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ВИСОКОТО ОБРАЗОВАНИЕ ЗА СТУДЕНТИТЕ СО ИНВАЛИДНОСТ: ПРЕГЛЕД НА ЛИТЕРАТУРА

Крашка содржина

На универзишешско ниво, йроценшой на студенти со високо образование сè йовеќе се зголемува. Во Македонија не йосојат статистички йодатоци за бројой на зайишани студенти со инвалидност на академските институции. Несоодветната йристатност до високообразовните институции, недостатокот на йоддршка, негативните социјални ставови и социјалната изолација, како и немањето финансии влијае на устехот на студентите со инвалидност и на нивната инклузија во високот образование. Целта на овој труд е да се даде детален преглед на некои од овие предизвици во високот образование на студентите со инвалидност. Направена е детална анализа на 11 тубликации. Од овие публикации можеме да заклучиме дека членовите на факултетската утрава, генерално, имаат позитивни ставови кон студентите со инвалидност, но некои истражувања укажуваат и на не толку поволни ставови кон студентите со т.н. невидлива инвалидност, како што се тешкоти во учењето. Исто така, постојат контрадикторни резултати во дел од публикациите за академскот от остигање на студентите со и без инвалидност.

Клучни зборови: ВИСОКО ОБРАЗОВАНИЕ, СТУДЕНТИ СО ИНВАЛИДНОСТ, СТУДЕНТИ БЕЗ ИНВАЛИДНОСТ, СТАВОВИ, АКАДЕМСКИ ПОСТИГНУВАЊА

Вовед

Образованието е многу важно за успехот на секој поединец. Многумина сметаат дека стекнувањето диплома е "клучно за остварување квалитетни професионални можности" (Reinschmiedt et al., 3). За студентите со инвалидност, стекнувањето диплома е од особена важност, затоа што тие во споредба со нивните врсници без инвалидност имаат помала стапка на вработеност (Newman et al., 2011). Достапност на високото образование (ВО) за сите членови на заедницаша, вклучувајќи $\bar{\iota}u$ и лицаша со инвалидносш, е од императивно значење за секоја земја.

Во литературата, од историски аспект, наведено е дека студентите со инвалидност се недоволно застапени во високото образование (Macleod and Cebula, 2009). Но, сепак, бројот на студенти со инвалидност постојано се зголемува на универзитетите (Department of Education and Training, 2014). Студентите со инвалидност продолжуваат да бидат растечка демографска група на факултетските и универзитетските кампуси (Sanford et al., 2011). Според Херст и Смердон (Hurst and

Smerdon, 2000), 63 % од сите средношколци со инвалидност се запишуваат на високообразовните институции. Поголем број од студентите со инвалидност имаат тешкотии во учењето (ТУ), АДХД и нарушувања во менталното здравје (Raue and Lewis, 2011).

Голем број од студентите со инвалидност се соочуваат со значителни пречки кои негативно се рефлектираат на нивните искуства во високото образование.

Во академските институции не постојат ресурси што ќе го направат високото образование подостапно за студентите со различна инвалидност (телесно и сензорно оштетување) ниту, пак, се одвојуваат доволно финансиски средства за физичка адаптација на објектите наменети за теоретска и практична настава, а не постои ни посебен фонд за асистивна технологија и за друга адаптирана опрема со која би се зголемила ефикасноста во образовниот процес.

Архитектонската недостапност на високообразовните институции, недостатокот на психосоцијална поддршка, негативните социјални ставови и социјалната изолација, како и недостатокот на финансиски средства влијаат врз успехот и инклузијата на студентите со инвалидност во високото образование. Затоа, за да им станат достапни академските институции на лицата со инвалидност, важно е соодветно и наменски да се проектираат буџетските средства во државата, а и на самите универзитети (Ramot and Feldman, 2003); покрај стипендии за студентите, треба да се обезбедат средства за физичко адаптирање на објектите наменети за високообразовна дејност, набавка на компјутери, асистивна технологија и друга адаптирана опрема за поефикасно следење и совладување на програмските содржини (Inbar, 2003).

