

Advising college students with dis/abilities in online learning

José Israel Reyes^{*} and Julio Meneses

Department of Psychology and Education, Open University of Catalonia, Barcelona, Spain

Most distance universities have adopted advising practices traditionally employed in on-campus institutions. Nonetheless, little is known about the role of academic advisers while guiding students with dis/abilities to engage and achieve success in online higher education. This study aimed to explore and analyze advisers' perspectives related to supporting the diversity of these students in a fully online university. We followed the methodology of a case study based on semi-structured interviews in which 14 advisers participated. Our findings show that even though advisers face challenges when advising online students with dis/abilities, they attempt to support them proactively by offering personalized tracking. A paradigm shift from a reactive to a proactive approach by adopting inclusive practices would greatly improve the inclusion of all learners. Online institutions could better support learners with dis/abilities by framing all processes in the universal design principles and promoting collaborative and coordinated work among advisers, faculty, and staff.

Keywords: online learning; academic advising; students with dis/abilities; inclusion; universal design

Introduction

Most distance institutions have adopted advising practices traditionally employed in on-campus universities to support learners (Argüello & Méndez, 2019; Pardy, 2016). But advising and supporting students in online learning environments entail a change of paradigm (Kember et al., 2022; Snow & Coker, 2020; Tait, 2014), especially when it concerns the attention of those with dis/abilities (Kocdar & Bozkurt, 2022). Although

^{*} CONTACT José Israel Reyes jreyesrey@uoc.edu

online advising shares similarities with in-person advising, online learners face extra challenges in comparison with students in on-campus settings, including loneliness, anxiety, and technological issues (Argüello & Méndez, 2019; LaPadula, 2003). These challenges could have a higher impact when students are dealing with mental and physical conditions; hence, online advisers are required to develop new strategies aimed at supporting these learners to cope with such adversities.

Academic advising for online learners should stress key components such as communication, problem-solving, relationship management, learning and psycho-emotional support, and administrative processing (Warren & Schwitzer, 2018). Online institutions should also enable academic advisers to work with other stakeholders such as staff and faculty members to support students adequately (Rimbau-Gilabert et al., 2011). Coordinating actions to support learners among support services, advisers, administrative staff, and faculty positively affects their academic success (Kocdar & Bozkurt, 2022; O. Simpson, 2013; Thorpe, 2002).

The literature is solid in that academic advising in higher education, either in-person or online, is associated with students' persistence and success (Drake, 2011; Tippetts et al., 2020; Young-Jones et al., 2013). Most studies conducted in the last 2 decades have shown that students who receive effective advising from their first days at university are more likely to persist in their studies (Tippetts et al., 2020; Young-Jones et al., 2013). Recent investigations have also suggested that effective advising makes online students feel adapted and integrated into their programs of study as well as in the institution in general, which enhances their emotional well-being and academic performance (Argüello & Méndez, 2019).

One of the strongest components of advising is communication. Currently, online advisers contact students through different digital or electronic media, of which

the most common is email (Argüello & Méndez, 2019). Communication by email is advantageous for advisers and advisees not only because it overcomes the time and distance barriers but because it allows both parties to have a record of their interactions (Argüello & Méndez, 2019; Rimbau-Gilabert et al., 2011). But it can also be challenging because, in some cases, students need immediate responses or closer human touch to cope with their study-related issues. Hence, several studies have suggested the use of online meetings by videoconferencing, which has proven efficient (Argüello & Méndez, 2019; Pardy, 2016), especially after the COVID-19 pandemic (Bornschlegl & Caltabiano, 2022).

Academic advising is employed for all students irrespective of their circumstances, which is positive for promoting inclusion. However, the literature unveils some challenges when advising online learners with dis/abilities because many practices are focused on arranging accommodations or offering personalized support upon students' request (Bornschlegl & Caltabiano, 2022; Kilpatrick et al., 2017). This advising approach based on reacting to students' demands has proven insufficient to address the needs of all learners (Kilpatrick et al., 2017; Reyes et al., 2022). For instance, there is solid evidence that some students do not disclose their condition to their advisers, instructors, or support services (Melián & Meneses, 2022; Tongsookdee, 2020), which means that they do not receive any support if courses, services, or processes are inaccessible.

The universal design (UD) approach applied in educational environments is highly effective to promote the inclusion of online learners with a wider range of profiles (Burgstahler, 2016; Rao et al., 2021). There are different frameworks of UD for educational purposes such as universal design for instruction (UDI) and universal design for learning (UDL). UDI focuses on the entire system by designing learning

environments and resources suitable to all learners (Scott et al., 2003); UDL focuses on promoting students' learning by considering inclusive course design, teaching, and assessment (Rao et al., 2021). In this regard, adopting these frameworks into advising practices may become very useful to enhance online learners' retention and success.

Advising strategies focused on UD in a fully online learning environment include, among others, enhancing the readability of textual information by writing short sentences, giving access to summaries of procedures (i.e., through infographics), and making sure that the information is understandable and meaningful to all learners (Lowenthal et al., 2020). Most importantly, all textual information must be offered in audiovisual formats, either through subtitled podcasts and short videos or images with descriptive texts (Burgstahler, 2016). Additionally, effective advising practices should incorporate diverse strategies such as seminars, workshops, writing courses, service and community-based learning, collaborative projects, and community building (Tait, 2014). All these strategies must be designed and carried out following UD principles.

