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GIULIA STAGGINI, RITA CERSOSIMO

The academic and linguistic needs of students with SEN: an e-learning course for university professors

Abstract

This contribution outlines a self-paced asynchronous online course designed to familiarize university professors with the profiles of students with special educational needs (SEN). The course structure was informed by a questionnaire assessing the educational and linguistic needs of a sample of 70 students with SEN. The results of a preliminary delivery phase of the course are presented. An initial questionnaire was aimed at assessing teachers' prior knowledge of inclusive teaching and a final questionnaire evaluated the user experience, the perception of acquired knowledge and the impact of the course on teaching.

Keywords

SEN, disability, dyslexia, higher education, online course, professors

1. Introduction

In 2022, the National Agency for the Evaluation of the University and Research System (ANVUR) in Italy published a report on the presence of students with SEN in Higher Education during the academic year 2019-2020. The statistics confirm that both students with disabilities and those with SpLD have exponentially increased in the last 20 years. Students with disabilities, indeed, have quadrupled, while students with SpLD have gone from 0.10% in 2011-2012 to over 1.40% of the total number of students in 2019-2020.

Despite the increase in the number of students with SEN accessing universities, demonstrating that Inclusive Education policies have achieved their goal, bureaucracy, administration, and teaching staff sometimes struggle to meet the needs of this category of students (Cardinaletti, 2018).

In this paper, we aim to describe the design of a training course for the University of Genoa's professors and teaching staff about Educational Inclusion and Accessibility. The course was designed within the University of Genoa's research group GLIA. The GLIA (Teaching and Learning Techniques Working Group), in line with its goals of developing educational innovation and providing continuous training for teachers, researchers, and administrative-technical staff, deemed it appropriate to develop a training course on such topics. The aim of the course is to

provide theoretical and practical foundations to raise awareness and encourage a change in perspective in the teaching approach towards students with SEN.

2. The profile of university students with SEN

Examining learners' needs is a crucial aspect of any teaching process, particularly when addressing learners' specific educational requirements related to neurobiological, cognitive, or social conditions. In our case, the primary focus of the analysis was to explore the language needs of University of Genoa learners with SEN.

To achieve this objective, a satisfaction survey, focusing on students' expectations, difficulties, and needs, was designed for the mandatory "recovery course" in English at the B1 level provided by the University of Genoa. The survey, comprising 21 items, is categorized into five main areas: personal data, feedback on course organization and structure, feedback on exercise types and organization, graphic aspects of the course, and course contents and materials.

Data from 720 students, including 650 without SEN and 70 with SEN, reveal significant variations through statistical analyses (T-tests, Levène tests). Students with SEN, and in particular with learning disabilities, face challenges in understanding English explanations, perceive longer explanations, and encounter difficulties with course organization. Graphic aspects, especially formatting, font, and spacing, pose greater challenges for students with SEN compared to neurotypical students.

The study emphasizes the connection between students' biological conditions and the difficulties they face in foreign language studies. It highlights concerns among students with SEN regarding transparency, clarity, and organization in teaching structures. The visual memory characteristic of students with SEN emerges as a crucial factor, and although not statistically significant, the importance of images and videos in comprehending L2 (and also L1) texts is underscored.

For these reasons, when designing the training course for the University of Genoa's professors and teaching staff, we decided to include and highlight the previously described aspects with the aim of making the University of Genoa's workers aware of students with SEN's needs.

3. The online course for the University of Genoa's professors and staff

The attitude of teachers can be strongly relevant to the success of inclusive education, as it forms the basis for a flexible approach in adapting one's manner and teaching methods to the diverse needs potentially present in the student population. In the Italian University context, where legislation on inclusion is much more recent (Law 17 of 1999 for students with disabilities and Law 170 of 2010 for students with learning disabilities), the issue of attitudes may be even more crucial.

The professional development of professors, and teaching and administration staff regarding this matter is fundamental for establishing truly inclusive education. To achieve the goals of educational accessibility and inclusion, it was decided to

create a self-paced online course that could serve as an introductory guide, both theoretically and practically, to the topics of inclusivity and accessibility in Higher Education.

For the design of the course, the principles of Online Educational Design (OED) were employed. Specifically, the theoretical framework developed by the Institute for Educational Technologies (ITD) of the National Research Council (CNR) was applied. This framework involves an initial phase of analyzing educational needs based on the ADDIE model, followed by the design of educational environments on one hand, and the actual instructional design on the other. The subsequent section will provide a detailed description of the course design in terms of both content and structure and ultimately, highlight the utilization of digital resources.