Во овој труд, со цел да се направи подетална анализа на високото образование на студентите со инвалидност, поставени се следниве истражувачки прашања: кои се ставовите на универзитетскиот персонал кон студентите со инвалидност, дали студентите со и без инвалидност имаат исти академски постигнувања и дали стапката на дипломирање значително се разликува меѓу студентите со и без инвалидност.

Методологија

Исшражувачка йроцедура

Во периодот март и април 2018 година беа пребарани и анализирани сите релевантни истражувања за академското образование на студентите со инвалидност во електронските бази на податоци: ERIC, Google Scholar и SocINDEX. Како дескриптори се користени следниве комбинации на клучни зборови: "студенти со инвалидност" или "студенти со посебни потреби" и "високо образование" или "универзитетско образование". Пребарувањето беше систематски спроведено на статии од академски рецензирани списанија и не беше ограничено по години. Голем број од трудовите се дескриптивни студии. Поточно, поголемиот дел од нив се фокусираат на дескрипција на ставовите на универзитетскиот персонал, знаења и практики, и тоа преку спроведување анкети.

Резултати и дискусија

Резултатите од ова истражување ги организиравме според три аспекти: ставовите на универзитетскиот персонал кон студентите со инвалидност, стапката на дипломирање на студентите со инвалидност и академските резултати на студентите со или без инвалидност. За секој аспект е презентирана анализа на студиите што ги испитуваат ставовите на универзитетскиот персонал кон студентите со инвалидност (табела 1), студии кои се однесуваат на стапката на дипломирање на студентите со и без инвалидност (табела 2) и студии за академското постигнување на студентите со инвалидност (табела 3).

Ставови на универзитетскиот йерсонал кон студентите со инвалидност

Ставовите кон попреченоста, како варијабла, се детално истражувани во многу објавени студии за инвалидноста. Но оваа варијабла е најмалку истражувана во публикациите за студентите со инвалидност во високото образование. Многу студии ја истакнуваат важноста на ставовите на универзитетскиот персонал кон студентите со инвалидност (СИ), нивната свест за потребите на овие студенти и знаењето за нивното соодветно сместување (Sachs and Schreuer, 2011). Овие ставови влијаат на успехот или неуспехот на студентите со инвалидност, но влијаат и на инклузијата во високото образование (Rao, 2004). Негативните ставови на универзитетскиот персонал можат да ги попречуваат студентите, особено студентите со "невидливи" пречки, да ги согледаат своите попречености и да побараат соодветен пристап (Johnson, 2006).

Табела 1. Став на универзитетскиот персонал

Автор	N / Институција	Став
Гринбергер (Greenberger, 2016)	25 члена на факултет / Институт за техноло- гија во Израел	Членовите на факултетот имаат <u>позитивни ставови</u> кон СИ, но имаат помалку позитивни ставови кон студентите со тешкотии во учењето (ТУ).
	23 члена на факултет / Универзитет за умет- ности, Њујорк	Резултатите покажуваат дека иако членовите на факултетот, генерално, имаат позитивни ставови кон СИ, тие имаат понегативни ставови кон студентите со проблеми во менталното здравје и ТУ отколку кон учениците со телесна попреченост.
Абу-Хамор (Abu- Hamour, 2013)	70 члена на факултет / Универзитет во Јордан	Поголем број од членовите имаат <u>позитивни ставови</u> кон инклузијата на СИ; исто така, тие не се запознаени со законодавството за инвалидност во Јордан; и мнозинството од членовите не се обучени да подучуваат СИ.

Од истражувањата што се наведени во табела 1, може да се заклучи дека универзитетскиот персонал има позитивни ставови кон студентите со инвалидност. Некои истражувања покажуваат недоволно поволни ставови кон студентите со "невидлива" инвалидност, како што се тешкотиите во учењето, АДХД, и менталните заболувања. Овие "невидливи" попречености обично подразбираат и бараат адаптации во наставата, курсот и процената.