Little is known about the application of UD frameworks when it concerns online advising, but the literature suggests some directions. As such, designing inclusive online courses, as well as advising and teaching, entails stronger efforts in terms of time and resources (Xie & Rice, 2021), but the results of doing so clearly contribute to enhancing online students' learning, persistence, and success (Catalano, 2014; Rao et al., 2021). The evidence indicates that advisers in on-campus universities face some challenges while advising learners with dis/abilities because of the lack of preparedness in addressing disability issues (Kilpatrick et al., 2017; Tongsookdee, 2020). This situation appears to be similar when it comes to distance learning. Therefore, advising online students by applying inclusive approaches based on UD principles could lead advisers

to enhance their strategies while supporting all learners irrespective of their circumstances.

Online advisers' role should also focus on creating a supportive environment, so that learners have a reference person in the university to rely on (Debenham et al., 1999; Warren & Schwitzer, 2018). Strengthening the relationships at the beginning of all students' academic trajectories is a useful strategy to promote this bond with advisers (Bornschlegl & Caltabiano, 2022; Warren & Schwitzer, 2018), so that they have someone in the university to communicate any need or difficulty. Encouraging online learners to engage in social media networks to mutually support each other on study-related difficulties has also been proved an effective strategy to improve their chances of success (Argüello & Méndez, 2019).

Analyzing online advisers' experiences, perceptions, and reflections about their advising practices to support learners with dis/abilities in a fully online university would help to understand in which areas online universities could concentrate their efforts to improve the inclusion of these students. Such knowledge may be also useful for faculty and staff members to include the advisers' perspectives when planning or designing courses, as well as for the academic authorities responsible for setting effective policies to address learners' needs.

Methods

This study aimed to explore and understand what the academic advisers' role is in supporting learners with dis/abilities in a fully online learning environment, as well as analyze their reflections on how to make online advising more suitable for these students. The following research questions guided our analysis:

- What is the experience of academic advisers while advising students with dis/abilities in a fully online university?
- How do academic advisers support students with dis/abilities in a fully online university?
- How could a fully online university improve the advising practices addressed to support students with dis/abilities according to the advisers' experiences and reflections?

Research design

This investigation was based on the methodology of a case study (Yin, 2009, 2012). Given that the structure and organization of a fully online university itself were the unit of analysis, our design is consistent with an intrinsic case study. The main purpose of this study was to develop a better understanding of participants' subjective experiences on how inclusion may be possible in the learning environment being researched, and this research design enabled us to do so (Miles et al., 2014; Yin, 2009). Thus, we sought common patterns in the participants' testimonies, so that we can reflect on the lesson learned from their perspective, as Yin (2009, 2012) suggests, under a social constructivist approach.

Context

This study was carried out in a fully online university, grounded on an open entry policy, and based on asynchronous text-based interaction. The university reported having 87,500 students enrolled in its more than 100 undergraduate and graduate programs for the academic year 2021–2022. Of them, 1,944 students reported having a certified disability (Melián & Meneses, 2022). There are three academic and

administrative figures to support students in this university: instructors, who accompany students with their learning acquisition; Student Services staff, who channel students' technical and administrative issues; and academic advisers, who support students alongside their academic trajectory with organizational, administrative, and decision-making processes. Each adviser supports a cohort of more than 100 students (the vast majority without a disability) and their role is based on addressing all students' general affairs rather than supporting those with specific issues, so they do not have any special expertise in disability. The communication among all these stakeholders and students takes place both via the university's virtual campus and by email. Instructors and advisers who directly attend to students have their main job in other institutions, so they reconcile their work in the university with their regular journey.

Procedures

Ethical considerations and participants' recruitment

The university's Ethical Committee approved the project and recommended the directives to adopt when contacting, selecting, and interviewing participants. Following these standards, both we and the participants signed an ethical protocol about the process of collecting, storing, and processing the information as well as guaranteeing the interviewees' confidentiality and anonymity. There was no relationship—either professional or personal—between the participants and us before the investigation.

The participants were selected through a purposive sampling in which we considered two selection criteria: participants' experience in advising students with dis/abilities in the university and the department to which they belonged, selecting two of them from each department. Next, in coordination with the Student Services, we sent an invitation by email to participate in the study to the most experienced advisers,

explaining the objectives of the study, how it would be conducted, and their rights as participants. The advisers interested in participating voluntarily contacted us and we gave them more information about the study.

Data collection

We conducted semi-structured interviews by videoconferencing with 14 advisers (Table 1) for 45 to 70 minutes, with an average of 1 hour. The fieldwork was carried out from April 2021 to November 2021. The interview guide comprised five blocks of open questions: participants' trajectory as advisers, communication strategies to interact with students, strategies to advise and support learners, challenges and needs while advising students with dis/abilities, and reflections. The interviews were recorded under participants' consent and then stored in a protected folder to be transcribed later.

Table 1. Participants' information [near here]

Participant	Program	Profile	Experience as adviser
P1	Arts	EOL (adviser) and EDI	7 years
P2	Geography and Art History	EOL (adviser)	3 years
P3	Psychology	EOL (adviser)	5 years
P4	Law	EOL (adviser)	5 years
P5	Computer Engineering	EOL (former student, adviser, and instructor) and EDI	18 years
P6	Digital and Multimedia Interaction	EOL (adviser)	12 years
P7	Communication	EOL (former student, adviser, and instructor) and EDI	15 years

P8	International relations	EOL (adviser)	3 years
P9	Law	EOL (former student and adviser)	3 years
P10	Business administration and management	EOL (adviser)	20 years
P11	Communication	EOL (adviser and instructor)	12 years
P12	Speech Therapy	EOL (former student, adviser, and instructor) and EDI	3 years
P13	Employment and Labour Relations	EOL (adviser)	20 years
P14	Speech Therapy	EOL (adviser) and EDI	3 years

Note. EOL = Experience in online learning; EDI = Experience in disability issues.

