the severity and evolution of his/her condition.

-The European Virtual University Clinic is a platform where students and staff (from the partner university first and then from allover EU) can meet, interact, exchange ideas and practice. This platform is also innovative for the fact that our students gain acces to a set of activities supported by ICT, including e-learning, that realise or facilitate European/international, collaborative experiences in a context of teaching, training or learning (virtual mobility). The practical activities that students must carry (in

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CUTCP/Special Needs Institutes/schools) will be recorded and the most relevant of them will be uploaded on the platform, with subtitles and comments from the supervisors. The platform has a dedicated section where superviors can acctually see the interventions performed by the students and give feedback directly on what they saw and not on what the students stated that they have accomplished.

The platform will also develop the transversal skills of the students`: to enroll at the platform and take advantage of all the opportunities it offers they must practice the TIC and English skills

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