Алистон (Alliston, 2011), Ломбарди и Мареј (Lombardi and Murray, 2011), Кук и сор. (Cook et al., 2009) истакнуваат дека факултетскиот персонал од женски пол покажува поголемо знаење за попреченостите, подготвеност за прифаќање и поддршка на студентите со инвалидност. Резултатите од други истражувања укажуваат дека персоналот што имал контакт со СИ има попозитивни ставови кон инклузијата на студентите со инвалидност (Bourke, Strehorn and Silver, 2000). Универзитетскиот персонал кој имал почесто контакт со студентите со инвалидност покажал и поголеми познавања за попреченоста. Покрај тоа, интересно е да се спомене дека членовите со понизок академски статус се поподготвени да направат адаптации во наставата отколку постарите предавачи и професори (Lombardi and Murray, 2011).

Некои студии укажуваат дека универзитетскиот персонал нема солидно разбирање за законодавната институционална политика за инклузија на студентите со инвалидност (Abu-Hamour, 2013; Katsiyannis, Zhang, Landmark and Reber, 2009; Murray, Flannery and Wren, 2008).

Академски йосшигнувања на сшуденшише со и без инвалидносш

Општо земено, постојат различни наоди за тоа дали студентите со и без инвалидност имаат исти или различни академски перформанси (Jorgenson et al., 2005).

Табела 2. Академско постигнување

Автор	N / институција	Академско постигнување
Вит, Филипс и Какела (Witte, Philips, and Kakela, 1998)	Студенти со ТУ ¹ = 55 СБИ ² = 55/ Универзитет Ма- јами	Студентите со ТУ <u>дипломирале со просечна оценка (ПО) значително помала</u> од групата на СБИ.
Спаркс, Јаворски и Филипс (Sparks, Javorsky and Philips, 2004)	Студенти со ADHD = 68/ Уни- верзитет во Мид- фест, САД	Студентите со АДХД покажале <u>исти ака-</u> <u>демски постигнувања</u> со групата врсници и дипломирале со слични успеси.
Jopreнсен и сор. (Jorgenson et al., 2005)	40.000 СИ и СБИ / универзитети во Канада	Статистички незначајна разлика во про- сечната оценка (ПО), но е констатирана разлика во тежината на студиските кури- кулуми и во изборот на предмети кај сту- дентите со и без инвалидност.

Сакс и Шреер (Sachs and Schreuer, 2011)	СБИ ² = 156 СИ ³ = 170/ Универзитети во Израел	Академските постигнувања на студентите со и без инвалидност се слични. Студентските искуства се разликуваат според типот на инвалидноста. Имено, студентите со телесна попреченост се позадоволни од студентите со сензорна попреченост или психијатриско заболување.
Bасиелевски (Wasielewski, 2016)	СБИ ² = 56 СИ ³ = 56/ Колеџ Св. Анселм	Резултатите во оваа студија покажуваат дека <u>постои значајна разлика</u> во академските постигнувања, односно ПО помеѓу студентите со и без инвалидност.

¹Тешкотии во учењето; ²Студенти без инвалидност; ³Студенти со инвалидност

Студиите презентирани во табела 2 укажуваат на нејасни академски постигнувања на студентите со инвалидност. Имено, може да се заклучи дека постојат контрадикторни резултати за тоа дали студентите со и без инвалидност имаат исти или различни академски постигнувања. Според Рид, Кенет и Емонд (Reed, Kennett and Emond, 2015), студентите со инвалидност се соочуваат со бројни предизвици, зашто тие се изложени на поголем ризик од послаби академски резултати од нивните врсници без инвалидност.