3.1 The design of the course

At the core of the majority of Online Educational Design (OED) approaches, which encompass the strategies and processes of instructional design utilizing the network as an educational environment, lies the so-called ADDIE model (Analyse-Design-Develop-Implement-Evaluate). Developed in the late '70s and early '80s (Andrews and Goodson, 1980), the ADDIE model consists of five fundamental phases: analysis, design, development, implementation, and evaluation.

Concerning the analysis phase, the most relevant aspect to consider was the participants' profile. Literature on the training needs of university professors is limited; however, some common characteristics can be identified for this learner profile. University professors are aware of the need for continuous training not only in their discipline but also in terms of cross-cutting skills and digital literacy. The preferred training methods include laboratory activities, in-person seminars, and blended or online courses. Among the topics of greatest interest are learner-centered teaching, instructional strategies for developing creative thinking, active teaching methodologies such as cooperative learning, the use of digital resources (multimedia materials, Learning Management Systems, educational apps), and the development of soft skills for teaching (Vinci and Perla, 2018).

In addition to the literature studies, satisfaction questionnaires from previous training courses offered by GLIA were also analyzed. These questionnaires revealed similar interests regarding topics for updating, and the need for short and flexible courses to align with ongoing teaching activities.

Based on this, an asynchronous online course accessible at any time and place, using any device, was conceived. The self-paced course is designed as a short, intensive program, not only in a theoretical but also in a practical sense, providing applicable and effective educational tools.

Once the needs were analyzed, and the course objectives deduced, the design of the course structure and content followed. Regarding the instructional design process, it was articulated in three main phases: 1) macro-design, defining educational objectives, evaluating these objectives, and determining strategies and educational resources; 2) micro-design, detailing teaching methods, time allocation, and evalu-

ation methods for the course; 3) designing individual e-tivities, i.e., online activities (Trentin et al., 2020).

In terms of macro-design, the identified educational objectives include expanding knowledge of inclusivity and accessibility concepts in the educational field, understanding the specific educational needs of students with SEN, learning the theoretical and practical foundations of accessible teaching, and learning and applying compensatory teaching tools and accessible resources.

Subsequently, in the micro-design phase, the course topics, support resources, activities, and scripts were defined. Regarding the topics, the course includes updates on inclusive concepts and techniques, along with an overview of services offered by the University.

Here are the main course contents:

1. Disability, accessibility, inclusion: a glossary
2. Getting to know students with SEN
3. The services for inclusion at the University of Genoa
4. How to make accessible presentations
5. Accessibility in Moodle
6. Maps as compensatory tools

The course contents aim to give professors and teaching staff instruments and measures to adopt to enhance students with SEN's learning process, especially focusing on language needs (both in L1 and L2).

As for the resources, in line with the UDL principle that envisions multiple forms of representation, we decided to include both multimedia, mainly videos, and textual resources. For each video segment, slides and optional additional texts for further understanding are provided. At the end of the expository phase, a self-assessment of knowledge is planned. Participants are required to review an inclusive PowerPoint presentation or evaluate a concept map, indicating strengths and weaknesses. Participants are then given the opportunity for general feedback through key solutions and personalized feedback through peer evaluation, i.e., feedback from another course participant or feedback from one of the course tutors.

The course duration is estimated at approximately 3 hours, distributed as follows:

- Expository teaching: 1 hour and 20 minutes;
- Evaluative activities (questionnaires and self-assessment test): 1 hour;
- Independent study: 40 minutes.

The third and final design phase concerns the creation of e-tivities. This phase focused on writing scripts and creating videos, in short pill formats (averaging between 7 and 14 minutes) for expository teaching. For the evaluative phase, two e-tivities alternatives were designed: analyzing the accessibility of a PowerPoint presentation or evaluating the suitability of a concept map typically used by students with SEN during exams.

The educational environment hosting the course is AulaWeb, which is the University of Genoa's Moodle platform. The choice of such an environment is due to its flexibility, adaptability, and the familiarity of professors with it.

4. Testing phases prior to course release

The evaluation of the course prior to its release was divided in two parts. The first was the alpha test, which represents an internal evaluation process conducted within the institution or organization offering the course (Clark & Mayer, 2023). Its primary purpose is to assess the effectiveness of the program, identify potential issues or errors, and make substantial improvements before the course is made available to users. The alpha test typically involves a limited group of participants within the organization itself, such as course developers, instructors, or personnel involved in designing instructional materials. The beta test represents a phase in which the course, having passed internal evaluation, is subjected to a larger group of real users to test usability, clarity, and effectiveness (Clark & Mayer, 2023). In this phase, the course is made available to a selection of participants with profiles similar to the target audience. In the next paragraph, we are going to outline the results of these two phases.