Data analysis

We followed the six-phase approach of thematic analysis (Braun et al., 2015; Braun & Clarke, 2006) to analyze the participants' experiences, points of view, and practices employed aimed at promoting inclusion. Thematic analysis offered us enough flexibility to connect our interview-based information with our research design, as well as the assurance of the study's trustworthiness by coding and analyzing data systematically and iteratively. In this regard, we "got familiar" with the data while reading the corpus several times, highlighting the excerpts that fit our research questions, taking notes, and creating memos about the consensus of the participants. Next, we carried out an iterative coding process using Atlas.ti, through which we defined the themes that better matched the participants' experiences, perceptions, and reflections with our research questions.

Results

We have organized the participants' testimonies into three themes. First, we analyze the advisers' experiences while advising students with dis/abilities in a fully online learning environment, including how their profiles facilitate their role, as well as their challenges and needs. The second theme summarizes the main strategies employed by advisers to attend to these students in the university including communication and intervention (advising and support) strategies. Finally, we analyze the advisers' reflection on what measures a fully online university should incorporate as a priority to enhance advising practices toward inclusion.

Advisers' experience attending different types of disabilities

Advisers' profiles

Most respondents had extensive experience in online learning, either as former students, advisers, or instructors. But almost none had any experience in or knowledge of disability issues. Despite the lack of knowledge, these advisers attempted to support learners with dis/abilities from their experience in online learning. Those who self-identified as former students in the university described their experience as follows: "I (without a dis/ability) experienced successful and not successful moments as an online student, so I empathize with these students giving them emotional support" (Participant [P] 5). Another participant commented: "It motivates me to promote the access to education as a human right... I am trying not to fail where I found my advisers failed" (P9).

Some advisers had experience in disability issues because they work or have worked in external contexts with people with dis/abilities. For them, supporting students living with any dis/ability is effortless since they recognize some patterns that suggest

how to intervene. “Once I realized that I had this student [with multiple dis/abilities] I started to revive everything; I contacted the person responsible for attending to these issues to communicate the student’s situation and how to support her/him” (P5).

Likewise, those with experience as both instructors and advisers face fewer difficulties in supporting these students as they address any issue by coordinating strategies with other university stakeholders such as faculty and staff. “Because I’m also an instructor, my coworkers see professors as part of the team; it facilitates working collaboratively” (P12). Other participants described themselves as “passionate about advising or teaching” (P7; P8), which guided them to support students proactively.

Attending different types of disabilities

The types of disabilities most challenging to attend to for the participants included mental health conditions and chronic illnesses. For instance, the advisers highlighted their difficulties while advising students who usually experience emotional changes. “This student emails me and says: ‘I will abandon the studies, but 15 minutes or half-hour later comes back and says: ‘I get back the studies’, and this episode has happened many times” (P1). The adviser also expressed that students living with mental health conditions often do not take into consideration their advice, especially in decision-making processes such as the number of courses to enroll in. Many times, advisers feel overwhelmed as they do not know how to support them. “This student never listens to me. Trouble is that I am not an expert, and I don’t know how to address his issues adequately” (P4).

According to the participants, advising students with chronic illnesses such as fibromyalgia, hypersensitivity to chemical products or electronic devices, and students dealing with cancer also turn out to be challenging. Advising students with severe or

multiple dis/abilities also demands more intense and personalized support. “If I have many students like this one, it would be hard to attend them adequately because it requires three or four times the time I invest for other students without disabilities” (P2).

Limited guidelines and coordination

Our results showed that no clear guidelines on supporting learners with dis/abilities exist in the university. Hence, it causes the entire system to rely on reacting to students' requests, which may exclude those who do not feel comfortable disclosing their condition. According to advisers' testimonies, some students do not disclose their situation, or they do it just when they are in big trouble. Sometimes, these students even drop out of their studies. This issue is even harder to manage for advisers because they do not receive these students' information from anyone else. “I accessed these students' enrolment information, and they had a discount for disability issues incorporated ... But I haven't received any communication from the university” (P13). Internal communication is essential to attend to these students effectively and avoiding misunderstandings, as some advisers have experienced. “I have a student with Asperger's syndrome. In the beginning, I didn't understand why they asked the same thing several times until I realized their situation” (P2).

The advisers also perceive that, due to the nature of distance learning, information and guidelines among faculty and staff are missing when advising learners with dis/abilities: “I don't have a clear instruction on how to attend to these students; it's on my own initiative or empathy that I get involved” (P11). Regardless, it is evident that an institutional policy with clearer guidelines on supporting learners with different profiles from an inclusive frame is needed in this university. For instance, advisers often mediate between students and faculty to request or supervise curricular

accommodations but, according to the participants, every instructor decides whether to grant or deny the petition. “There are instructors with a high readiness to support these students, but other ones are more reluctant ... It is hard to get accommodation from them” (P4).

Advisers also experienced isolation issues while advising online students. The participants consider that such loneliness causes a significant scarcity of coordination and collaboration with university staff and faculty. As Figure 1 shows, according to advisers’ experiences, communication and support processes when addressing learners’ needs and demands in the university are not as fluid as they would like.