Сшайка на дийломирање на сшуденшише со инвалидносш

Повеќето од факултетите и универзитетите се фокусираат на бројот на запишани студенти, иако е поважно времетраењето на студирањето и дипломирањето. Постои поголема веројатност дека студентите со инвалидност ќе се откажат од студирањето. Исто така, помал број од нив го продолжуваат своето образование на постдипломски студии.

Табела 3. Дипломирање

Автор	Институција	Стапка на дипломирање
Беркнер и сор. (Berkner et al., 1996)	Национален центар за образовна статис- тика, САД	СИ имаат <u>помал процент на дипломирање</u> од студентите без инвалидност.
Вит, Филипс и Каке- ла (Witte, Philips, and Kakela, 1998)	Универзитет Мајами	Студентите со ТУ, во просек, <u>дипломираат</u> еден семестар <u>подоцна</u> .
Joprенсен и сор. (Jorgenson et al., 2005)	Универзитети во Ка- нада	СИ имаат полесни күрсеви и им треба повеќе време за да ги завршат студиите.
Весел и сор. (Wessel	Карнеги институција,	Стапката на дипломирање на сите сту-

et al., 2009)	Мидвест, САД	денти, без разлика на присуството или отсуството на инвалидност, <u>е слична.</u>
Hajr и cop. (Knight, Wessel, and Markle, 2016)	Истражувачки универзитет Мидвестерн, САД	Оваа студија покажала дека присуството на инвалидноста не влијае негативно на стапката на дипломирањето, но влијае на времетраењето на студирањето.

Генерално, студентите со инвалидност се изложени на поголем ризик од предвремено напуштање на студиите во споредба со студентите без инвалидност. Речиси половина од сите СИ се откажуваат од студирањето, во споредба со една третина од студентите без инвалидност (Horn et al., 1999). Поради тоа, неопходно е да се дизајнираат високообразовни политики и стратегии кои ќе ги поттикнат студентите да останат на универзитетот и успешно да ги завршат своите студии (Могіña, 2017). Многу факултети и универзитети имаат посебна служба за инвалидност која го олеснува пристапот до високото образование и академскиот успех на студентите со инвалидност, со што се намалува бројот на СИ кои се откажуваат од студирањето.

Заклучок

Според Гајрин и Суарез (Gairín and Suárez 2014), инклузивноста е предуслов за квалитетен универзитет. Европската Унија е посветена на инклузивното образование во рамките на високото образование. За таа цел, во Европската стратегија 2010 - 2020 (European Commission, 2010) е предложено креирање поддршка и планови за нетрадиционални студенти. Многу универзитети имаат служби за поддршка на студентите со инвалидност, користат нови технологии за учење и/или имплементираат инклузивна образовна практика. Сепак, постоењето на овие услуги е недоволно за да се обезбеди правото на квалитетно образование, без дискриминација и врз основа на принципите на инклузивно образование.

Во светски рамки, преваленцата на студентите со инвалидност во високото образование се зголемува. Поради тоа, на високообразованите институции им е потребна поширока свест за инвалидноста и инклузивни наставни практики врз основа на начелата на универзалниот дизајн (УД).

Постојат различни рамки на УД, како што се Универзален дизајн за процена (УДП) (Thompson et al., 2002), Универзален дизајн за настава (УДН) (Scott et al., 2003) и Универзален дизајн за учење (УДУ) (Rose et al., 2006). Овие рамки се наменети да им помогнат на факултетите во фазите на планирање, имплементација и оценување на наставата. Многу истражувачи сугерираат дека ставовите на универзитетскиот персонал кон студентите со инвалидност и обезбедувањето инклузивност може да се подобрат преку обезбедување обуки за попреченост врз основа на УДпринципи.