4.1 Preliminary results

In the case of our course, the alpha testing phase was conducted by members of the GLIA group at the University of Genoa. After completing this initial review and making necessary modifications based on received feedback, the course advanced to the beta testing phase, involving a broader sample of real users before the final release.

The beta testing phase involved a sample of 10 professors and researchers from the University of Genoa, coming from various scientific disciplines. These participants had two months to complete the course and fill out two specific questionnaires aimed at gathering structured feedback.

4.1.1 Initial questionnaire - Participants information and background knowledge

The first questionnaire, administered at the beginning of the course, aimed to acquire preliminary information about the profiles of participating users. Participants were asked to provide details regarding gender, scientific-disciplinary sector, and position within the university. Of the beta test participants, 4 were women and 6 were men. In terms of academic roles, 8 were structured professors, one was a contract lecturer, and one was a researcher. Regarding the disciplinary sector, 4 belonged to the humanities/social field, 4 to the scientific/technological sector, and 2 to the health sector. In terms of years of service, 7 had been working at the university for more than ten years, while 3 had been working for more than five but less than ten. The participant sample appears balanced and representative across all measured dimensions.

The second part of the questionnaire focuses on detecting the skills and beliefs related to inclusion that participants possess before starting the course (as highlighted in Table 1). In the “Average Score” column, the average scores assigned by participating professors in the beta testing phase have been calculated. The results reveal interesting information about the perceptions and practices of professors regarding inclusion topics.

Table 1

<i>Evaluate the following statements on a scale from 1 to 4, where 1 indicates “strongly disagree” and 4 indicates “strongly agree”</i>	<i>Mean score</i>
I believe that students with disabilities and learning disorders should be able to actively participate in the lesson	4
I am concerned that students in my course may perceive accommodations for students with disabilities and SpLD as unfair.	1,4
It happens that some students with disabilities or SpLD ask me to implement specific measures during the course.	2,5
It happens that some students with disabilities or SpLD ask me for assistance during the evaluation phase.	3,8
Students with SpLD promptly communicate their educational needs to me.	2,8
I believe that my lessons already take into account issues related to inclusivity and accessibility.	2,9
I am familiar with the measures provided by the University to make the educational process accessible and inclusive for students with SpLD.	3,5
I believe that the materials provided to students in my course can be used by those with disabilities or SpLD.	3,1
I am aware of dispensations and compensatory tools for students with disabilities and SpLD.	3,8
I try to implement alternative teaching strategies if I know there are students with disabilities or SpLD in my course.	2,9

The third part of the questionnaire is dedicated to investigating the teaching practices used by the participants, offering a comprehensive overview of the perspectives and teaching habits among the involved faculty (as highlighted in Table 2). This section aims to provide additional details on the dynamics at play and the actual implementation of inclusive teaching strategies within university lectures.

Table 2

<i>Indicate how often you use these teaching practices on a scale from 1 to 4, where 1 indicates "rarely" and 4 indicates "very often"</i>	<i>Mean score</i>
Traditional lecture	3,6
Use of visual aids (presentation, maps, diagrams, videos, graphics...)	3,5
Multisensory activities	2
Flipped classroom	1,5
Peer review	1,8

4.1.2 Final questionnaire - User experience and learning perception

The second questionnaire, administered at the end of the course, aims to assess the satisfaction with the content offered in relation to individual needs, the clarity in presenting topics, the overall usability of the course, as well as the desire to apply the acquired skills in university teaching and interactions with students (Table 3).

Table 3

<i>Evaluate the following statements on a scale from 1 to 4, where 1 indicates "strongly disagree" and 4 indicates "strongly agree"</i>	<i>Mean score</i>
The topic addressed is relevant to the teaching function of the university professor	4
This course has allowed me to improve my level of theoretical-practical knowledge on the topic	3,6
The structure of the course was satisfactory	3,9
I believe that the clarity of presentation by the instructors was satisfactory	3,7
The instructors stimulated my interest in further exploring the topics	3,9
The time dedicated to explaining the content was adequate	3,6
The online platform hosting the course was suitable for its purpose	4
I will try to introduce/apply some of the knowledge gained during this course in my professional practice	4

5. Discussion

Preliminary data from the alpha and beta tests were primarily aimed at: (1) mapping the beliefs and practices of a group of users comparable to the intended target audience, and (2) evaluating participants' satisfaction with the course during this phase. These data were collected through an initial questionnaire and a final questionnaire, respectively.