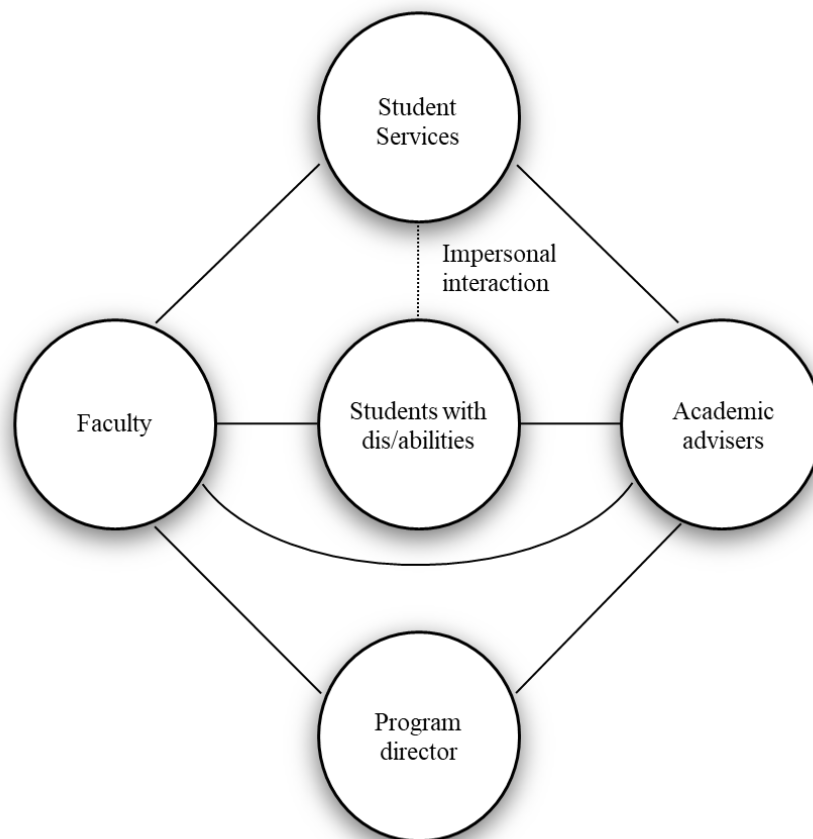


Figure 1. Institutional connections developed in the university to support students with dis/abilities

Advisers' strategies to advise learners with dis/abilities

Communication strategies

All the participants communicated asynchronously both with students and other university stakeholders. They used two channels to communicate with students: the virtual campus to disseminate general information and email to advise students privately. Most advisers are aware that asynchronous communication is very convenient both for them and the students. Even though most advisers attempted to advise students with dis/abilities under the same terms as everyone to avoid segregation and stigmatization, some of them personalized the messages once they knew about the students' condition, so that students could access the information effortlessly. "When students are dealing with disorders such as hypersensitivity, I send them brief messages; something simple and readable" (P1). Additionally, some advisers were willing to address these students' demands as soon as possible, considering that their pace of work is slower than others without a disability. So, immediate responses are crucial for them to complete their learning and assessment activities in time.

Several respondents expressed they use alternative communication strategies, even synchronous such as phone calls, videoconferencing, or face-to-face meetings, to advise learners with dis/abilities. Face-to-face meetings—either by videoconferencing or in-person—usually happened at the beginning of students' trajectory because these learners needed accurate information about the university's procedures as well as wanting to express their situation. According to several participants, students who requested synchronous meetings have several physical or sensory disabilities. These advisers consider that such meetings positively influenced these students' adaptation given that they had a broader landscape of the university and felt more accompanied.

Advisers also employed communication strategies such as phone calls or voice notes by email throughout students' academic trajectory. Most of these strategies were addressed to students with learning dis/abilities or mental health conditions for whom text-based communication causes accessibility and emotional challenges. "I send the information by email first, but if I see they have trouble, we use WhatsApp (text message or Facetime) ... With students with dyslexia or autism we do videoconference by Google Meet" (P9). A few advisers also commented that they use phone calls with several students to address the most salient issues, even with those without a disability.

Intervention strategies

Advisers' strategies to support learners with dis/abilities included mediation between them and instructors or the Student Services staff, advising and counseling practices, and providing emotional and instrumental support. Some advisers directly contacted the Student Services and faculty members to request accommodations on behalf of students, even though they usually just mediate conflicting situations where students feel unsatisfied with the accommodation received in the courses. The advising and counseling strategies focused on offering personalized monitoring and guiding students with the processes of requesting accommodations for teaching and final exams. "Apart from the faculty, we, as advisers, remind the students of all the processes; this is so useful for students with special educational needs" (P12).

The advisers also offer these learners the human touch they usually do not get in any other structure of the university. This kind of affection includes moral and emotional support, which is essential for students who deal with several adversities. "When they see a person who is supporting them, who is monitoring their progress, they feel grateful." The advisers attempted to motivate students by sending them

encouraging messages or supporting them through positive reinforcement “focused always on their success” (P5). Emotional support is often accompanied by instrumental support. While advisers provide students with motivational messages, they also suggest techniques to overcome the issues that students are dealing with. Some advisers go beyond and offer personalized support by phone and videoconferencing or adapt some textual contents that students find hard to access. One participant shared:

One student with dyslexia was calling me almost daily ... one call was for emotional unloading and the next one was to address her issues ... I explained to her the learning contents that way ... I also have other students who shared with me some dense textual learning resources and I highlighted the most important parts, but I did it voluntarily. (P11)

Although most students disclose their condition to advisers with the aim of requesting specific support, some of them just do it to express that they do not want any special treatment. Advisers such as P7, P9, and P13 commented on experiences in which students communicated their condition just to inform them. “The student explained his situation to me, I offered him the special support provided by the university’s Student Services, but he refused it” (P7).