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HIGHER EDUCATION OF STUDENTS WITH DISABILITIES: A LITERATURE REVIEW

Abstract

The proportion of higher education students with disabilities is increasing at university level. In Macedonia, there are no statistics about the number of students with disabilities included in the academic institutions. The inadequate accessibility of higher education institutions, the lack of support, the negative social attitudes and social isolation, as well as the low financial capacity influence the success of students with disabilities and affect their inclusion in the higher education. This study aims to conduct an in-depth review of some of these challenges that are present in the higher education of students with disabilities. A detailed analysis of 11 publications was performed. We can conclude from those publications that faculty members demonstrate generally positive attitudes towards students with disabilities, with some research indicating less favourable attitudes towards those with "nonvisible" disabilities, such as learning disabilities. Also, there are conflicting results as to whether students with disabilities have an equivalent academic performance with those without disabilities.

Keywords: HIGHER EDUCATION; STUDENTS WITH DISABILITIES; STUDENTS WITHOUT DISABILITIES; ATTITUDES, ACADEMIC ACHIEVEMENT

Introduction

Education is very important for an individual's success in life. Obtaining a college degree is considered by many to be "crucial to the pursuit of high-quality vocational opportunities" (Reinschmiedt et al., 3). For students with disabilities, earning a college degree is especially important because they, in comparison with their peers without disabilities, have a lower work participation rates (Newman et al., 2011). So, it is imperative for each country to ensure that higher education (HI) is accessible to all, including equity groups such as students with disabilities.

From a historical point of view, the literature states that students with disabilities have been underrepresented in higher education (Macleod and Cebula, 2009). Despite this fact, it is evident that the number of students with disabilities entering university has continued to increase (Department of Education and Training, 2014). It is well documented that students with disabilities continue to be a growing demographic group at colleges and universities (Sanford et al, 2011). According to Hurst and Smerdon (2000), 63% of all high school graduates with disabilities enrolled in higher education.

The majority of students with disabilities in higher education institutions have learning disabilities (LD), Attention Deficit Hyperactivity Disorder (ADHD), and mental health disorders (Raue and Lewis, 2011).

Despite the rising number of enrollments, many of these students continue to encounter significant barriers that can have a profound impact on their college experience. At the higher education institutions, there are no resources to make academic institutions accessible to students with various disabilities (physical and sensory), funds for making physical adjustments in buildings, assistive technology, and other adapted learning equipment.

The inadequate accessibility of the higher education institutions, the lack of support, the negative social attitudes and social isolation, as well as the low financial capacity influence the success of students with disabilities and affect their inclusion in the higher education. Therefore, it is very important to accordingly allocate resources to make academic institutions accessible to people with disabilities (Ramot and Feldman, 2003); provide funds for making physical adjustments in buildings and adding computers, assistive technology, and other adapted learning equipment, as well as award scholarships to students (Inbar, 2003).

In order to develop a more in-depth analysis of the higher education of students with disabilities, the following research questions were formulated in this article: What are the attitudes of university members towards students with disabilities, do students with disabilities display equivalent academic performance with those without disabilities, are graduation rates significantly different between students with and without disabilities?

Methods

Search Procedure

We searched the three electronic databases (ERIC, Google Scholar, and SocIN-DEX) for relevant studies from March/April 2018. The following keyword descriptors were used in combination: "students with disabilities" or "students with special needs" and "higher education" or "university education". The search was systematically conducted on journal articles in academic peer-reviewed journals and was not limited by year. The literature on higher education and students with disabilities is largely composed of descriptive studies. Specifically, the majority of the articles and reports focus on descriptions of various indices of faculty's attitudes, knowledge, and practices, based on self-report surveys.

Results and Discussion

We have organized our findings along three aspects: faculty members' attitudes towards students with disabilities, graduation rates of students with disabilities,

and academic outcomes of students with and without disabilities. For each aspect, an analysis of the studies that have measured the faculty's attitudes towards students with disabilities (Table 1), studies that show the differences between the graduation rates of students with and without disabilities (Table 2), and the studies containing the academic outcomes (Table 3) will be presented.

University members' attitudes towards students with disabilities

Attitudes towards disabilities as a topic is widely researched when it comes to published studies concerned with disability issues. However, this also happens to be the least researched variable in studies done with faculties and students with disabilities in higher education.