The initial questionnaire revealed that, despite demonstrating knowledge of the tools and measures available at the university, the application of alternative teaching strategies remains limited among university professors. From the scores assigned by participants, it emerges that traditional lectures are predominantly used, with a positive incorporation of visual aids. The adoption of multisensory activities or participatory methodologies, such as the flipped classroom and peer review, still seems to be rare.

Participants highlighted that students tend to request accommodations, permitted by dedicated laws, mainly during evaluation phases rather than during instructional activities. A key goal of our course is precisely to promote inclusivity from the lesson design phase, extending it beyond examinations. Furthermore, they have noted that students do not promptly communicate their educational needs, a crucial aspect for successfully implementing inclusive measures.

The scores given in the final questionnaire reveal a high satisfaction level across all areas investigated. Participants believe that the topic is relevant to their needs and has enhanced their theoretical-practical knowledge of inclusion. They also gave positive ratings regarding the course organization, clarity of instructors, and the learning platform. It is encouraging that participants expressed their intention to apply the acquired knowledge in their professional practices, which is undoubtedly the ultimate goal of any educational proposal.

The two questionnaires were not interconnected, as they addressed distinct objectives outlined in the introduction of this discussion. Future research involving a larger cohort of course participants will re-administer the initial questionnaire at the end of the course to determine whether participation has led to measurable changes in the application of best practices. Notably, a limitation of the present study is its focus on participant satisfaction rather than exploring potential shifts in their perceptions of the subjects covered. To address this gap, a follow-up study employing a pre-test, intervention, and post-test design is planned.

6. Conclusions

In this contribution, we introduced an experimental online course designed for university professors and researchers. The primary objective was to familiarize them with the diverse educational and linguistic needs of students with SEN, as formal instruction on this matter is generally lacking in university lecture settings. After delineating the theoretical foundations and course contents, we presented data from preliminary tests conducted before the official release. Preliminary results are promising, suggesting that participants perceived an enhancement in their knowledge of strategies to foster inclusivity in their lectures through the course. The exploratory testing provided valuable insights into the overall perception of the course, which was positively received. Evaluating the extent to which the course content met expectations revealed that the content was deemed applicable and relevant to the university teaching context.

Following alpha and beta testing and gathering essential feedback from participants, the course underwent further refinement in preparation for its official release in September 2023. Nevertheless, to ascertain the course's efficacy in terms of learning outcomes, and shifts in perception of inclusive and accessible teaching, additional studies will be required, involving a broader sample of participants and using appropriate statistical methodologies.

Bibliographical References

(s.d.) <https://www.anvur.it/attivita/ava/accreditamento-iniziale/linee-guida-per-laccreditamento-iniziale/a-a-2022-2023>.

Andrews, Dee H., and Ludwika A. Goodson. 1980. "A comparative analysis of models of instructional design." *Journal of instructional development* 3(4): 2-16.

Cardinaletti, Anna. 2018. *Test linguistici accessibili per studenti sordi e con DSA: pari opportunità per l'accesso all'università. Test linguistici accessibili per studenti sordi e con dsa*, 1-327.

Clark, Ruth and Mayer, Richard. 2023. *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & sons.

Daloiso, Michele. 2009. La dislessia evolutiva: un quadro linguistico, psicolinguistico e glottodidattico. *Studi di glottodidattica*, 3(3), 25-43

Daloiso, Michele. 2012. *Lingue straniere e dislessia evolutiva. Teoria e Metodologia per una glottodidattica accessibile*. UTET Università

Krashen, Stephen D., and Tracy Terrell. 1983. *Natural approach* (pp. 20-20). New York: Pergamon.

Rose, David H., Ted S. Hasselbring, Skip Stahl, and Joy Zabala. 2005. Assistive technology and universal design for learning: Two sides of the same coin. *Handbook of special education technology research and practice*, 507-518.

Trentin, Guglielmo, Maria Cecilia Reyes and Valeria Piras. 2020. Come disegnare un corso online: Criteri di progettazione didattica e della comunicazione. *Come disegnare un corso online*, 1-160.

Vinci, Viviana and Loredana Perla. 2018. TLL (Teaching Learning Laboratory) e formazione dialettica dei docenti universitari alla didattica: primi passi verso la certificazione della competenza pedagogica in Uniba. *Lifelong Lifewide Learning*, 14(32), 68-88.