The advisers in one department have developed a strategy to evaluate the interventions they employed with these students by having a record book in which they annotate every accommodation needed by each learner and its effectiveness. Thus, the advisers share such information with faculties for new courses in which these students enroll to coordinate the accommodations at least 2 months before the course starts. Advisers in other departments, such as P5 and P9, used similar strategies to track the effectiveness of their advising on these students’ performance, but they did not share them with anyone else in the university.

Advisers' reflection on improving online advising for students with dis/abilities

Collaboration between university stakeholders

The participants reflected on aspects on which the university should work to improve advising for students with dis/abilities. One of the most salient themes was the collaboration between them and other stakeholders involved in supporting students, such as faculty and Student Services staff. “Better coordination is essential and critical” (P7).

The advisers' role in the university is generic, which makes it challenging to support those with specific needs. Hence, guiding advisers in addressing the needs of all learners under an inclusive framing is a necessity. Additionally, most of the participants do not know the university's staff who manage the accommodations or the faculties. “It would be great having available a space for advisers in which they [the university] accompany us, or at least that they tell us about the services offered to students” (P8).

The respondents have experienced difficulties while addressing students' disability-related issues because of the scarce preparedness along with limited information, guidelines, and knowledge. Even though the university does have a team within Student Services to coordinate the accommodations, several participants considered that having a team of advisers with expertise in disability would represent a great step forward toward the inclusion of learners with dis/abilities in a fully online university. Therefore, the advisers' testimonies reveal that a significant distance separates them from other stakeholders responsible for supporting students. Figure 2 represents a model of coordination and support based on the participants' points of view that may be useful to address advisers' isolation and coordination issues when supporting students with dis/abilities.

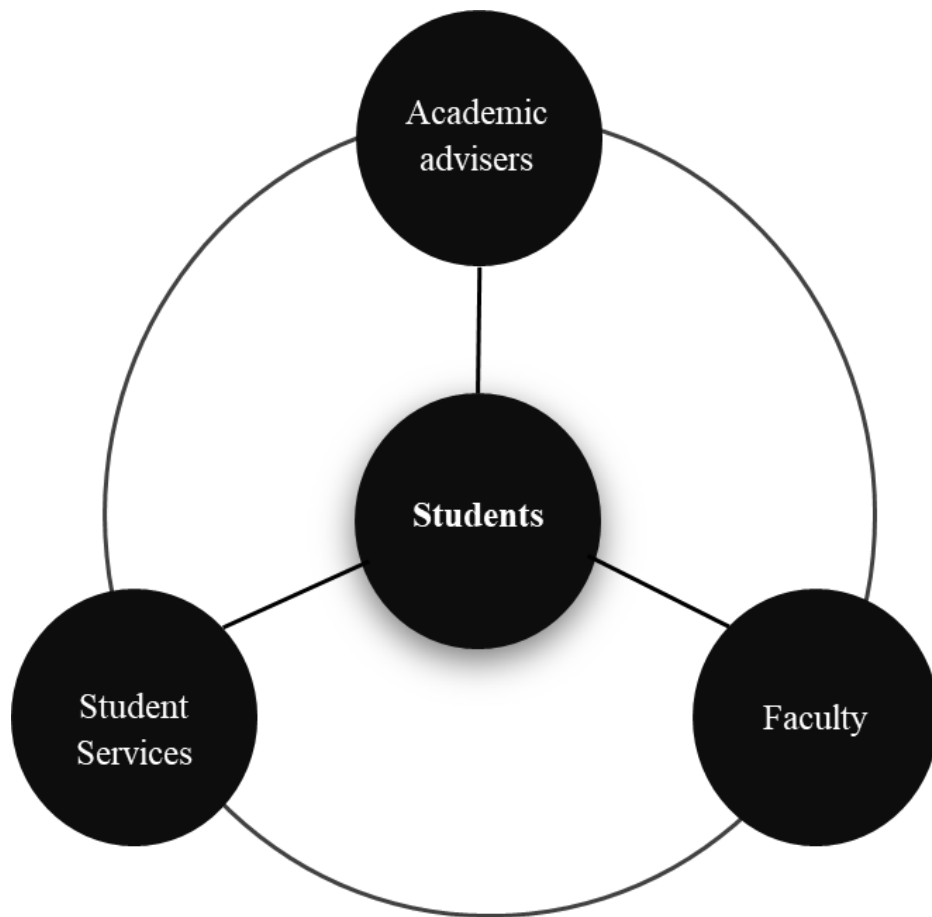


Figure 2. A collaborative model to advising online learners based on a proactive approach

Advisers also stated that, if the university provides them with clear guidelines and learning opportunities on disability issues, it would improve their ability to attend to these learners. More than half of the respondents preferred to have a team—either as an “elite unit” within advisers or as an external group (which is already available)—that coordinates all the institutional strategies addressed to attend to these students. P5 reflected on that matter as follows:

I think it would be better to have a team that works with these students directly. Someone who masters that knowledge so that can channel it through the program director and the faculties to agree on the type of support that would be offered to students according to their needs.