Many studies have shown the importance of the faculty's attitudes towards students with disabilities (SWD), their awareness of these students' needs, and their knowledge of the reasonable accommodations available (Sachs and Schreuer, 2011). These attitudes influence the success or failure of students with disabilities and affect their inclusion in higher education (Rao, 2004). The negative attitudes of the faculty staff may prevent students, especially students with invisible disabilities, from disclosing their disabilities and from requesting accommodations that they are entitled to (Johnson, 2006).

Table 1. Faculty members' attitudes

Authors	N / Institution	Attitudes
Greenberger (2016)	225 faculty mem- bers/ Institute of technology in Israel	Faculty members expressed <u>positive attitudes</u> towards SWD, yet shared some concerns, especially regarding students with learning disabilities.
Sniatecki, Perry and Snell (2015)	123 faculty mem- bers/ Public liberal arts university, New York	Results suggest that although the faculty has generally <u>positive attitudes</u> toward SWD, it is more likely to hold negative attitudes towards students with mental health disabilities and learning disabilityes than towards students with physical disabilities.
Abu-Hamour (2013)	170 faculty mem- bers/ University in Jordan	The majority of the faculty members have <u>positive attitudes</u> towards the inclusion of SWD; also, they are not familiar with the disability legislation in Jordan; and the majority of the faculty members were not trained to teach SWD.

From the studies listed in Table 1, it can be concluded that faculty members demonstrate generally positive attitudes towards students with disabilities. But, some research indicate less favourable attitudes towards those with "nonvisible" disabilities, such as learning disabilities (Greenberger, 2016; Sniatecki, Perry, and Snell, 2015), an attention deficit hyperactivity disorder, and psychiatric disabilities. These "nonvisible" disabilities typically require adaptations in the area of instructions, course content delivery, and assessment.

Alliston (2011), Lombardi and Murray (2011), and Cook et al. (2009) argue that female faculty members show greater willingness to accommodate students with disabilities, learn more about disabilities, and support them as well. Other researchers' findings indicated that faculty members who had contact with SWD showed more favourable attitudes towards their presence in the class (Bourke, Strehorn, and Silver, 2000). Namely, faculty members who have increased contact proved themselves more knowledgeable about relevant disability considerations. Moreover, it is interesting to mention that faculty members with lower academic rank are more willing to provide teaching accommodations than senior lecturers and professors (Lombardi and Murray, 2011).

Several studies show evidence that faculty members in higher education do not have a solid grasp of the institutional policies on accommodation for students with disabilities (Abu-Hamour, 2013; Katsiyannis, Zhang, Landmark, & Reber, 2009; Murray, Flannery, & Wren, 2008)

Academic outcomes of students with and without disabilities

Generally, there is a conflict in researchers' findings as to whether students with disabilities display equivalent academic performance with those without disabilities (Jorgensen et al., 2005).

Table 2. Academic outcomes

Authors	N / Institution	Academic outcomes
Witte, Philips and Kakela (1998)	Students with LD ¹ = 55 SWOD ² =55/ Miami University	Students with LD graduated with grade point averages (GPAs) that are <u>significantly below</u> the comparison group of SWOD.
Sparks, Javorsky and Philips (2004)	Students with ADHD = 68/ Uni- versity in the Midwest, USA	Students with ADHD at a medium-sized university were academically competitive with their peer group and graduated with <u>similar GPAs</u> compared to the typical graduating senior at the same university.
Jorgensen et al. (2005)	40,000 SWOD ² and SWD ³ / Universities in Canada	The results indicated <u>statistically insignificant difference in GPA</u>

Sachs and Schreuer (2011)	SWOD ² = 156 SWD ³ = 170/ Universities in Israel	The academic outcomes of students with and without disabilities <u>were similar</u> . Student experiences differed according to the disability type. Namely, the students with a physical disability were more satisfied than the students with a sensory or psychiatric disability.
Wasielewski (2016)	SWOD ² = 56 SWD ³ = 56/ Saint Anselm College	The findings in this study indicate that <u>there is a significant difference</u> in the academic performance between these two groups as measured by the GPA.

¹Learning disabilities; ²Students without disabilities; ³ Students with disabilities

The studies presented in Table 2 suggest that there are unclear academic performance outcomes when it comes to students with disabilities. It can be concluded from them that there are conflicting results as to whether students with disabilities have an equivalent academic performance with those without disabilities. Reed, Kennett, and Emond (2015) concede that as a result of numerous barriers encountered by the students with a disability, they are more at risk of having a poor academic performance than their non-disabled peers.

The graduation rates of students with disabilities

More colleges and universities focus on enrolment management, but retention plays an increasingly important role. Students with disabilities are more likely to drop out of college prior to getting the degree. They may also be less likely to pursue a post-graduate education compared to their nondisabled peers.

Table 3. Retention and graduation rates

Authors	Country	Academic outcomes
Berkner et al. (1996)		SWD had l <u>ower persistence and graduation rates</u> than the students without disabilities.
Witte, Philips and Kakela (1998)	Students with LD ¹ = 55 SWOD ² =55/ Miami University	Students with LD, on average, took one semester <u>longer to graduate</u> .
Jorgensen et al. (2005)	40,000 SWOD ² and SWD ³ / Universities in Can- ada	The rigor of the college plan of the studies and the choices of course loads differed to such an extent that SWD had lighter course loads and took longer to complete their stu- dies
Wessel et al. (2009)	Carnegie doctoral-	The retention and graduation rates for all

		students, regardless of the presence or absence of a disability, were $\underline{\text{similar}}$.
Knight et al. (2016)	Midwestern Re- search University, USA	This study demonstrated that the presence of a disability <u>does not negatively influence</u> <u>the eventual graduation</u> , but that it does influence the amount of time to get a degree.

Generally, students with disabilities are at a greater risk of prematurely dropping out of universities in comparison to students without disabilities. Nearly half of all disabled students drop out, compared with one-third of students without disabilities (Horn et al., 1999). Therefore, it is necessary to design policies and strategies that encourage students to stay in the university and complete their degree courses successfully (Moriña, 2017). Many colleges and universities have disability service offices to help facilitate the access to higher education and the academic success of students with disabilities, thus reducing the number of students with disabilities that drop out of college.

Conclusion

According to Gairín and Suárez (2014), inclusivity is a hallmark of a quality university. The European Union is committed to achieving an inclusive education within the framework of higher education. For this purpose, the creation of support plans and services that improve the access and educational inclusion of non-traditional students was proposed in the European Strategy 2010–2020 (European Commission 2010). Many universities have established offices to support the educational needs of students with disabilities, and they also have incorporated the use of new technologies and/or have implemented inclusive educational practices. However, the existence of these actions is insufficient for ensuring the right of the students to quality education, without discrimination, and based on the principles of inclusive education.

Across the globe, students with disabilities have been increasing in prevalence in higher education settings. Thus, it has become more urgent for higher education institutions to have a broad awareness of disability and inclusive teaching practices based on the tenets of Universal Design (UD). There are various UD frameworks, such as the Universal Design for Assessment (UDA) (Thompson et al., 2002), the Universal Design for Instruction (UDI) (Scott et al., 2003), and the Universal Design for Learning (UDL) (Rose et al., 2006). These frameworks are meant to aid faculty in promoting maximum usability and accessibility in the planning, delivery and evaluation stages of the instruction. Many researchers suggest that faculty attitudes towards students with disabilities and the provision of accommodations can be improved by providing the faculty with disability-related training based on UD principles (Lombardi & Murray, 2011; Murray, Lombardi, & Wren, 2011; Park, Roberts, & Stodden, 2012).

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