Many participants agreed with that idea, arguing that sometimes they manage issues out of their competence. “I can accompany students to some extent, but there are issues very sensitive to address and, perhaps, you’re getting into something that’s not your business” (P7).

Shifting toward an inclusive approach

Some learners, especially those with mental health conditions, do not feel comfortable explaining their situation to every faculty and staff member. They prefer “someone else does it confidentially because they do not want to disclose their situation straightaway” (P2). But rather than waiting for students to communicate their condition, online universities are urged to adopt inclusive practices, so that all learners can access resources and services by default: “The university will be inclusive when all students with any dis/ability can participate with no limitation and be successful ... I mean, providing learners with accessible media and resources to enable them to have equitable opportunities” (P5). This entails a paradigm shift in which neither learners need to request accommodations nor faculties and advisers need to accommodate resources at the last minute. P1 questioned himself on this matter:

If learners have universal access to information about paperwork it would be helpful ... I send this information through a PDF file and perhaps some students do not read it because it’s inaccessible for them ... this is an issue that needs to be addressed.

Advisers’ reflections showed that accessibility is an issue on which improvements should focus in all areas. “Many times, what these students find hard is not the course contents but accessing some tools and resources” (P6). The respondents also commented on the accessibility and usability faced by learners with dis/abilities with administrative procedures. In this regard, enabling universal access to procedures

and resources is essential to guarantee all learners' inclusion in a fully online university.

"It's mandatory making all the administrative processes accessible, usable, and more systematic" (P3).

Redesigning communication strategies

Several advisers agreed that asynchronous communication by email is very convenient for students, especially for those with severe and multiple disabilities, given that it enables them to interact flexibly with faculty and staff. Nonetheless, more than half of respondents also agreed that synchronous communication with learners is needed to reduce or eliminate some difficulties such as bureaucracy, misunderstandings, time-wasting, and even anxiety or stress. "If the fluency and exchange of information were faster, it would greatly facilitate everything because, sometimes, the students write an email, and they receive the answer from the Student Services staff 4 days later, when students are already overwhelmed" (P12).

The participants considered that making communication flexible around the students' needs and possibilities is the best option, considering the advisers' availability as well. For instance, while some advisers are willing to communicate synchronously by phone and video calls—in fact, they already do—others see it as unsustainable, as they work as advisers "in the wee hours of the morning" (P1) or simply they consider it would reduce flexibility and "the university would lose its spirit" (P12). Regardless of the chosen way of communication, most participants agreed that closer contact is needed to accompany students in a fully online learning environment.

Discussion

This case study focused on exploring the experiences of academic advisers while attending students with dis/abilities in a fully online university. We aimed to analyze the

main advising practices employed by the participants to support these students as well as their reflections on how to make online advising more inclusive. We defined three main themes based on the participants' testimonies to answer our research questions: advisers' experiences attending different types of dis/abilities; strategies to advise these learners; and reflection on improving online advising for these students.

The advisers' profile determines how they address the demands and needs disclosed by learners. But rather than focusing on finding a suitable profile for professionals attending to students with dis/abilities, what is really important here is that all online advisers feel prepared to support all learners irrespective of their circumstances. To do so, supporting these advisers in enhancing their awareness of the diversity of needs among students would be an early consideration, so that they can adopt effective strategies to advise all learners. Even though improving the awareness of diversity in online higher education involves the entire online university community, it would be useful starting with advisers as they have the closest contact with students. Thus, online advisers could adopt an inclusive approach to support all learners proactively and effectively.

The advisers' experience supporting learners with dis/abilities is closely linked with the type and severity of their condition. They feel more overwhelmed while supporting students with nontraditional disabilities, such as mental health and chronic conditions, due to the lack of knowledge and guidelines on how to address these students' needs. In such cases, online advisers wished that they could receive support on how to advise these students by adopting an inclusive approach. According to literature, the lack of knowledge and support for advisers on disability issues has been a notable concern in higher education (Dunn, 2005; LaPadula, 2003; Tongsookdee, 2020).

Our results suggest that promoting advisers' knowledge about focusing their advising practices on UD principles in online higher education is a real necessity. Advising approaches typically based on students' demands exclude those learners who decide to keep their condition undisclosed. Therefore, it is urgent that online advisers shift their support practices into a proactive approach that promotes the inclusion of all learners. This means that online advising strategies should be designed in a way that helps students to gain autonomy and self-efficacy while progressing in their academic trajectory. In this sense, UD is a useful approach that suggests some guidelines to make information, processes, services, and resources accessible to all learners. By using this approach, institutions can promote learners' autonomy while accessing resources or processes independently and therefore to keep their condition undisclosed (Burgstahler, 2016; Scott et al., 2003). In any case, adopting this approach does not replace advisers' role of offering online learners the human touch they may need but gives them more chances and resources to support all learners.

Our results are consistent with the literature (Drake et al., 2013) in that advising strategies in higher education are framed in three blocks: emotional and instrumental support, administrative procedures, and advising and counseling practices. The advisers' psychoemotional and instrumental support to learners is a salient role in online higher education (Warren & Schwitzer, 2018). Therefore, it is convenient to define institutional strategies that guide advisers to improve their practices in these areas and provide them with the necessary resources that enable them to advise all learners effectively.

Collaboration and coordination between all the stakeholders involved in supporting students are also key to promoting inclusion in a fully online university. The advisers involved in coordinating strategies within their department were likely to

support students effectively. Likewise, those who at least discussed the troubles they found and shared their experiences while attending to learners' needs with their colleagues to support each other also considered this informal collaboration very useful. Therefore, advising learners with diverse needs in a fully online university requires a well-structured institutional strategy and informal spaces in which the advisers can discuss, collaborate, and coordinate their strategies.

The advisers' testimonies are consistent with the literature regarding the effectiveness of combining different formats of communication particularly used in online learning (Argüello & Méndez, 2019; Pardy, 2016; Rimbau-Gilabert et al., 2011). There are no doubts regarding the suitability of asynchronous communication for these learners and online advisers. Nonetheless, all communication strategies should be based on UD to make interaction fluently and dynamic. For instance, advisers usually use synchronous interaction or asynchronous messages based on audiovisual formats to advise students with mental health conditions and learning dis/abilities. Incorporating diverse methods of interaction by combining audiovisual and text content and synchronous and asynchronous formats greatly enhances the communication between advisers and learners. Considering students with dis/abilities' diversity of needs, the communication processes should leverage the opportunities that diverse media offer in terms of flexibility, interactivity, and therefore accessibility, to facilitate their full involvement.

Conclusions

Advisers' practices in supporting students with different types of dis/abilities are key to promoting inclusion in online higher education. Therefore, even though this study shows that advisers attempt to address students' difficulties proactively, supporting the

advisers' work is essential. Enhancing their knowledge of inclusive practices is fundamental to providing them with effective resources directed at meeting all learners' needs. Focusing the institutional support on collaborative and coordinated strategies among support services, advisers, and instructors to address the needs of the wide range of students jointly is also crucial.

Online advisers provide learners with emotional support, which is essential for all students and particularly for those with dis/abilities to succeed in online higher education. In this regard, strengthening the relationship between advisers and students, as well as with the rest of the university stakeholders, would greatly enhance their possibilities to support all learners. To do so, a communication strategy based on flexible and diverse forms of interaction would increase these actors' chances to collaborate, as well as receive and provide academic support aiming at promoting students' success equitably.

Acknowledgments

We thank Sílvia Mata for helping us to access the participants, to the latter for sharing their experiences for the study, and Efreem Melián for helping us to proofread the manuscript.

The Version of Record of this manuscript has been published and is available in *Distance Education Journal*, November 16, 2022,

<https://www.tandfonline.com/journals/cdie20>, DOI:

<https://doi.org/10.1080/01587919.2022.2121264>

Disclosure statement

No potential conflict of interest was declared by the authors.

Geolocation information

This study was conducted at the Open University of Catalonia's 22@ building, Barcelona, Spain: 41.406719323451824°N, 2.1945476797315604°W.

Funding information

This research was funded by the Universitat Oberta de Catalunya.

Notes on contributors

José Israel Reyes is a Doctoral Candidate at the Universitat Oberta de Catalunya (UOC). His research interests include the analysis of students with dis/abilities' experiences in online higher education in terms of socialization, collaboration, and interaction, as well as the improvement of the academic support to promote their academic success.

Julio Meneses is an associate professor of Research Methods at the Faculty of Psychology and Education Sciences at the Universitat Oberta de Catalunya (UOC), head of the Learning Analytics Unit (eLearning Innovation Center), and an Internet Interdisciplinary Institute (IN3) researcher. Academic website: <https://femrecerca.cat/meneses>

ORCID

José Israel Reyes <https://orcid.org/0000-0001-8420-4438>

Julio Meneses <https://orcid.org/0000-0003-4959-456X>

References

- Argüello, G., & Méndez, M. G. (2019). Virtual advising: A tool for retention, engagement, and success for the graduate distance learner. *Distance Learning*, 16(2), 51–57. <https://www.infoagepub.com/products/distance-learning-vol-16-2>
- Bornschlegl, M., & Caltabiano, N. J. (2022). Increasing accessibility to academic support in higher education for diverse student cohorts. *Teaching and Learning Inquiry*, 10. <https://doi.org/10.20343/teachlearningqu.10.13>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., Clarke, V., & Rance, N. (2015). How to use thematic analysis with interview data. In A. Vossler & N. Moller (Eds.), *The counselling and psychotherapy research handbook* (pp. 183–197). SAGE Publications. <https://doi.org/10.4135/9781473909847.n13>
- Burgstahler, S. (2016). The development of accessibility indicators for distance learning programs. *Research in Learning Technology*, 14(1), 79–102. <https://doi.org/10.1080/09687760500479753>
- Catalano, A. (2014). Improving distance education for students with special needs: A qualitative study of students' experiences with an online library research course. *Journal of Library & Information Services in Distance Learning*, 8(1-2), 17–31. <https://doi.org/10.1080/1533290X.2014.902416>
- Debenham, M., Whitelock, D. M., Fung, P., & Emms, J. M. (1999). Online educational counselling for students with special needs: Building rapport. *Research in Learning Technology*, 7(1), 19–25. <https://doi.org/10.1080/0968776990070104>

Drake, J. K. (2011). The role of academic advising in student retention and persistence.

About Campus: Enriching the Student Learning Experience, 16(3), 8–12.

<https://doi.org/10.1002/abc.20062>

Drake, J. K., Jordan, P., & Miller, M. A. (2013). *Academic advising approaches strategies that teach students to make the most of college*. John Wiley & Sons.

Dunn, S. (2005). A place of transition: Directors' experiences of providing counseling and advising to distance students. *Journal of Distance Education*, 20(2), 40–57.

<http://www.jofde.ca/index.php/jde/article/view/86>

Kember, D., Trimble, A., & Fan, S. (2022). An investigation of the forms of support needed to promote the retention and success of online students. *American Journal of Distance Education*, 0(0), 1–16.

<https://doi.org/10.1080/08923647.2022.2061235>

Kilpatrick, S., Johns, S., Barnes, R., McLennan, D., & Magnussen, K. (2017).

Exploring the retention and success of students with disability in Australian higher education. *International Journal of Inclusive Education*, 21(7), 747–762.

<https://doi.org/10.1080/13603116.2016.1251980>

Kocdar, S., & Bozkurt, A. (2022). Supporting learners with special needs in open, distance, and digital education. In O. Zawacky-Richter & I. Jung (Eds.), *Handbook of open, distance and digital education* (pp. 1–16). Springer.

https://doi.org/10.1007/978-981-19-0351-9_49-1

LaPadula, M. (2003). A comprehensive look at online student support services for distance learners. *American Journal of Distance Education*, 17(2), 119–128.

https://doi.org/10.1207/S15389286AJDE1702_4

Lowenthal, P. R., Humphrey, M., Conley, Q., Dunlap, J. C., Greear, K., Lowenthal, A., & Giacumo, L. A. (2020). Creating accessible and inclusive online learning:

Moving beyond compliance and broadening the discussion. *Quarterly Review of Distance Education*, 21(2), 1–21.

<https://www.infoagepub.com/products/Quarterly-Review-of-Distance-Education-21-2>

Melián, E., & Meneses, J. (2022). Getting ahead in the online university: Disclosure experiences of students with apparent and hidden disabilities. *International Journal of Educational Research*, 114, 101991.

<https://doi.org/10.1016/j.ijer.2022.101991>

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.

Pardy, L. (2016). *Academic advising in British Columbia*. British Columbia Council on Admissions and Transfer (p. 38).

<https://www.bccat.ca/pubs/Reports/AcademicAdvising2016.pdf>

Rao, K., Torres, C., & Smith, S. J. (2021). Digital tools and UDL-based instructional strategies to support students with disabilities online. *Journal of Special Education Technology*. <https://doi.org/10.1177/0162643421998327>

Reyes, J. I., Meneses, J., & Melián, E. (2022). A systematic review of academic interventions for students with disabilities in online higher education. *European Journal of Special Needs Education*, 37(4), 569–586.

<https://doi.org/10.1080/08856257.2021.1911525>

Rimbau-Gilabert, E., Martinez-Arguelles, M., & Ruiz-Dotras, E. (2011). Developing models for online academic advising: Functions, tools and organisation of the advising system in a virtual university. *International Journal of Technology Enhanced Learning*, 3(2), 124–136.

<https://www.inderscienceonline.com/doi/abs/10.1504/IJTEL.2011.039397>

- Scott, S., Mcguire, J., & Shaw, S. (2003). Universal Design for Instruction: A new paradigm for adult instruction in postsecondary education. *Remedial and Special Education*, 24(6), 369–379. <https://doi.org/10.1177/07419325030240060801>
- Simpson, O. (2013). *Supporting students for success in online and distance education* (3rd ed.). Routledge. <https://doi.org/10.4324/9780203095737>
- Snow, W. H., & Coker, J. K. (2020). Distance counselor education: Past, present, future. *Professional Counselor*, 10(1), 40–56.
<https://tpcjournal.nbcc.org/distance-counselor-education-past-present-future/>
- Tait, A. (2014). From place to virtual space: Reconfiguring student support for distance and e-Learning in the digital age. *Open Praxis*, 6(1), 5–16.
<https://doi.org/10.3316/informit.935850797583299>
- Thorpe, M. (2002). Rethinking learner support: The challenge of collaborative online learning. *Open Learning: The Journal of Open, Distance and e-Learning*, 17(2), 105–119. <https://doi.org/10.1080/02680510220146887a>
- Tippetts, M. M., Brandley, A. T., Metro, J., King, M., Ogren, C., & Zick, C. D. (2020). Promoting persistence: The role of academic advisors. *Journal of College Student Retention: Research, Theory & Practice*, Article 1521025120924804.
<https://doi.org/10.1177/1521025120924804>
- Tongsookdee, R. (2020). Academic advisors’ experiences and needs working with students with disabilities: A case of Chiang Mai University. *International Journal of Child Development and Mental Health*, 7(2), 21–32. <https://he01.tci-thaijo.org/index.php/cdmh/article/view/196292>
- Warren, G., & Schwitzer, A. M. (2018). Two-year college distance-learning students with psychological disorders: Counseling needs and responses. *Journal of*

Reyes, J. I., & Meneses, J. (2022). Advising college students with dis/abilities in online learning. *Distance Education*, 43(4), 526-542. <https://doi.org/10.1080/01587919.2022.2121264>

College Student Psychotherapy, 32(4), 270–281.

<https://doi.org/10.1080/87568225.2017.1396518>

Xie, J., & Rice, M. F. (2021). Professional and social investment in universal design for learning in higher education: Insights from a faculty development programme.

Journal of Further and Higher Education, 45(7), 886–900.

<https://doi.org/10.1080/0309877X.2020.1827372>

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed). Sage Publications.

Yin, R. K. (2012). *Applications of case study research* (3rd ed.). SAGE.

Young-Jones, A. D., Burt, T. D., Dixon, S., & Hawthorne, M. J. (2013). Academic advising: Does it really impact student success? *Quality Assurance in Education*, 21(1), 7–19. <https://doi.org/10.1108/09684881311293034>